Appendix 5.15 BIG-2: Level of Service Assessment – Transportation Analysis

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APPENDICES

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ACRONYMS AND ABBREVIATIONS

ADT	average daily traffic
BIG	Barstow International Gateway
BNSF	BNSF Railway
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
FFS	free-flow speed
ft	feet
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
IMF	intermodal facility
I	Interstate
ITE	Institute of Transportation Engineers
KSF	thousand square feet
kV	kilovolt
LOS	level of service
mph	miles per hour
pc	passenger cars
PCE	passenger car equivalent
ROW	right-of-way
SANBAG	San Bernardino County Associated Governments
SBCTA	San Bernardino County Transportation Authority
SBTAM+	San Bernardino Transportation Analysis Model Plus
SCE	Southern California Edison
SR	State Route
TAZ	traffic analysis zones
TM	transportation modification
TWLTL	two-way left turn lane
V/C	Volume-to-Capacity ratio
VMT	vehicle miles traveled

1.0 EXECUTIVE SUMMARY

1.1 Introduction

This technical report was prepared to document the transportation level of service (LOS) assessment for BNSF Railway's (BNSF's) Barstow International Gateway Specific Plan (BIG). This LOS assessment evaluates consistency with applicable LOS standards outlined in the proposed Transportation Study for Barstow General Plan, San Bernardino County Transportation Impact Study Guidelines (County TIS Guidelines) (County of San Bernardino, 2019), and the San Bernardino Congestion Management Program (CMP) 2016 Update (San Bernardino County Transportation Authority, 2016). The analysis in this report follows the methodology outlined in the "BNSF Barstow International Gateway Project – Traffic Study Scoping" Memorandum ("*Traffic Scoping Memo"*) (Kimley-Horn and Associates, Inc., May 13, 2025b) to the City of Barstow (City), which is included as **Appendix A: Transportation Study Scoping**. The LOS assessment in this document is generally completed in accordance with the County TIS Guidelines. While the BIG LOS assessment study area includes facilities in the City, County of San Bernardino (County), and California Department of Transportation (Caltrans) right-of-way, the County TIS Guidelines were used as the basis of methodology because the City and Caltrans do not provide guidance for the preparation of LOS assessments.

The following technical report includes a LOS assessment for consistency with applicable LOS standards; any LOS deficiencies that may be identified are not considered impacts under the California Environmental Quality Act (CEQA). Automobile delay, as measured by LOS or other similar metrics, does not constitute a significant environmental effect under CEQA (Pub. Resources Code, § 21099, subdivision (b)(3)). Transportation analyses that are required by CEQA, including Vehicle Miles Traveled (VMT), circulation system conflicts, transportation hazards, and emergency access, are included in **Appendix 5.15 BIG-1: CEQA Assessment – Transportation Analysis** (Kimley-Horn & Associates, Inc., 2025a).

1.2 "At-A-Glance" Summary

This section provides an "at-a-glance" summary of the key findings presented in this LOS Assessment. Please refer to the remainder of the report for additional detail and context.

- Intersection LOS Operations
    - The addition of BIG traffic would not result in LOS deficiencies under the Opening Year (2028) scenario.
    - The addition of BIG traffic would result in LOS deficiencies at three locations under the Interim Year (2033) scenario, which would be offset by recommended improvements.
    - The addition of BIG traffic would result in LOS deficiencies at seven locations under the Horizon Year (2048) scenario, which would be offset by recommended improvements.

- Roadway LOS Operations
    - The addition of BIG traffic would not result in LOS deficiencies under the Opening Year (2028) and Interim Year (2033) scenarios.
    - The addition of BIG traffic would result in LOS deficiencies at three locations under the Horizon Year (2048) scenario, which would be offset by fair-share contributions to future roadway widening improvements.

  - Lenwood Road, between High Desert Road and the Interstate (I)-15 southbound off-ramp, is projected to operate at a deficient LOS based on daily traffic volumes and roadway capacity. However, a detailed arterial analysis for this segment found that operations are acceptable in both directions during the peak hours. This is because roads near the BIG Specific Plan experience more steady traffic throughout the day rather than sharp increases during peak hours, allowing them to handle higher daily vehicle volumes. As a result, roadway widening is not recommended for this segment.

- Freeway Off-Ramp Queueing
  - The addition of BIG traffic would not result in safety hazards by backing up onto the freeway mainline or encroaching within the off-ramp deceleration areas under the Opening Year (2028), Interim Year (2033), and Horizon Year (2048) scenarios.

1.3 BIG Summary

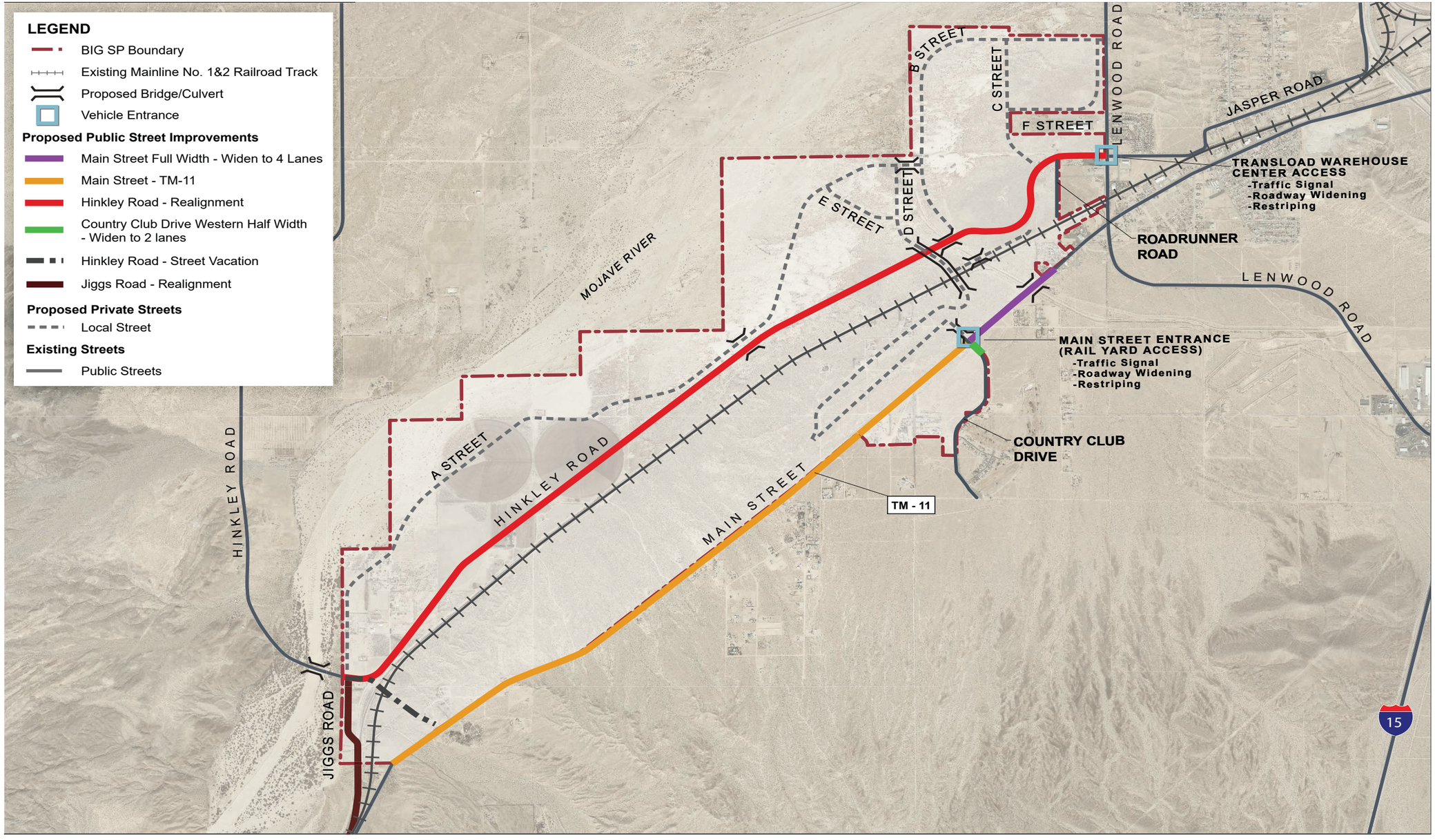
BNSF proposes BIG in the City and in unincorporated territory in the County. BIG consists of a rail yard with an intermodal facility (IMF)[1] and a "block swap" yard,[2] a transload warehouse center[3], and a solar farm. The BIG rail yard would operate 24 hours per day, 365 days per year. BIG's proposed on-site circulation improvements (i.e., within the BIG Specific Plan area) are identified in **Figure 1: On-Site Circulation Improvements** and access improvements are shown in more detail in **Figure 2: BIG Access Improvements**.

Additionally, to serve the proposed rail yard and transload warehouse center, BNSF proposes off-site rail improvements (including lead track extensions), and off-site non-rail improvements (including stormwater drainage, utilities, and circulation/roadways). BIG also proposes Transportation Modifications (TMs) to improve traffic operations and safety, as discussed below. BIG's proposed TMs are identified in **Figure 3: BIG Transportation Modifications** and illustrated in **Figure 4: BIG Transportation Modification Details**.

1 "Intermodal facility" or "IMF" refers to a rail yard where intermodal containers are transferred between trains and heavy-duty trucks. Heavy-duty trucks arrive to either pick up containers from arriving trains or deliver containers for departing trains. However, unlike traditional intermodal facilities, most containers at BIG would arrive by train and be transferred to and from electric hostlers.

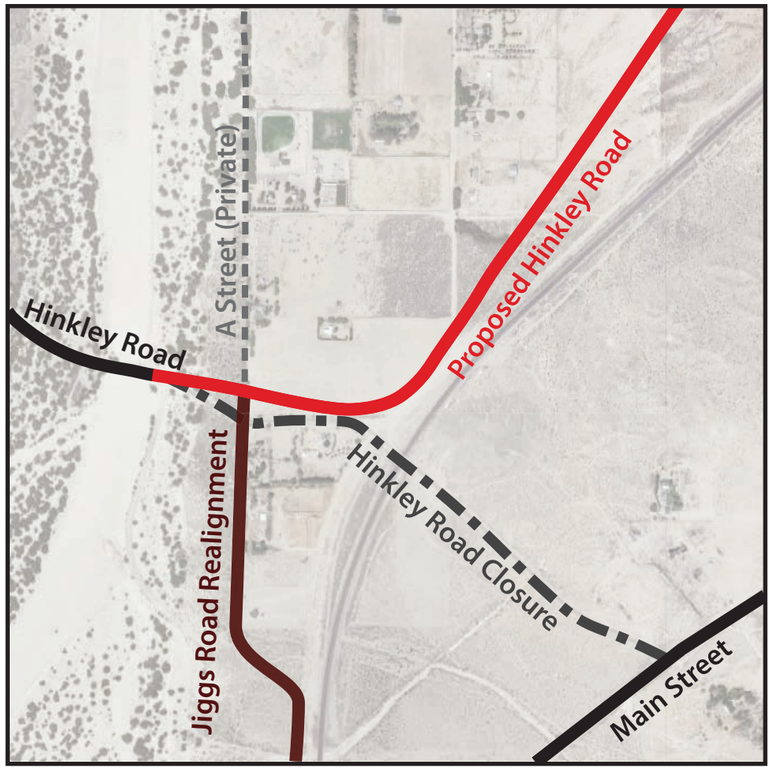
2 "Block swap" refers to transferring a block of intermodal train cars between trains. In effect, the entire block of cars remains coupled together and is moved en masse to another train.

3 "Transload" refers to the transfer of goods from one container to another. In this document, it specifically refers to the transfer of goods from international containers to domestic containers. The transload warehouse center at BIG would primarily serve goods transported to and from the BIG intermodal facility by rail.



Note: TM-11, Main Street between western BIG site limit and Country Club Drive: As part of BIG's frontage improvements, repaint the north edge-line and centerline with 6" retroreflective lane markings and install rumble strips and pavement reflectors on the north edge-line and centerline. On Main Street between Castle Court and Country Club Drive, also repaint the south edge-line with 6" retroreflective lane markings and install rumble strips and pavement reflectors.

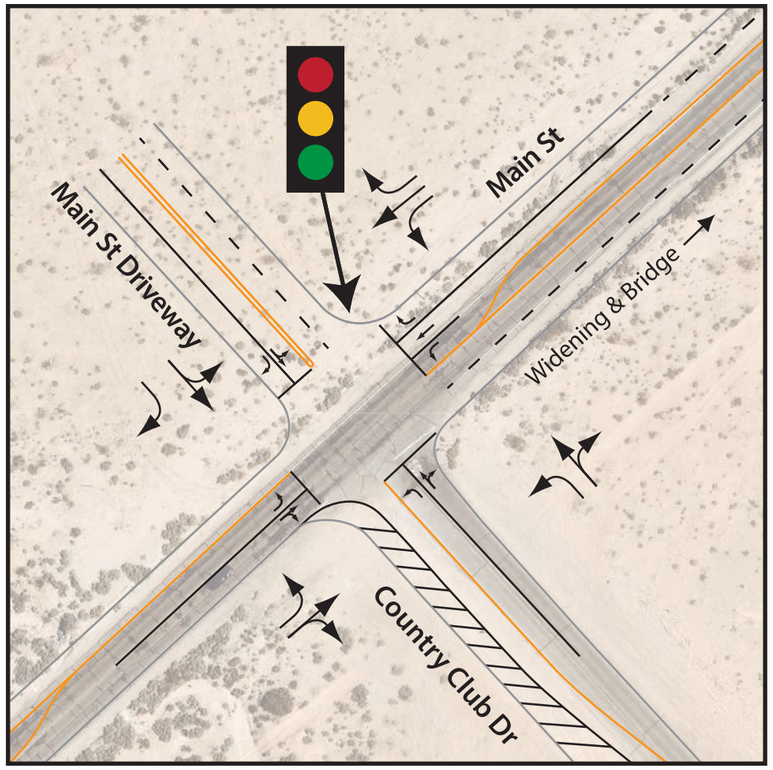
Figure 1: On-Site Circulation Improvements



Hinkley Road Vacation and Realignment and Jiggs Road Realignment

Vacate Hinkley Road from south side of Mojave River bridge crossing to Main Street. Realign Hinkley Road to run east-west through the transload warehouse center.

Realign Jiggs Road.

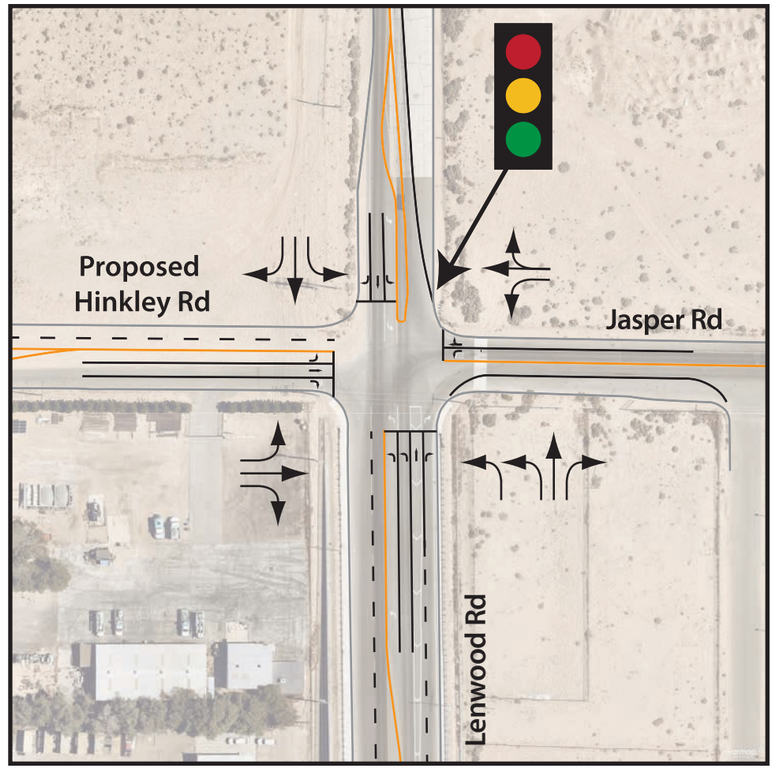


Rail Yard Access, Main Street Widening, and Country Club Drive Widening

Construct signalized project driveway and turn pockets at the existing intersection of Main Street and Country Club Drive to provide rail yard access.

Widen Main Street to include two lanes in each direction for approximately 0.5-mile east of Country Club Drive. Replace the Lenwood Channel Bridge.

Widen Country Club Drive between Main Street and Sweeten Lane.



Transload Warehouse Center Access

Install traffic signal, roadway widening, and restriping at the proposed Hinkley Road/Jasper Road/Lenwood Road intersection to provide transload warehouse center access.

NOT TO SCALE

Figure 2: BIG Access Improvements

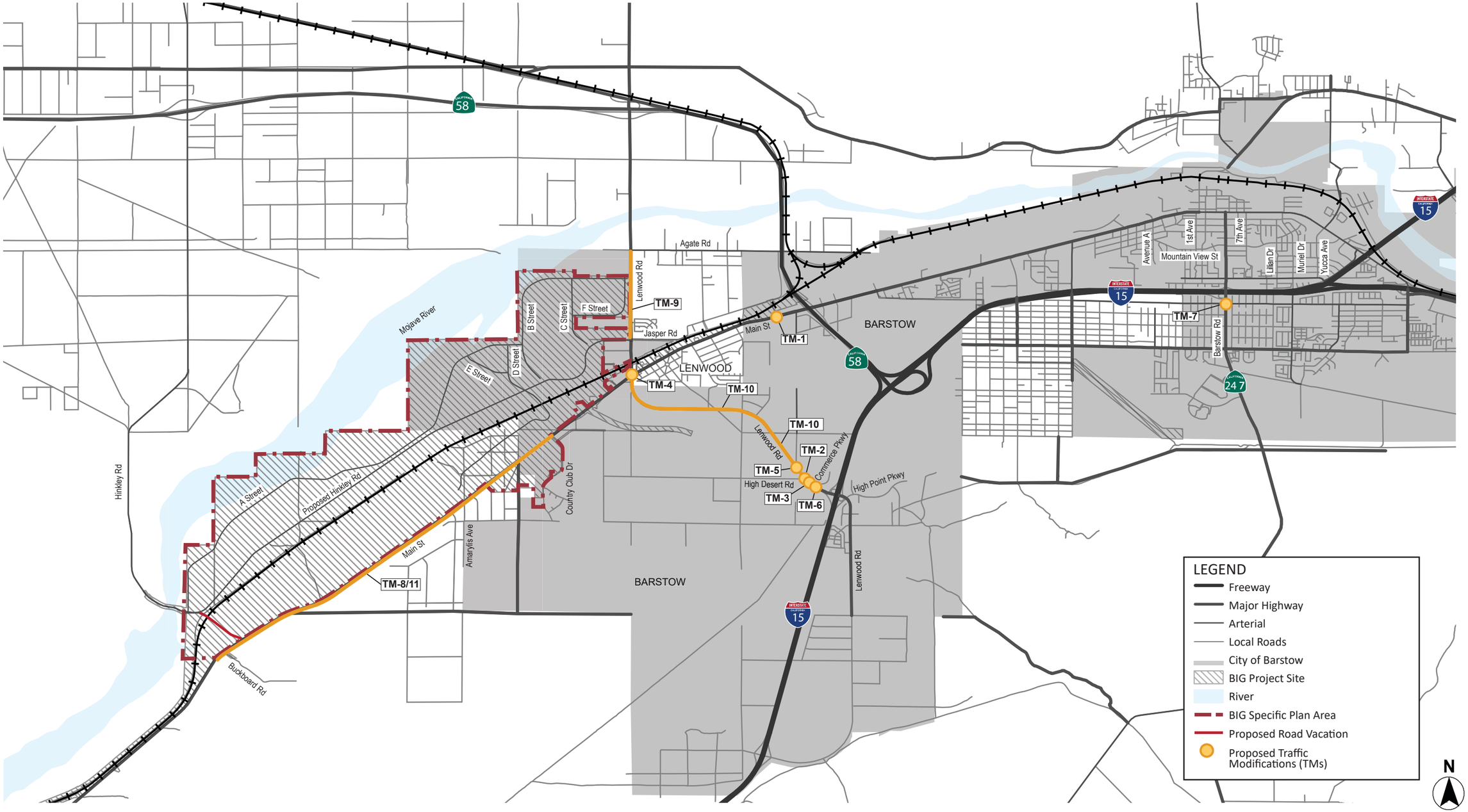


Figure 3: BIG Transportation Modifications

1.4 BIG Transportation Improvements

The improvements listed below and depicted on **Figure 1: On-Site Circulation Improvements** and **Figure 2: BIG Access Improvements** are circulation improvements that BIG proposes and are included in the analysis of Plus BIG conditions:

- **Hinkley Road.** BIG would vacate Hinkley Road between the south side of the Mojave River bridge crossing and Main Street, closing the existing at-grade rail crossing. Hinkley Road would be realigned to run east-west through the transload warehouse center from the south side of the Mojave River bridge crossing to the Jasper Road/Lenwood Road intersection. BIG proposes to reconstruct the existing Hinkley Road bridge over the Mojave River to conform to current federal and State standards. BIG also proposes to construct a bridge for the proposed Hinkley Road to cross the Lenwood Channel.
- **Transload Warehouse Center Access (from Lenwood Road).** Transload warehouse center employees and heavy-duty[4] trucks accessing the transload warehouse center would enter BIG from the proposed Hinkley Road/Jasper Road/Lenwood Road intersection. To facilitate access to the proposed transload warehouse center, BIG proposes to install a traffic signal, roadway widening, and restriping at the proposed Hinkley Road/Jasper Road/Lenwood Road intersection, as depicted in **Figure 2: BIG Access Improvements.** Signalization is warranted under Opening Year (2028), Interim Year (2033), and Horizon Year (2048) conditions. It is recommended that the intersection be signalized under 2028 conditions. Traffic signal warrant analysis is included in **Appendix L: Traffic Signal Warrant Analysis**.
- **Rail Yard Access (from Main Street).** Rail yard employees and heavy-duty trucks would access the rail yard from a new driveway proposed on Main Street across from Country Club Drive. Rail yard employees would enter an employee parking lot near the proposed rail yard administration buildings. Heavy-duty trucks dropping off or picking up containers at the IMF would enter through a gate system into the IMF. To facilitate access to the proposed rail yard, BIG proposes to install a traffic signal, roadway widening, and restriping at the driveway, as depicted in **Figure 2: BIG Access Improvements**. Signalization is not warranted under Opening Year (2028) conditions but meets the criteria for signalization under Interim Year (2033) and Horizon Year (2048) conditions. It is recommended that the intersection be signalized under 2028 conditions. Traffic signal warrant analysis is included in **Appendix L: Traffic Signal Warrant Analysis**.
- **Main Street Roadway Widening/Lenwood Channel Bridge.** Main Street would be widened from two lanes to four lanes for approximately 0.5-mile east of Country Club Drive, resulting in a consistent four-lane roadway width through Barstow. Additionally, the existing two-lane Main Street over Lenwood Channel low water crossing would be replaced with a new four-lane bridge that accommodates the 100-year flood condition. Main Street would be raised over Lenwood channel, modifying the vertical alignment of Main Street for approximately 0.8 miles. A temporary bypass would be constructed to facilitate the Main Street at Lenwood Channel bridge reconstruction, as shown on **Figure 5: Main Street at Lenwood Channel Bridge Reconstruction - BIG**. The temporary bypass would include private driveways for nearby residences and would be open for the approximately 18-month bridge reconstruction period.

[4] "Heavy-duty trucks" (also referred to as "trucks" in this document) are conventional highway trucks that travel on public roads and carry containers intra- and inter-state. As used in this document, the terms "heavy-duty trucks" and "trucks" do not include electric hostlers that are proposed to run on internal roads within the BIG Specific Plan area.

- **Country Club Drive**. Country Club Drive would be widened along the solar farm frontage for approximately 400 feet to the proposed realignment of Sweeten Lane. A new stop-controlled intersection is proposed at the Country Club Drive at Sweeten Lane intersection.
- **Jiggs Road.** BIG proposes to realign Jiggs Road (a gravel and dirt road also referred to as Holcomb Ranch Road/Lords Road/Link Road) north of its existing location from Hinkley Road to the western limit of the BIG footprint (between Holcomb Ranch Road and Indian Trail). The Jiggs Road realignment would maintain would provide a 24-foot gravel road and access to the adjacent land uses and emergency access from Indian Trails to Hinkley Road. Consistent with existing conditions, traffic volumes on the realigned Jiggs Road are expected to be minimal.
- **Sweeten Lane.** Sweeten Lane would be vacated and realigned to eliminate the existing unimproved intersection with Main Street. A new paved access will extend from Country Club east approximately 1,000 and connect to the unimproved Sweeten Lane.

Additionally, the following off-site transportation modifications (TMs) are proposed to improve traffic operations and safety, as identified in **Figure 3: BIG Transportation Modifications** and illustrated in **Figure 4: BIG Transportation Modification Details**. These TMs would also include restriping and refreshed pavement where needed. These TMs were not included in the analysis of Plus BIG conditions but were instead included in the analysis of the Plus BIG with Transportation Modifications conditions; **Section 6.0 Plus BIG Transportation Modifications** discusses the proposed TMs and the resulting LOS:

- **TM-1: Main Street & Petit Road intersection:**
  - *2033*: Install traffic signal.
  - *2048*: Same improvement as 2033.
- **TM-2: Lenwood Road & High Desert Road intersection:**
  - *2033*: Install traffic signal. Install fiber-optic interconnect system between High Desert Road and Commerce Parkway and optimize signal timing for corridor.
  - *2048*: Same improvements as 2033 and optimize signal timing for corridor under 2048 conditions.
- **TM-3: Lenwood Road & Truck Freightliner Service Point Driveway intersection:**
  - *2033*: Install traffic signal and cluster the intersection with the existing signal at Commerce Parkway so they function as a combined system with a single controller. This configuration is recommended due to the close proximity of the intersections, which supports synchronized signal operations and improved traffic flow. Install fiber-optic interconnect system between High Desert Road and Commerce Parkway and optimize signal timing for corridor.
  - *2048*: Same improvements as 2033 and optimize signal timing for corridor under 2048 conditions.
- **TM-4: Lenwood Road & Main Street intersection:**
  - *2048*: Restripe southbound approach to provide a second southbound left-turn lane. Restripe southbound right-turn lane into a through-right lane. Reconfigure traffic island to provide space for additional southbound through movement. Restripe northbound approach to provide a second northbound left-turn lane.

- **TM-5: Lenwood Road & Love's Travel Stop Driveway intersection:**
  - *2048*: Install traffic signal. Install fiber-optic interconnect system between Love's Travel Stop Driveway and Commerce Parkway and optimize signal timing for corridor.
- **TM-6: Lenwood Road & Commerce Parkway intersection:**
  - *2048*: Restripe existing southbound middle through-left lane to an exclusive through lane. Add northbound and southbound protected left phase. Install fiber-optic interconnect system between Love's Travel Stop Driveway and Commerce Parkway and optimize signal timing for corridor.
- **TM-7: Barstow Road & Armory Road intersection:**
  - *2048*: Restripe westbound right-turn lane from through-right to right turn only and add westbound right turn overlap phase.
- **TM-8: Main Street between Vacated Hinkley Road and Country Club Drive**:
  - *2048*: Provide 4.04% fair share of the costs for widening the roadway to four lanes.
- **TM-9: Lenwood Road between Agate Road and Jasper Road**:
  - *2048*: Provide 35.59% fair share of the costs for widening the roadway to four lanes.
- **TM-10: Lenwood Road between Main Street and High Desert Road**:
  - *2048*: Provide 33.13% fair share of the costs for widening the roadway to four lanes.
- **TM-11: Main Street between western BIG site limit and Country Club Drive:** As part of BIG's frontage improvements, repaint the north edge-line and centerline with 6" retroreflective lane markings and install rumble strips and pavement reflectors on the north edge-line and centerline. On Main Street between Castle Court and Country Club Drive, also repaint the south edge-line with 6" retroreflective lane markings and install rumble strips and pavement reflectors.

To accommodate BIG, various public rights-of-way would need to be fully or partially vacated as described below. The proposed street vacations are listed in **Table 1: BIG Street Vacations and Dedications** and shown in **Figure 6: BIG Street Vacations**. The vast majority of these rights-of-way are unpaved dirt roads, or in some cases "paper roads," where the land is dedicated but is not graded or paved for use. As applicable, these roads would be modified to provide access to the remaining land uses.

Table 1: BIG Street Vacations and Dedications

Street	Vacation/Dedication	Within Specific Plan?	County	City
Amarylis Street	Partial vacation	Yes	X*	
Anson Avenue	Full vacation	Yes	X*	
Barker Road	Full vacation	Yes		X
Belvoir Street	Full vacation	Yes	X*	
Botero Road	Full vacation	Yes	X*	
Camino Road (also known as Youngs Drive)	Full vacation	Yes	X*	
Cannae Road	Full vacation	Yes	X*	
Country Club Drive	Dedication	Yes		X
Cuzco Road	Full vacation	Yes	X*	

Table 1: BIG Street Vacations and Dedications				
Street	**Vacation/Dedication**	**Within Specific Plan?**	**County**	**City**
Delaney Road (also known as Waverly Avenue)	Partial vacation	Yes	X*	X
Dundee Street	Full vacation	Yes	X*	
Dunkirk Street	Full vacation	Yes	X*	
Fairview Road	Full vacation	Yes	X*	
Frank Street	Partial vacation	No	X	
Gazana Street	Partial vacation	Yes	X*	
Glencoe Street	Full vacation	Yes	X*	
Hannan Street	Partial vacation	No	X	
Henry Road	Full vacation	Yes	X	
Hinkley Road over the Mojave River	Partial vacation and dedication/realignment	No	X	
Hinkley Road	Partial vacation and dedication/realignment	Yes	X*	X
Holland Street	Dedication (cul-de-sac)	No	X	
Jiggs Road	Partial vacation and dedication/realignment	Yes	X*	
Jiggs Road/Holcomb Ranch Road/Lords Road	Partial vacation and dedication/realignment; see description further below	No	X	
Lenwood Road	Dedication of ROW and vacation of excess ROW	Yes		X
Main Street	Dedication of ROW and vacation of excess ROW	Yes	X*	X
Mockingbird Street	Full vacation	Yes	X*	
Mockingbird Way	Full vacation	Yes	X*	
Navarino Avenue	Full vacation	Yes	X*	
Norfolk Road	Full vacation	Yes	X	
Oak Grove Road	Full vacation	Yes	X*	
Old Lenwood Road (also known as Lenwood Street, an access road adjacent to BNSF right-of-way, east of Lenwood Road)	Full vacation	No	X	
Outer Highway 66 North	Full vacation	Yes	X	
Orleans Drive	Full vacation	Yes	X*	
Phillips Street	Partial vacation	No	X	

Table 1: BIG Street Vacations and Dedications				
Street	**Vacation/Dedication**	**Within Specific Plan?**	**County**	**City**
Roadrunner Road	Dedication	Yes		X
Robin Court	Full vacation	Yes	X*	
Seymour Avenue	Partial vacation	Yes	X*	
Sun Valley Drive	Partial vacation	No		X
Sweeten Lane	Partial vacation and dedication/realignment	Portion within, portion outside	X*	X
Townsend Street	Partial vacation	No	X	
Unnamed cul-de-sac north of Main Street	Full vacation	No		X
U.S. Public Road**	Full vacation	Yes	X*	
Viejo Court	Partial vacation	Yes		X
Woods Avenue	Partial vacation	No	X	

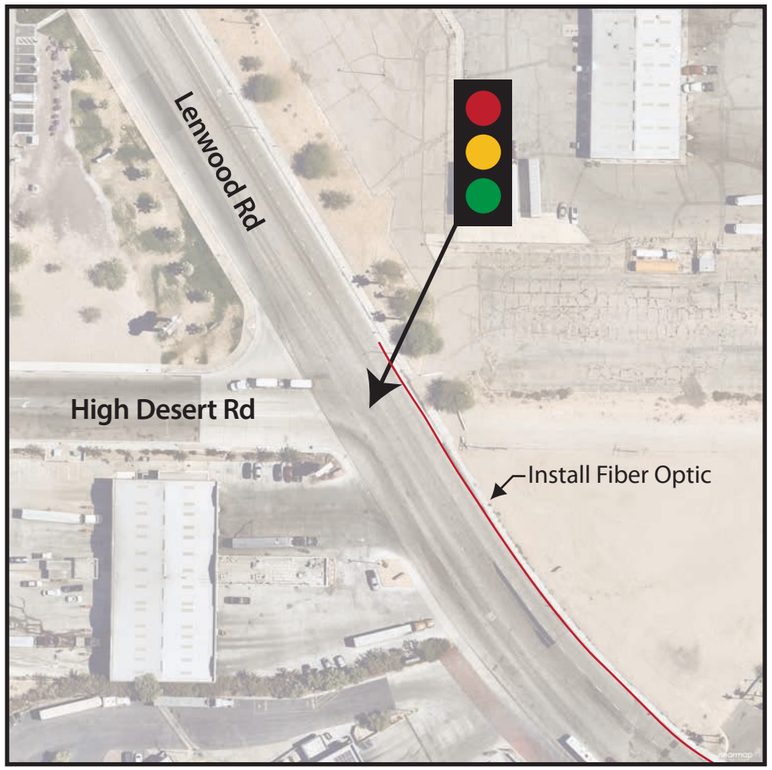
* Upon annexation, the right-of-way would be within City limits and vacated by the City.
** U.S. Public Road is an easement for access between two parcels formerly managed by the BLM. These parcels are no longer managed by the BLM.
Note: Some of the roadways noted may not be formally dedicated as public roadways in fee or as easements. In those instances, a formal street vacation process will not be required if public right of way records cannot be located.



TM-1

Intersection 14: Main St & Petit Rd

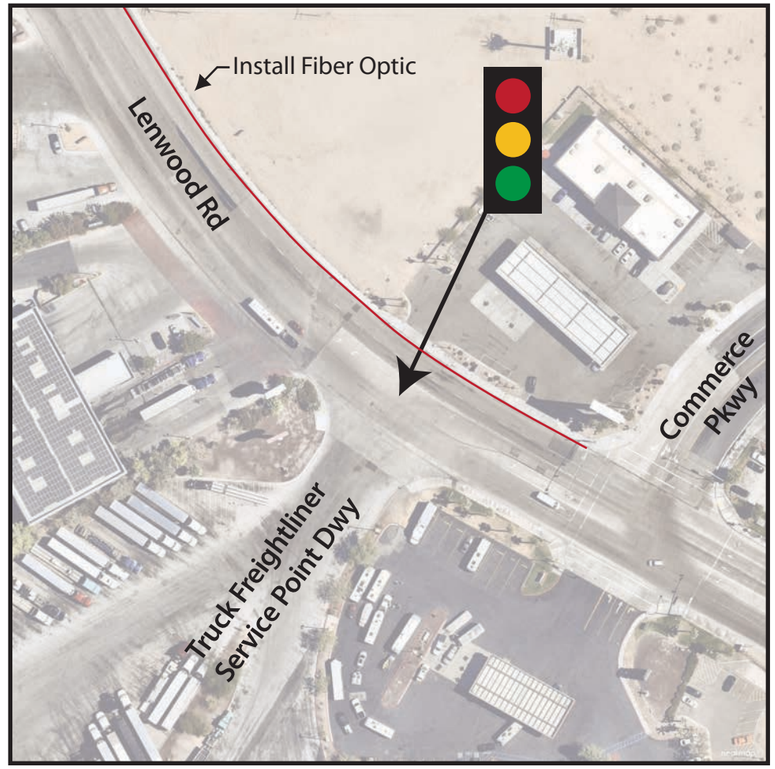
2028: No improvements proposed.
2033: Install Traffic Signal.
2048: Same improvements as 2033.



TM-2

Intersection 18: Lenwood Rd & High Desert Rd

2028: No improvements proposed.
2033: Install Traffic Signal. Install fiber optic interconnect system between High Desert Rd & Commerce Pkwy and optimize signal timing for corridor.
2048: Same improvements as 2033 and optimize signal timing for corridor under 2048 conditions.



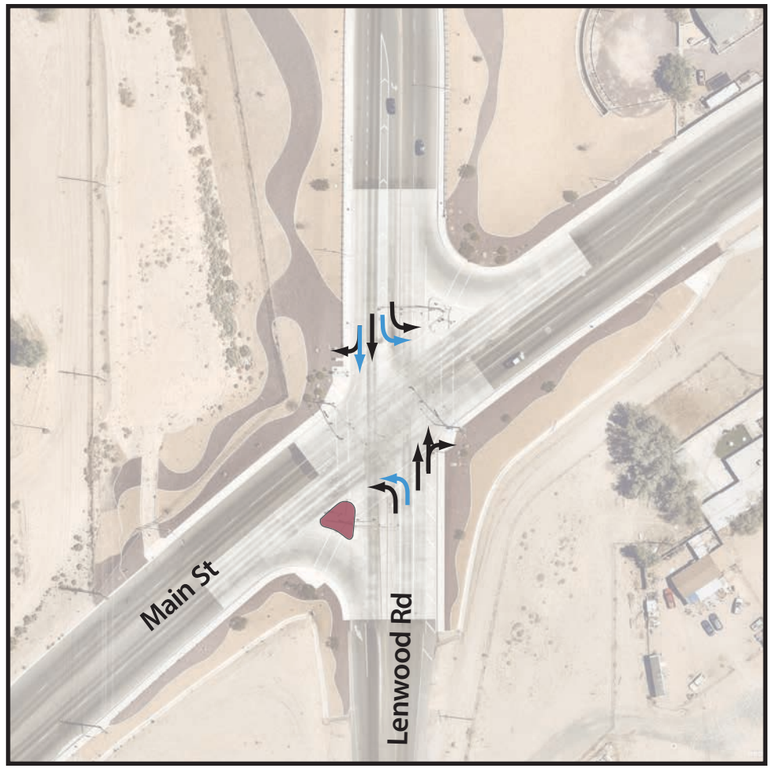
TM-3

Intersection 19: Lenwood Rd & Truck Freightliner Service Point Driveway

2028: No improvements proposed.
2033: Install traffic signal and cluster the intersection with the existing signal at Commerce Pkwy so they function as a combined system with a single controller. This configuration is recommended due to the close proximity of the intersections, which supports synchronized signal operations and improved traffic flow. Install fiber optic interconnect system between High Desert Rd & Commerce Pkwy and optimize signal timing for corridor.
2048: Optimize signal timing for 2048 conditions.

NOT TO SCALE

Figure 4: BIG Transportation Modification Details
(Page 1/3)



TM-4

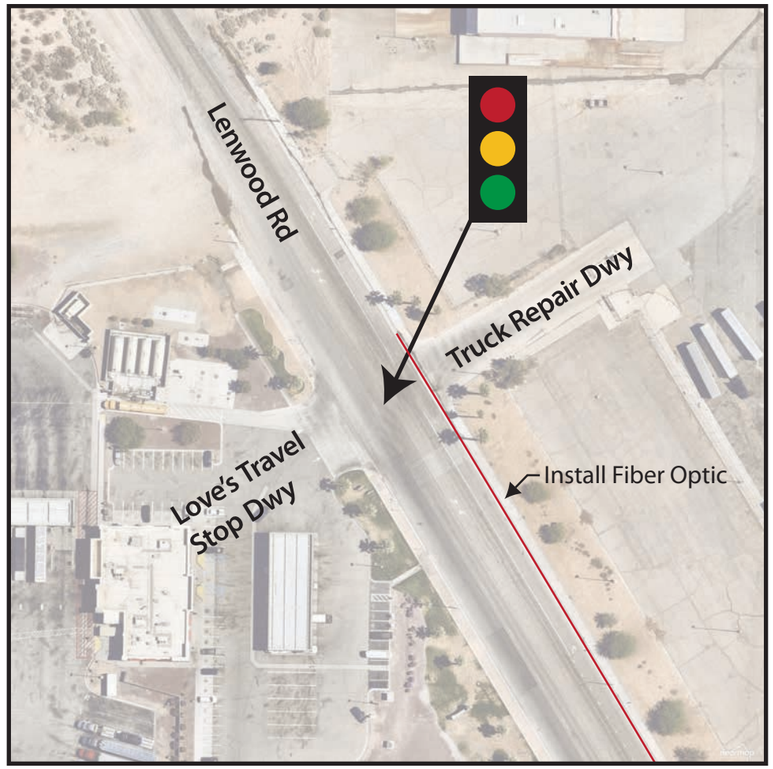
Intersection 3: Lenwood Rd & Main St

2028: No improvements proposed.

2033: No improvements proposed.

2048: Restripe southbound approach to provide a second southbound left-turn lane. Restripe southbound right-turn lane into a through-right lane. Reconfigure traffic island to provide space for additional southbound through movement. Restripe northbound approach to provide a second northbound left-turn lane.

NOT TO SCALE



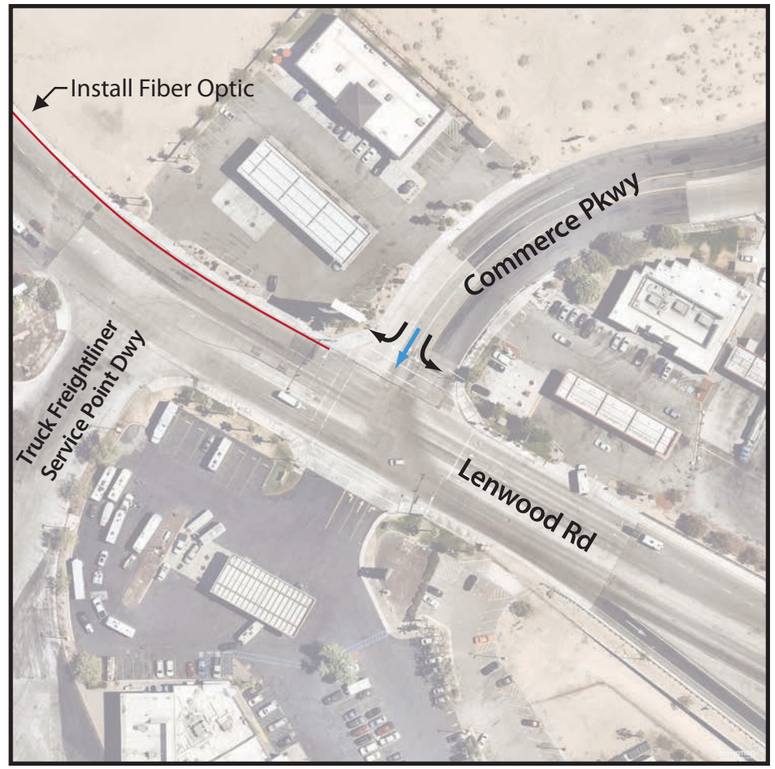
TM-5

Intersection 17: Lenwood Rd & Love's Travel Stop Driveway

2028: No improvements proposed.

2033: No improvements proposed.

2048: Install Traffic Signal. Install fiber optic interconnect system between intersections Love's Travel Stop Driveway and Commerce Pkwy and optimize signal timing for corridor.



TM-6

Intersection 20: Lenwood Rd & Commerce Pkwy

2028: No improvements proposed.

2033: No improvements proposed.

2048: Restripe existing southbound middle through-left lane to an exclusive through lane. Add northbound and southbound protected left phase. Install fiber optic interconnect system between Love's Travel Stop Driveway and Commerce Pkwy and optimize signal timing for corridor.

Figure 4: BIG Transportation Modification Details
(Page 2/3)



TM-7

Intersection 37: Barstow Rd & Armory Rd

2028: No improvements proposed.

2033: No improvements proposed.

2048: Restripe westbound right-turn lane from through-right to right turn only and add westbound right turn overlap phase.

NOT TO SCALE

Figure 4: BIG Transportation Modification Details
(Page 3/3)

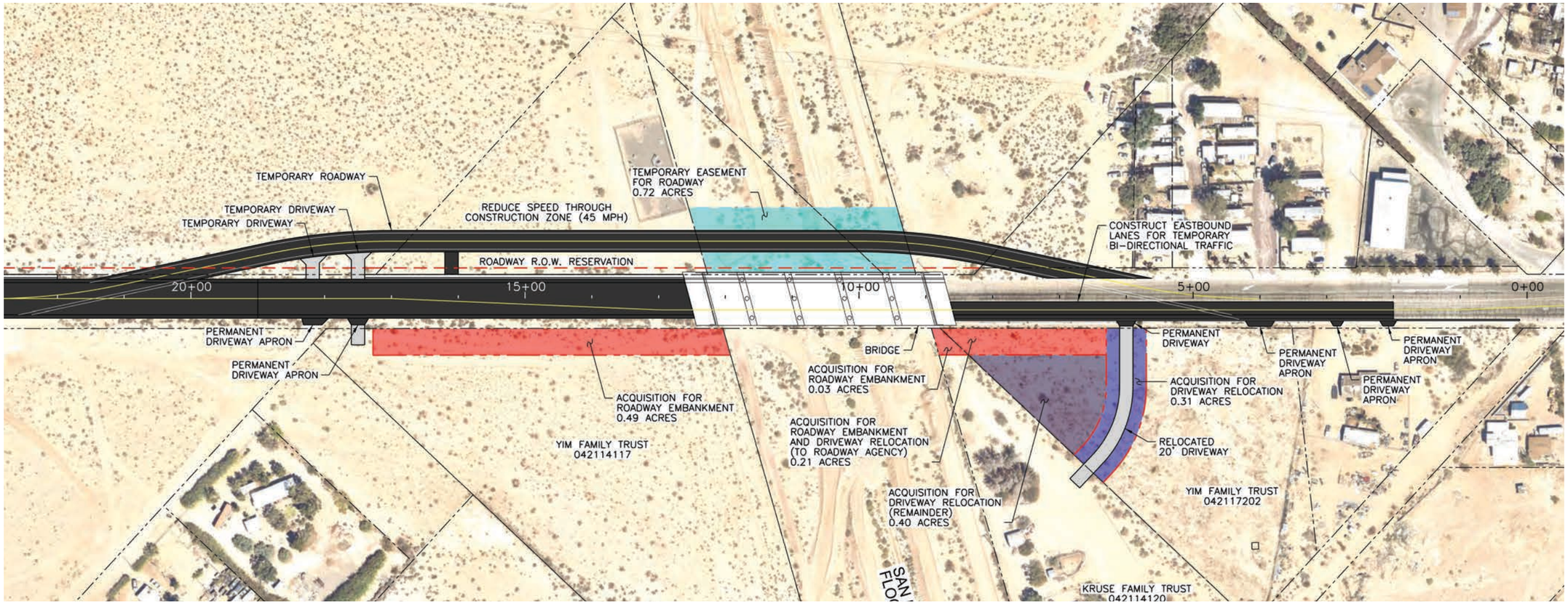
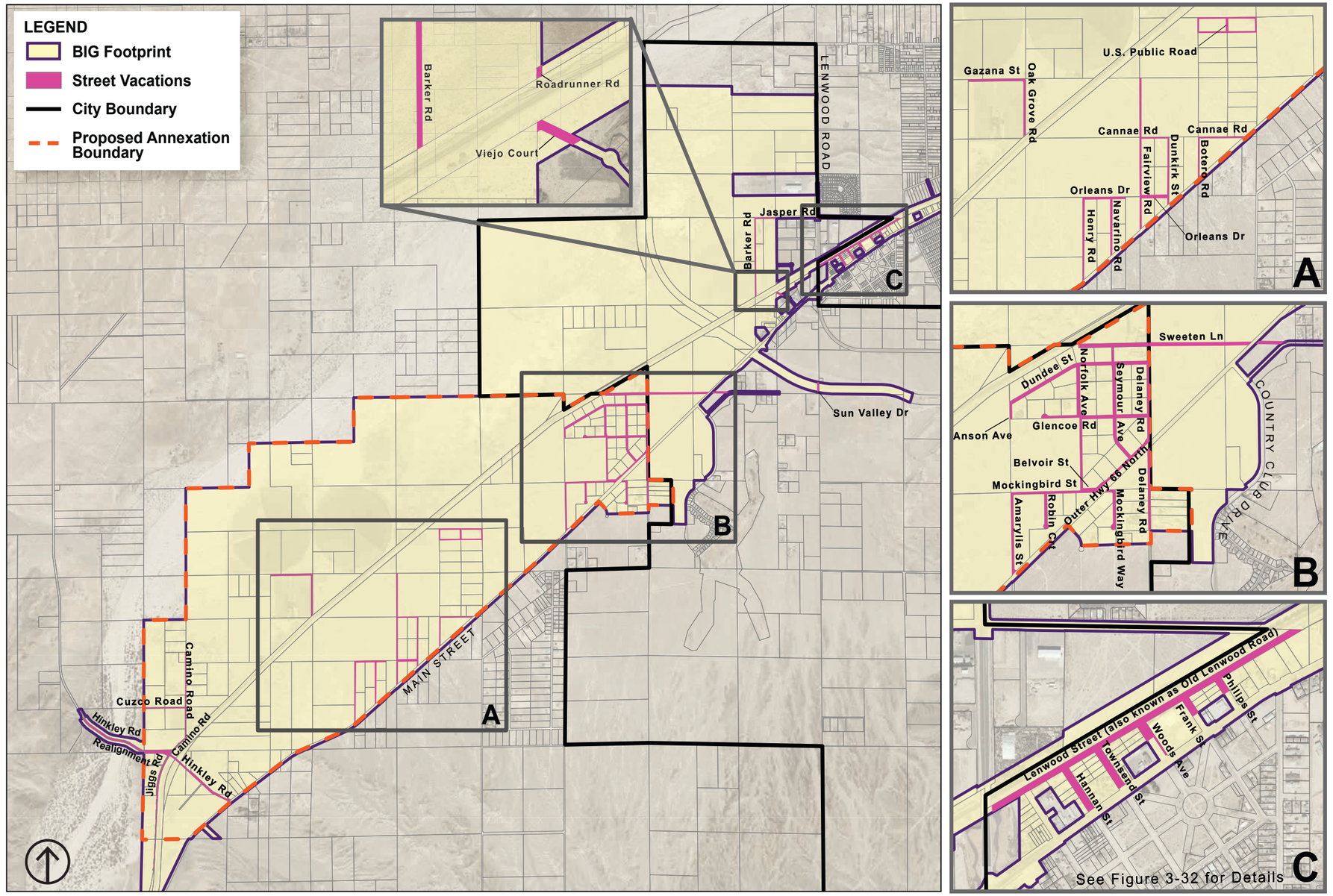


Figure 5: Main Street at Lenwood Channel Bridge Reconstruction - BIG

Source: TranSystems, 2024



Note: For Jiggs Road/Holcomb Ranch Road/Lords Road vacation and realignment/dedication (offiste in the County of San Bernardino), see figures 3-34 and 3-35 in Section 3.0 Project Description.
Along the Project Frontage on Main Street and Lenwood Road, dedication of right-of-way and vacation of excess right-of-way will occur as shown on the Tentative Map.

Figure 6: BIG Street Vacations

1.5 Study Area and Scenarios

As discussed in **Section 3.1: Definition of Study Area,** the LOS assessment study area is consistent with the County TIS Guidelines and includes the following transportation facilities:

- 44 intersections (including BIG's four proposed internal intersections and two access intersections)
- 27 roadway segments (including 7 proposed BIG roadway segments)
- 8 freeway off-ramps
    - Note: Freeway off-ramp queueing analysis is included to meet Caltrans guidance, as discussed further in **Section 3.5: Consistency with Applicable LOS Standards.**

This report analyzes study area operations for the following scenarios:

- Existing Conditions
    - Existing No BIG Baseline
- Opening Year 2028
    - Opening Year 2028 No BIG Baseline
    - Opening Year 2028 Plus BIG
- Interim Year 2033
    - Interim Year 2033 No BIG Baseline
    - Interim Year 2033 Plus BIG
- Horizon Year 2048
    - Horizon Year 2048 No BIG Baseline
    - Horizon Year 2048 Plus BIG

The Opening Year 2028 No BIG Baseline, Interim Year 2033 No BIG Baseline, and Horizon Year 2048 No BIG Baseline scenarios analyze operations on the existing roadway network, excluding BIG related traffic and proposed on-site circulation improvements and off-site TMs. The Opening Year 2028 Plus BIG, Interim Year 2033 Plus BIG, and Horizon Year 2048 Plus BIG scenarios analyze operations on the existing roadway network, plus BIG traffic and on-site circulation improvements, as discussed in **Section 1.4: BIG Transportation Improvements** (the proposed BIG driveways, Hinkley Road vacation and realignment, Main Street widening improvements, and Jiggs Road realignment). Where LOS analysis determined deficiencies, TMs were identified and incorporated as recommendations. **Section 1.7: Transportation Deficiency Improvements** summarizes the proposed TMs and the resulting LOS.

1.6 Deficiency Analysis

The Plus BIG conditions are assessed using LOS based methodologies for consistency with the following LOS standards, as described in more detail in **Section 3.5: Consistency with Applicable LOS Standards.**

- City of Barstow proposed Transportation Study for Barstow General Plan (Fehr & Peers, 2025)
- San Bernardino County Transportation Impact Study Guidelines (County of San Bernardino, 2019)
- San Bernardino Congestion Management Program (CMP) 2016 Update (San Bernardino County Transportation Authority, 2016)

Each transportation facility is assessed using the applicable threshold. The jurisdiction for each facility is noted in **Section 3.1: Definition of Study Area**. If the applicable threshold is exceeded, BIG is considered to create a transportation deficiency inconsistent with applicable LOS standards, and transportation modifications to improve operations should be considered.

If a relevant Volume-to-Capacity (V/C) threshold was exceeded for a roadway segment, additional analysis was performed to determine if BIG is considered to create a transportation deficiency inconsistent with applicable LOS standards. Additional analysis was performed because the capacities used in V/C analysis are based on a road that experiences "typical" AM and PM peak hour traffic. In contrast, the roadway segments near the BIG Specific Plan area have traffic patterns that are distributed more evenly throughout the day without substantial increases during AM and PM peak hours. This indicates that the roadway segments near the BIG Specific Plan area can accommodate higher daily traffic volumes than what V/C analysis conveys. Therefore, roadway segments with uninterrupted flow, which is assumed to be roadway segments with traffic control devices spaced at greater than 1 mile, were analyzed using Highway Capacity Software (HCS) to further evaluate the LOS conditions. For roadway segments with interrupted flow, which is assumed to be roadway segments with traffic control devices spaced at less than or equal to one mile, Synchro arterial analysis was performed to further evaluate LOS conditions.

The thresholds for when BIG would be considered to cause a transportation deficiency inconsistent with applicable LOS standards is summarized in **Section 3.6: Summary of Proposed Operational Phase Thresholds**.

Transportation deficiencies for the analysis scenarios are summarized below. Where LOS analysis determined deficiencies, TMs were identified, if feasible, and recommended for consistency with applicable LOS standards. **Section 1.7: Transportation Deficiency Improvements** summarizes the proposed TMs and the resulting LOS.

Existing No BIG Baseline Conditions:

- All study area intersections operate at an acceptable LOS according to relevant agency performance standards.
- All study area roadway segments operate at an acceptable LOS according to relevant agency performance standards.

Opening Year 2028 No BIG Baseline Conditions:

- All study area intersections are forecast to operate at an acceptable LOS according to relevant agency performance standards.
- All study area roadway segments are forecast to operate at an acceptable LOS according to relevant agency performance standards.

Opening Year 2028 Plus BIG Conditions:

- All study area intersections are forecast to operate at an acceptable LOS according to relevant agency performance standards.
- All study area roadway segments are forecast to operate at an acceptable LOS according to relevant agency performance standards, except the following:
    - Roadway Segment 14, Lenwood Road between Agate Road and Jasper Road (LOS D)

    - Analyzed further using HCS to more accurately assess arterial operations and was found to operate acceptably.
- All study area freeway off-ramps are forecast to have sufficient storage to accommodate peak-hour queueing.

Interim Year 2033 No BIG Baseline

- All study area intersections are forecast to operate at an acceptable LOS according to relevant agency performance standards.
- All study area roadway segments are forecast to operate at an acceptable LOS according to relevant agency performance standards.

Interim Year 2033 Plus BIG Conditions:

- All study area intersections are forecast to operate at an acceptable LOS according to relevant agency performance standards, except the following:
    - Intersection 14, Main Street & Pettit Road (PM Peak Hour: LOS D)
    - Intersection 18, Lenwood Road & High Desert Road (PM Peak Hour: LOS D)
    - Intersection 19, Lenwood Road & Chevron Driveway (PM Peak Hour: LOS D)
- All study area roadway segments are forecast to operate at an acceptable LOS according to relevant agency performance standards, except the following:
    - Roadway Segment 14, Lenwood Road between Agate Road and Jasper Road (LOS E)
        - Analyzed further using HCS to more accurately assess arterial operations and was found to operate acceptably.
    - Roadway Segment 16, Lenwood Road between Main Street and High Desert Road (LOS F)
        - Analyzed further using HCS to more accurately assess arterial operations and was found to operate acceptably.
- All study area freeway off-ramps are forecast to have sufficient storage to accommodate peak-hour queueing.

Horizon Year 2048 No BIG Baseline Conditions:

- All study area intersections are forecast to operate at an acceptable LOS according to relevant agency performance standards, except the following:
    - Intersection 17, Lenwood Road & Love's Travel Stop Driveway (PM peak hour: LOS D)
    - Intersection 18, Lenwood Road & High Desert Road (PM Peak Hour: LOS D)
    - Intersection 19, Lenwood Road & Chevron Driveway (AM Peak Hour: LOS D, PM Peak Hour: LOS E)
    - Intersection 37, Barstow Road & Armory Road (PM peak hour: LOS E)
- All study area roadway segments are forecast to operate at an acceptable LOS according to relevant agency performance standards, except the following:
    - Roadway Segment 1, Main Street between Hinkley Road and Country Club Drive (LOS E)
    - Roadway Segment 16, Lenwood Road between Main Street and High Desert Road (LOS F)

- Roadway Segment 17, Lenwood Road between High Desert Road and the I-15 southbound off-ramp (LOS E)

Horizon Year 2048 Plus BIG Conditions:

- All study area intersections are forecast to operate at an acceptable LOS according to relevant agency performance standards, except the following:
  - Intersection 3, Main Street & Lenwood Road (PM peak hour: LOS E)
  - Intersection 14, Main Street & Pettit Road (PM peak hour: LOS E)
  - Intersection 17, Lenwood Road & Love's Travel Stop Driveway (AM peak hour: LOS D, PM peak hour: LOS F)
  - Intersection 18, Lenwood Road & High Desert Road (AM peak hour: LOS F, PM peak hour: LOS F)
  - Intersection 19, Lenwood Road & Chevron Driveway (AM peak hour: LOS F, PM peak hour: LOS F)
  - Intersection 20, Lenwood Road & Commerce Parkway (PM peak hour: LOS D)
  - Intersection 37, Barstow Road & Armory Road (PM peak hour: LOS E)
- All study area roadway segments are forecast to operate at an acceptable LOS according to relevant agency performance standards, except the following:
  - Roadway Segment 1, Main Street between Vacated Hinkley Road and Country Club Drive (LOS F)
    - Analyzed further using HCS to more accurately assess arterial operations and was found to also operate deficiently.
  - Roadway Segment 14, Lenwood Road between Agate Road and Jasper Road (LOS F)
    - Analyzed further using HCS to more accurately assess arterial operations and was found to also operate deficiently.
  - Roadway Segment 16, Lenwood Road between Main Street and High Desert Road (LOS F)
    - Analyzed further using HCS to more accurately assess arterial operations and was found to also operate deficiently.
  - Roadway Segment 17, Lenwood Road between High Desert Road and the I-15 southbound off-ramp (LOS F)
    - Analyzed further using SimTraffic to more accurately assess arterial operations and was found to operate acceptably.
- All study area freeway off-ramps are forecast to have sufficient storage to accommodate peak-hour queueing.

1.7 Transportation Deficiency Improvements

Consistent with the preceding list, **Table 2: Transportation Deficiencies and Proposed Transportation Modifications Summary** summarizes transportation deficiencies that BIG would contribute to and identifies TMs that are physically feasible and capable of lessening transportation deficiencies to a level that would be consistent with applicable LOS standards.

Table 2: Transportation Deficiencies and Proposed Transportation Modifications Summary						
ID	**BIG-Related Deficiency Location**	**Scenario**			**Proposed Transportation Modifications (TM)**	**Project Responsibility**
		Opening Year 2028 Plus BIG	**Interim Year 2033 Plus BIG**	**Horizon Year 2048 Plus BIG**		
Study Intersection						
3	Lenwood Road & Main Street			X	**TM-4 (Horizon Year 2048 Plus BIG):** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would restripe southbound approach to provide a second southbound left-turn lane; restripe southbound right-turn lane into a through-right lane; reconfigure traffic island to provide space for additional southbound through movement; restripe northbound approach to provide a second northbound left-turn lane.	**Construct Improvement**
14	Main Street & Petit Road		X	X	**TM-1 (Interim Year 2033 Plus BIG):** Prior to the occupancy of the transload warehouse center exceeding 5,900 KSF total, BIG would install a traffic signal at intersection. Signalization is warranted under Interim Year (2033) Plus BIG and Horizon Year (2048) Plus BIG conditions.	**Construct Improvement**
					TM-1 (Horizon Year 2048 Plus BIG): Same improvement as 2033.	
17	Lenwood Road & Love's Travel Stop Driveway			X	**TM-5 (Horizon Year 2048 Plus BIG):** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would install a traffic signal at intersection and fiber optic interconnect system between Love's Travel Stop Driveway/Truck Repair Driveway and Commerce Parkway. Signalization is warranted under Horizon Year (2048) conditions.	**Construct Improvement**
18	Lenwood Road & High Desert Road		X	X	**TM-2 (Interim Year 2033 Plus BIG):** Prior to the occupancy of the transload warehouse center exceeding 5,900 KSF, BIG would install a traffic signal at intersection and fiber optic interconnect system between High Desert Road and Commerce Parkway. Signalization is not warranted under Interim Year (2033) Plus BIG conditions, but meets the criteria for signalization under Horizon Year (2048) Plus BIG conditions. It is recommended that the intersection be signalized under 2033 conditions.	**Construct Improvement**
					TM-2 (Horizon Year 2048 Plus BIG): Same improvements as 2033 and optimize signal timing for corridor under 2048 conditions.	
19	Lenwood Road & Truck Freightliner Service Point Driveway		X	X	**TM-3 (Interim Year 2033 Plus BIG):** Prior to the occupancy of the transload warehouse center exceeding 5,900 KSF, BIG would install a traffic signal and cluster the intersection with the existing signal at Commerce Parkway so they function as an combined system with a single controller, and install fiber optic interconnect system between High Desert Road and Commerce Parkway. Signalization is not warranted under Interim Year (2033) Plus BIG conditions but meets the criteria for signalization under Horizon Year (2048) Plus BIG conditions. It is recommended that the intersection be signalized under 2033 conditions.	**Construct Improvement**
					TM-3 (Horizon Year 2048 Plus BIG): Same improvements as 2033 and optimize signal timing for corridor under 2048 conditions.	**Construct Improvement**
20	Lenwood Road & Commerce Parkway			X	**TM-6 (Horizon Year 2048 Plus BIG):** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would restripe existing southbound through-left lane to an exclusive through lane, add northbound and southbound protected left signal phases, and would install fiber optic interconnect system between Love's Travel Stop Driveway/Truck Repair Driveway and Commerce Parkway.	**Construct Improvement**
37	Barstow Road & Armory Road			X	**TM-7 (Horizon Year 2048 Plus BIG):** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would restripe westbound through-right lane to an exclusive through lane, add westbound right-turn overlap phase, and restrict southbound U-turns.	**Construct Improvement**
Roadway Segment						
1	Main Street between Vacated Hinkley Road and Country Club Drive			**X**	**TM-8 (Horizon Year 2048 Plus BIG):** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would provide 4.04% fair share of the costs for widening the roadway to four lanes.	**4.04% Fair Share**
14	Lenwood Road between Agate Road and Jasper Road			**X**	**TM-9 (Horizon Year 2048 Plus BIG):** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would provide 35.59% fair share of the costs for widening the roadway to four lanes.	**35.59% Fair Share**
16	Lenwood Road between Main Street and High Desert Road			**X**	**TM-10 (Horizon Year 2048 Plus BIG):** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would provide 33.13% fair share of the costs for widening the roadway to four lanes.	**33.13% Fair Share**

2.0 PROJECT SUMMARY

This Report has been prepared to analyze the proposed Barstow International Gateway (BIG) and associated off-site improvements. BIG is located in the City and in unincorporated territory in the County (see **Figure 7: Regional Vicinity Map** and **Figure 8: Local Vicinity Map**). BIG consists of a rail yard with an intermodal facility[5] and "block swap" facility[6], a transload warehouse center[7], and a solar farm.

Additionally, to serve the proposed rail yard and transload warehouse center, BNSF Railway Company (BNSF) proposes off-site rail improvements (including lead track extensions), and off-site non-rail improvements (including drainage, utilities, and roadways).

BIG's proposed components are depicted on **Figure 9: Barstow International Gateway Conceptual Site Plan** and **Figure 10: BIG Off-Site Improvements, West** and off-site improvements are depicted on **Figure 11: BIG Off-Site Improvements, East**.

2.1 Project Location and Setting

BIG totals approximately 5,000 acres[8], and includes approximately 680 acres which would remain ungraded/undisturbed (Mojave River buffer area). BIG's Specific Plan area totals approximately 4,300 acres and is generally bounded by the Mojave River to the north, Main Street (also referred to as National Trails Highway or Route 66) to the south, Lenwood Road to the east, and Hinkley Road to the west.

Most of the BIG footprint is within unincorporated County lands, while the remainder is within Barstow City limits. The BIG footprint is generally flat and gradually slopes north to the Mojave River. Off-site improvements are generally within existing BNSF rail and City/County street rights-of-way. The BIG footprint is primarily vacant undeveloped land, which is traversed by an existing BNSF railroad, and which contains scattered residential, commercial, and industrial land uses. This area is mostly devoid of tall vegetation and trees, with structures and other elements of the built environment scattered throughout. Existing land uses within BIG's footprint are listed in **Table 3: Existing Land Uses**. There are approximately 108 dwelling units and approximately 94,000 square feet of non-residential land uses (i.e., commercial and industrial) within the BIG footprint. Additionally, a private airstrip (Depue Airport) is within BIG's proposed solar farm footprint. Under BIG, this private airstrip would be demolished and replaced with the proposed solar farm.

Table 3: Existing Land Uses

Description	Residential (DU)	Commercial (SF)	Industrial (SF)	TOTAL (DU)	TOTAL (SF)
Existing Land Use	108	85,887	7,837	108	93,724

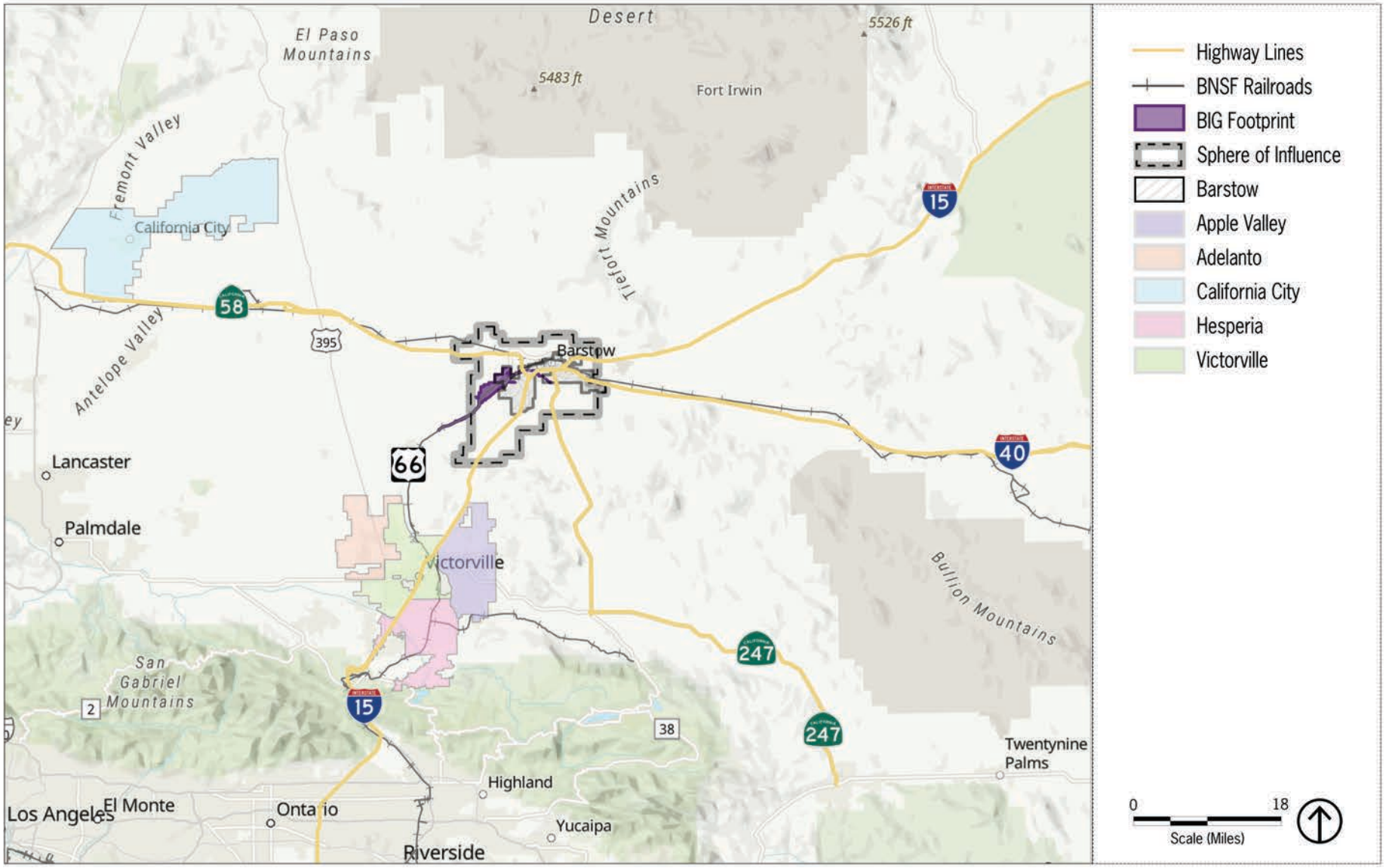
[5] "Intermodal facility" refers to a rail yard where containerized goods are transferred between trains and trucks. Trucks arrive to either pick up containers from arriving trains or deliver containers for departing trains. However, unlike traditional intermodal facilities, at BIG the majority of containers would arrive by train and be transferred to and from electric hostlers.

[6] "Block Swap" refers to transferring a block of intermodal train cars between trains. In effect, the entire block of cars remains coupled together and is moved en masse to another train.

[7] "Transload" refers to the transfer of goods from one container to another. In this document, it specifically refers to the transfer of goods from 40-foot international containers to 53-foot domestic containers. The transload warehouse center at BIG is designed to serve goods transported to and from the intermodal facility by rail.

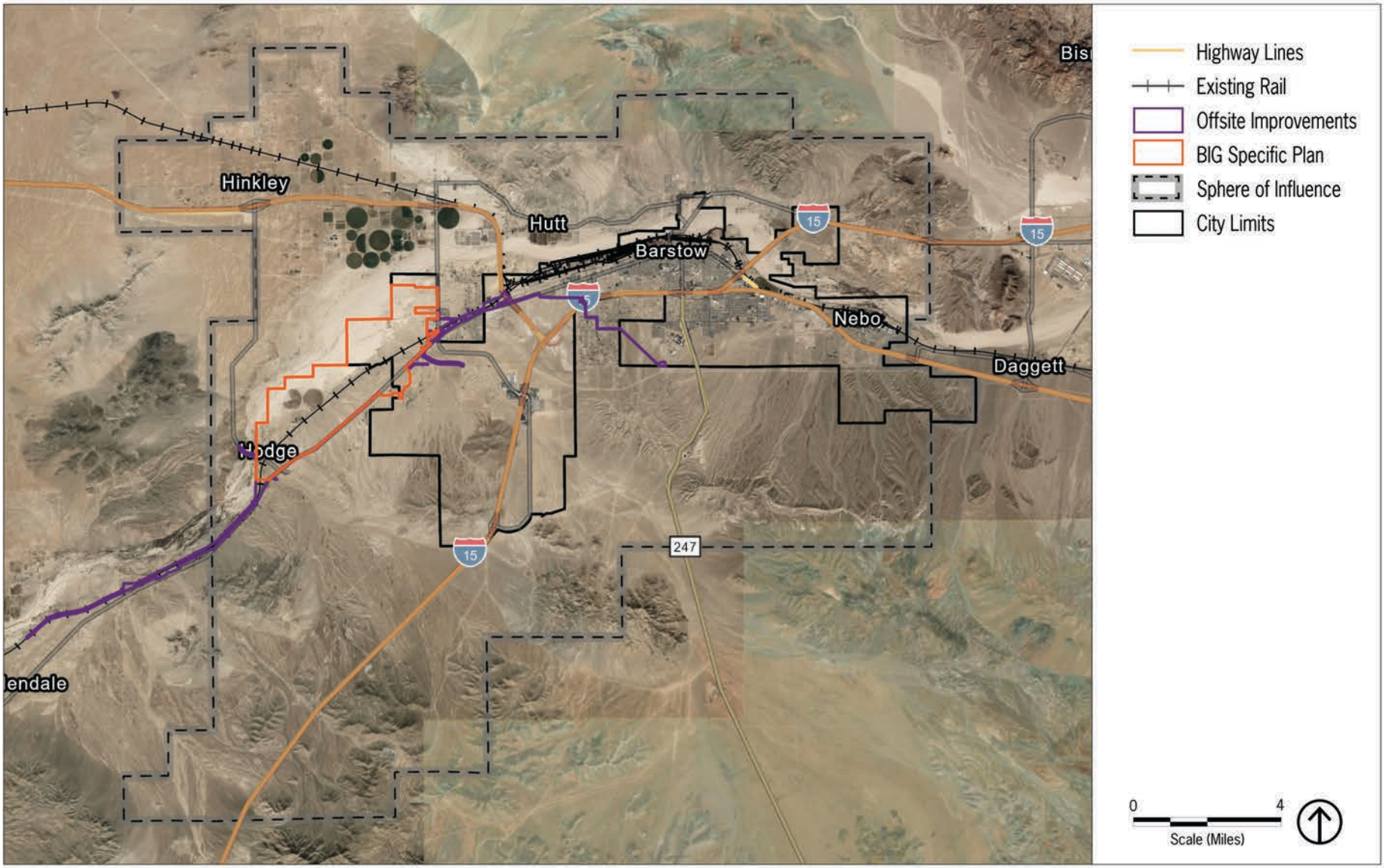
[8] Although the BIG Specific Plan acreage is 4,335 acres, throughout this technical report, the BIG Specific Plan acreage is referred to as 4,300 acres. Note: all acreages in this report are preliminary and based on GIS data. Acreages will be refined with site survey.

Regional vehicular access to BIG is provided by Main Street from the south, I-15 from the southeast, and State Route (SR) 58 from the east. Local access to BIG is primarily provided by Lenwood Road and Hinkley Road from the east and west, respectively, in addition to various unpaved roads along Main Street. Regional rail access is provided from the north by BNSF's Mojave subdivision, from the west by BNSF's Cajon subdivision, and from the east by BNSF's Needles subdivision.



Sources: City of Barstow, 2024
County of San Bernardino, 2023

Figure 7: Regional Vicinity Map



Sources: City of Barstow, 2024
County of San Bernardino, 2023

Figure 8: Local Vicinity Map

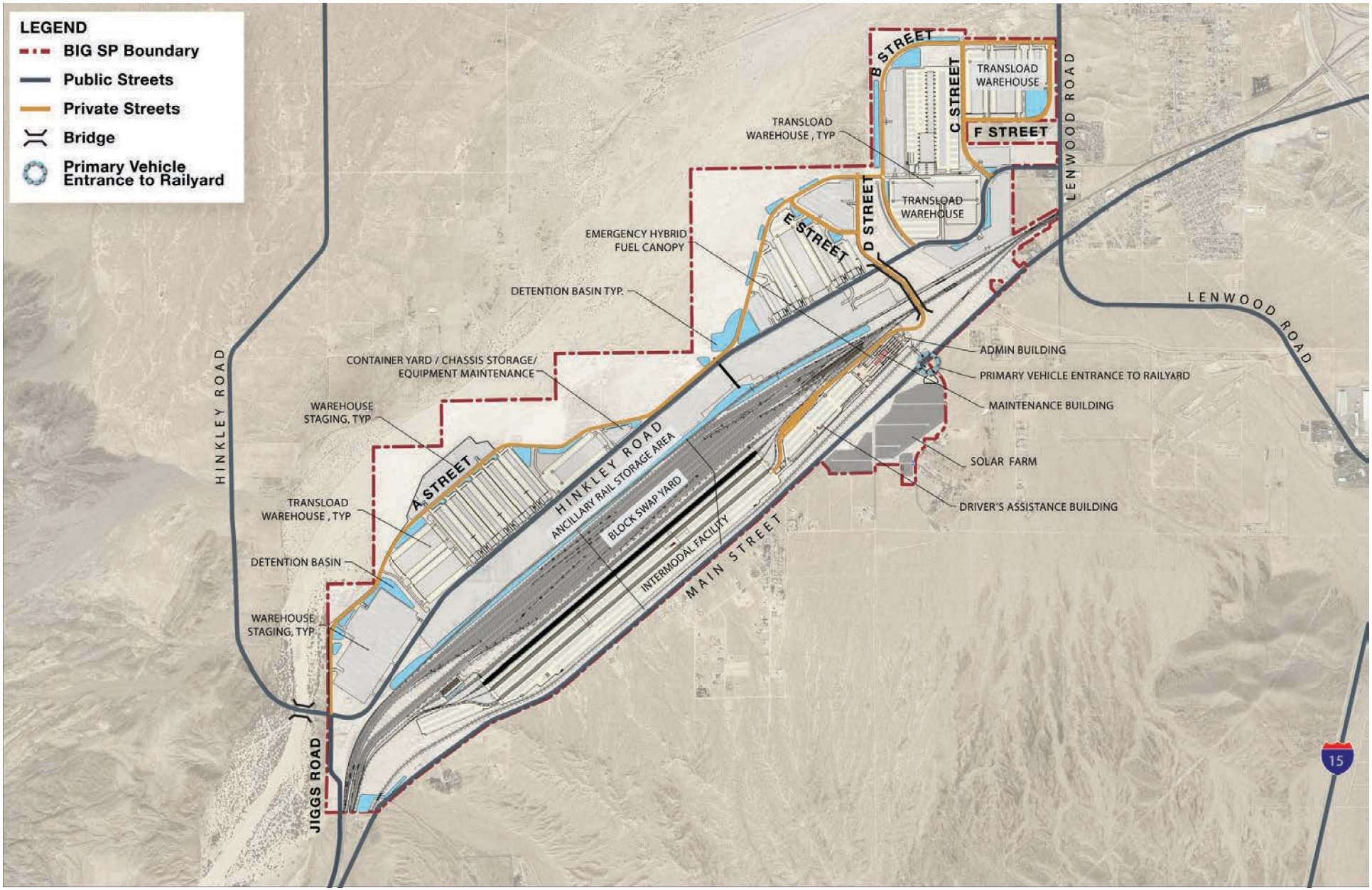
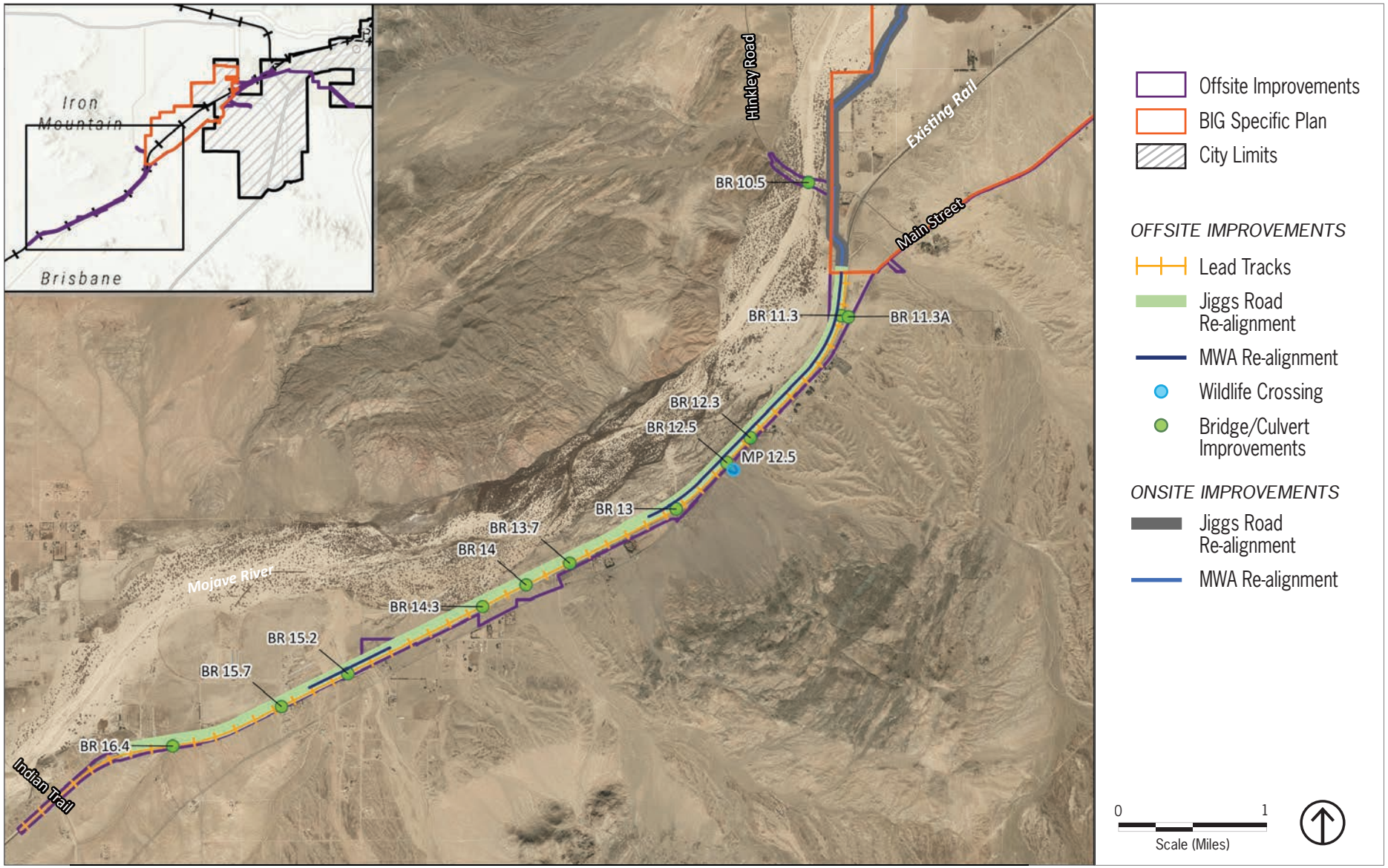
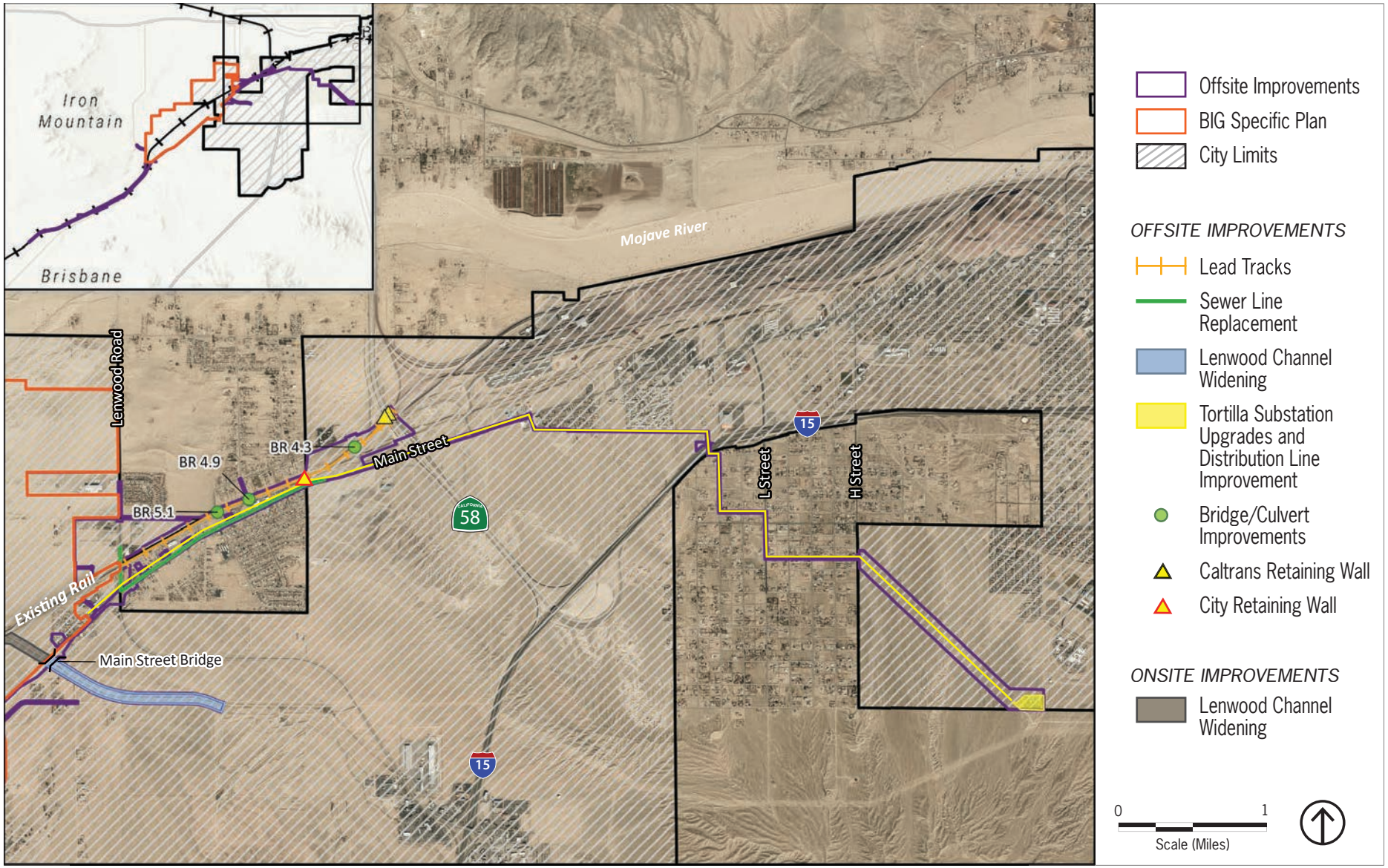


Figure 9: Barstow International Gateway Conceptual Site Plan



Source: TranSystems, 2025

Figure 10: BIG Off-Site Improvements, West



Source: TranSystems, 2025

Figure 11: BIG Off-Site Improvements, East

2.2 Project Components

Rail Yard

Overview

The rail yard would be generally bounded by the existing mainline to the north, Main Street to the south, Lenwood Road to the east, and Hinkley Road to the west. The rail yard would consist of an intermodal facility (i.e., where cross-dock intermodal operations and other intermodal facility operations would occur and where support intermodal facility uses would be located), a block swap yard, and ancillary rail areas (i.e., container yard, chassis storage, and ancillary rail storage area), as described below.

BIG's proposed rail yard would operate 24 hours per day, 365 days per year. The rail yard would have approximately 860 employees during Opening Year (2028), 1,010 employees in Interim Year (2033), and 1,125 employees during Horizon Year (2048)[9], which would accommodate both the block swap yard and intermodal facility operations. Employees would be split evenly between three shifts.

While the block swap yard would change the number of trains that would arrive or depart BIG by optimizing for end destinations, it would not increase the number of containers. BIG's intermodal facility would, through the cross-dock intermodal operation, add a new volume to the BNSF network, totaling approximately 3.2 trains per day on average in 2028, approximately 4.3 trains per day on average in 2033, and approximately 4.9 trains per day on average in 2048. These train counts include eastbound and westbound trains, and as described elsewhere, trains between the Ports and the BIG intermodal facility would be comprised of dedicated Tier 4 locomotives.

Intermodal Facility

BIG's intermodal facility is proposed at the southern extent of the BIG Specific Plan area and its operations would consist of two types: cross-dock intermodal and "other" operations. BIG's intermodal facility would operate differently than typical intermodal facilities in that most of the containers processed at BIG intermodal facility would not arrive or leave externally by heavy-duty trucks. Instead, almost all of the containers would arrive or leave by train and be processed via BIG's unique "cross-dock intermodal" operation. The intermodal facility's primary purpose would be to transfer containers between railcars and electric hostlers[10] for cross-dock movements at the on-site proposed transload warehouse center, and vice versa, though a small portion would arrive by heavy-duty truck. The electric hostlers would be used to transport containers within the rail yard, and between the rail yard and transload warehouse center. The electric hostlers would be zero-emission and would not leave BIG. This differs from the operations at a traditional intermodal facility where the primary purpose is to transfer containers from heavy-duty

[9] A "Horizon Year" is the last year of analysis. BIG's Horizon Year is 20 years after opening.
[10] Electric hostlers are trucks used for moving trailers and containers short distances within freight terminals, rail yards, and warehouses. Electric holsters would not use public roadways outside of BIG footprint.

trucks[11] to railcars, and vice versa (defined as "other" operations). BIG also includes a dedicated fleet of Tier 4 linehaul locomotives[12] to move containers between the Ports and the BIG intermodal facility.

BIG's intermodal facility would be composed of various components including railroad tracks, cargo handling equipment, an automated gate system, circulation roadways, yard equipment parking, container parking, stormwater detention ponds, electric vehicle charging stations, and buildings and ancillary rail facilities. Containers would be stored in parking spaces and low stacks at the intermodal facility, along with the ancillary rail area, and transload warehouse center (each described further below). Although electric lift equipment would be utilized to the extent commercially feasible within BIG's intermodal facility, a small 5,000-square-foot fuel canopy would be constructed in the electric hostler maintenance area to accommodate fueling of hybrid equipment. Hybrid and diesel equipment would include rubber-tired gantry cranes, seven air compressors, welders, railcar wheel change machines, and heavy-duty truck transport refrigeration units. The fuel canopy would be served by a 10,000-gallon unleaded fuel aboveground storage tank and a 20,000-gallon diesel fuel aboveground storage tank, with both controlled by an electronic fuel control system. In addition, starting in BIG opening year 2028, BNSF would increase the renewable diesel composition within their existing southern California fueling sites, including the existing fueling sites at the Ports and Barstow classification yard from 1 percent to 10 percent, a 900 percentage point increase in renewable diesel. This would improve the emissions of all BNSF trains fueling at the Ports, including those BNSF trains that would not stop at BIG.

BIG's intermodal facility proposes approximately 134,000 square feet of support buildings and structures, as detailed in **Table 4: BIG Intermodal Facility Structures**. As described below, final building sizes may vary slightly, this EIR conservatively analyzes up to 150,000 SF of support buildings and structures.

Table 4: BIG Intermodal Facility Structures

Building/Canopy	Square Footage
Administration Building	23,000
Electric Hostler Employee and Maintenance Building	39,000
Drivers Assist Building	5,000
Crane Maintenance Employee and Storage Building	5,000
Crane Maintenance Canopies	22,500
Container Safe Haven Canopies	2,500
Quick Repair Canopy	10,000
AGS Kiosk Canopies	20,000
AGS Portals	2,000
Emergency Fuel Station Canopy for Hybrid Vehicles	5,000
Total	*134,000*
Assumed Building Total for Final Design	*150,000*

Note:
The square footage described is an estimate and may vary up to 10% from 134,000 depending on the final engineering, therefore, the total square footage for planning purposes is estimated at approximately 150,000 sf.

[11] "Heavy-duty" trucks are conventional highway trucks that travel on public roads and carry containers intra- and inter-state.
[12] "Tier" refers to emissions standards set by regulatory agencies for engine emissions, with Tier 0 referring to the oldest and having the highest emissions, while Tier 4 is the latest, more stringent standard with the fewest emissions.

Block Swap Yard

The block swap yard is proposed within the middle portion of the BIG Specific Plan area, on approximately 410 acres of the rail yard's total approximately 1,950 acres. The proposed block swap yard would allow for the transfer of multiple railcars, or "blocks" of intermodal rail cars between trains via Tier 4 switcher locomotives. A block is defined as rail cars of a similar type moving to a similar destination that are already connected and can be combined with other blocks intended for similar destinations to produce more efficient train movements. The entire block of rail cars would remain coupled together and be moved en masse, permitting the synchronizing of blocks to their destinations, so that each train would be compiled of rail car blocks traveling to similar destinations. Blocks could be assembled from inbound trains or trains processed at the intermodal facility carrying containers processed at the transload warehouse center. Certain train blocks may stage at the block swap yard until another train arrives with similar destination. The block swap yard would facilitate switching and transfer of lengthy rail car blocks between tracks for assembling departing trains. Thus, by synchronizing trains to their destinations, the block swap yard would improve train efficiency eastbound and westbound. The rail car blocks within the block swap yard would include containers from BIG's intermodal facility and containers processed at the transload warehouse center, combining as needed based on their destination.

The block swap yard's function is unique compared to a typical classification yard, such as the existing Barstow classification yard. Classification yards are where trains being processed are made up of non-intermodal railcars (i.e., individual boxcars, gondolas, open and closed hopper cars, automobile railcars, and tank cars), rather than intermodal railcars. BNSF designates these types of trains with a different train identification than those that would be processed at BIG. Further, BNSF uses different equipment to process these trains than would be used at BIG. While there is a small intermodal facility component adjacent to the existing Barstow classification yard, that intermodal facility is only used to process overflow from other BNSF intermodal facilities. By contrast, BIG's block swap yard would disassemble and assemble lengthy blocks of railcars with intermodal containers to similar destinations utilizing Tier 4 switcher locomotives. The existing Barstow classification yard also utilizes switcher locomotives as part of its operations, although they are currently Tier 0/0+/1+ switchers. Starting in BIG opening year 2028, BNSF will voluntarily retire all existing Tier 0/0+/1+ switcher locomotives at the unrelated existing Barstow classification yard, and in their place add six Tier 4 switcher locomotives.

Ancillary Rail Area

The ancillary rail storage area is an approximately 400-acre area north of the existing mainline and would be graded and covered with aggregate to be used for numerous purposes, including a container yard, truck chassis storage, and storage of maintenance equipment. A container yard would support the storage of empty containers awaiting loading while chassis storage would be used to provide parking for empty chassis awaiting use for loading, unloading, or draying of containers. The ancillary rail storage area would also be used for storage of spare parts and equipment for track maintenance, including rail, ties, turnouts, and other track material.

Mainline Improvements

BIG would retain the existing two rail mainlines (north mainlines) within their current alignments, except at bridge crossings, which would be upgraded. BIG also proposes to construct two new mainlines (south mainlines), which would traverse the proposed rail yard in an east-west orientation, extending from Lenwood Road on the east to Hinkley Road on the west. During the construction phase, the south mainlines would be used to divert train traffic from the existing mainlines while they are upgraded. During BIG operations, half of the trains which would bypass BIG would use the north mainlines and half would use the south mainlines to balance train counts between the mainlines. BIG would also upgrade various bridge crossings including replacement of the crossing at Lenwood Channel to accommodate the proposed Lenwood Channel widening; removal of existing culverts[13] to accommodate proposed culverts for the overall rail yard; and replacement of two structures to meet BNSF standards regarding 50- and 100-year flood conditions.

Transload Warehouse Center

The transload warehouse center is proposed at the northern extent of the BIG Specific Plan area, on approximately 1,330 acres of BIG SP's total approximately 4,300 acres. The transload warehouses would be designed to process the contents of containers from cross-dock intermodal operations, with a small percentage dedicated to processing the contents of containers that have a portion destined for the Inland Empire (the remainder of the container's contents would be placed on trains destined eastward). A small percentage of containers processed at the transload warehouse center would arrive/leave by heavy-duty trucks, primarily from/to the Inland Empire. The transload warehouse center would process most of the containers within an on-site "closed loop" operation between BIG's intermodal facility and the transload warehouse center. The transload warehouse center would include approximately 9.0 million square feet of transload warehouses. The transload warehouse center would be fully built during construction, but operations would gradually increase as customers relocate to BIG. Transload warehouse center operations would include approximately 2,767 employees in Opening Year, approximately 3,660 employees in Interim Year, and 4,248 employees in Horizon Year.

The transload warehouse center would be composed of multiple buildings of various configurations and sizes, depending on tenant needs. As such, **Figure 9: Barstow International Gateway Conceptual Site Plan** provides a conceptual site plan for illustrative purposes showing potential transload warehouse buildings, locations, and sizes. Final transload warehouse buildings, locations, and sizes may differ from those proposed and would be processed with the City, as development occurs. Each transload warehouse would include container parking/storage areas, employee parking, stormwater/hydrology improvements, and landscaping. Finally, emergency generators are proposed throughout the transload warehouse center to provide electric power in the event of a power outage.

There would also be several areas distributed around the transload warehouse center, adding up to approximately 275 acres, for staging/overflow parking of containers accessing the transload warehouse center. These warehouse staging areas would be for truck containers only; truck "hoteling"[14] would not

[13] Culverts are drainage features, typically a pipe or arch, used to convey water under a road or rail tracks.
[14] Truck "hoteling" refers to when a heavy-duty truck parks for the driver to rest within the cab.

occur, as electric hostlers would transfer containers to/from these areas, thus, heavy-duty truck trailers would not enter or exit these areas.

Hydrology/Stormwater Drainage Improvements

BIG would construct various infiltration basins and drainage outlets to the Mojave River that would be designed for 100-year flood events. Preliminarily, BIG proposes detention ponds of various sizes throughout BIG footprint totaling approximately 165 acre-feet of storage volume, which would accommodate the 100-year flood conditions.

In addition to various ephemeral washes throughout BIG footprint, three other primary hydrologic features traverse BIG footprint, as detailed below.

Unnamed Stream (Milepost 10.9): This feature is a dry wash from Main Street to the Mojave River that includes a sharp western bend. This feature would be realigned to accommodate track mains, sidings, and support tracks and improved with a combination of bridges and box culverts spanning the channel (Bridge 10.9a and Bridge 11.2, respectively).

Hinkley Road Bridge at Mojave River (Milepost 10.5): The existing Hinkley Road Bridge, which the County owns and maintains, is at a narrowed section of the Mojave River and crosses via a concrete pier structure. Based on discussions with the County, the existing Hinkley Road Bridge over the Mojave River is experiencing structural issues and is at risk of being over-topped from seasonal flooding. Hydrology and hydraulic analyses have indicated the existing bridge is undersized. To maintain a roadway connection to Hinkley Road from the transload warehouse center, BIG proposes to replace the existing bridge with a longer structure to better match the channel width of the Mojave River at that location. The channel beneath, and immediately adjacent to, the existing bridge would be excavated and widened to match the natural channel width more closely. Portions of Hinkley Road immediately east and west of the bridge would be raised to reduce exposure to Mojave River flood events. These proposed improvements at Hinkley Road Bridge would reduce flooding compared to existing conditions. As part of the improvements, the existing at-grade crossing would be abandoned, and vehicles would instead utilize the proposed Hinkley Road extension through the transload warehouse center.

Lenwood Channel (Milepost 6.5): A portion of the BIG footprint along Lenwood Channel is currently within the FEMA 100-year flood zone due to existing flooding concerns. Lenwood Channel is a north-south earthen channel used to convey water from the southeast to the Mojave River and maintained by San Bernardino County Flood District. Lenwood Channel would be widened by approximately 60 to 100 feet throughout the Specific Plan area for a length of 1.1 miles, continuing off-site south of Main Street, for an additional 1 mile. The widened channel would improve flooding compared to existing conditions. Preliminary BIG design requires the Lenwood Channel to be spanned at three locations for additional track east leads, mains, and sidings, as well as three roadway crossings: Main Street, Hinkley Road, and the private road between the intermodal facility and transload warehouse center.

Utility Improvements

To accommodate the proposed rail yard and transload warehouse center, BIG would require both relocations of existing facilities and construction of new/expanded facilities (i.e., water, wastewater,

electric power, natural gas, and telecommunications). The utility improvements proposed within BIG's footprint are discussed below.

Water

BIG's construction phase water demand includes non-potable water for construction activities and potable water for on-site construction workers. To provide non-potable water during the construction phase, up to eight new private on-site temporary groundwater wells would be constructed within BIG's transload warehouse center portion.

Temporary aboveground connections from Golden State Water Company existing mains within Main Street to BIG would be constructed to supply potable water to the construction sites. Additionally, Mojave Water Agency owns and operates a 48-inch recharge water line that crosses the BIG Specific Plan area. BIG proposes to relocate this existing line to the north to avoid conflict with rail yard and transload warehouse center improvements.

Operational potable water and fire flow water would be provided by directly connecting to facilities owned and operated by the Golden State Water Company. Fire flow would be supplemented by on-site water tanks and fire pumps if necessary to meet the fire flow requirements. Power to water tanks and fire pumps would be supported by the transload warehouse diesel backup generators in the case of an emergency. Water tanks would be placed entirely within the BIG footprint. The transload warehouse center would connect to an existing water main in Jasper Road on the east end of the BIG Specific Plan area. The rail yard would connect to an existing water main on the east end of the BIG Specific Plan area near Lenwood Road on the south side of Main Street. A new public 12- to 16-inch looped water main would be constructed from the existing connection in Main Street, extending west to the edge of rail yard, north to Hinkley Road, and then continue east in Hinkley Road to the existing connection point near Lenwood Road. A second connection from the looped water main would be provided at the northeast corner of the Specific Plan at Lenwood Road. The new on-site public water mains total approximately 10 miles in length.

Wastewater

BIG's construction-related wastewater generation would be from construction workers. Temporary portable facilities (i.e., portable restrooms and portable handwash stations) would be utilized during the construction phase.

BIG's operational wastewater generation would be from transload warehouse center and rail yard employees, and the rail yard wash bays and track pans. Wastewater generated by BIG would discharge to the City's existing wastewater system at three connection points. The transload warehouse center would discharge to the proposed new sewer main in Hinkley Road. A new 8-inch wastewater line is proposed within the Hinkley Road extension from the west end of the transload warehouse center to the northeast end of the transload warehouse center and would connect to the existing sewer main in Lenwood Road. Within the transload warehouse center, west of the Lenwood Channel, 8-inch lines would extend north in C Street to serve the transload warehouses connecting to Lenwood Road via B Street. The rail yard would include new wastewater lines and force mains at the southern portion of the rail yard, conveying wastewater to the east and connecting to the existing sanitary sewer main in Main Street near Country

Club Drive. BIG's wastewater would be conveyed by gravity flow to and treated at the Barstow Regional Wastewater Treatment Facility, which is owned and operated by the City. Wastewater conveyance and treatment would be coordinated with the City.

Electrical Power

BIG construction activities would generate temporary electric power demand from construction equipment, tools, lighting, and other necessary facilities (e.g., temporary offices). The electric power for construction activities would be supplied through connections to existing Southern California Edison (SCE) facilities.

BIG operations would generate permanent electric power demand from the transload warehouse center (lighting, electric vehicle charging for material handling, and forklifts) and rail yard (lighting, buildings, cranes, and electric hostlers (used to move containers between the rail yard and the transload warehouse center). BIG operational electric power demand would be met through connecting to the SCE Tortilla Substation and supplemented with on-site electrical generation (i.e., an approximately 140-acre, approximately 21 megawatts solar power generation facility (i.e., solar farm), which is described further below. BIG proposes to construct the following on-site electric power facilities to serve BIG:

- Three substations: two substations at the eastern and western extents of the rail yard; and one substation within the solar farm.
- Additional 33 kilovolt (kV) distribution lines connecting via underground duct banks in a loop around the west end of the intermodal facility and north end of the transload warehouse center. These proposed 33Kv distribution lines would total 23 miles of ductbank within the BIG Specific Plan area.
- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 megawatts to serve BIG. The solar farm would include a battery electric storage system and a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 megawatts of rooftop solar generation for Title 24 compliance.
- Emergency diesel generators are proposed at various locations across the rail yard and transload warehouse center to provide backup power in the event of Tortilla Substation service interruptions. Rail yard generators would only be used if a power outage were to occur at nighttime, as the proposed solar farm would provide sufficient power during daytime in the event of a power outage. The rail yard would include up to 10 generators at the far western extent, while the transload warehouse center would include up to 29 generators dispersed throughout. Generators would require up to 50 hours of testing and maintenance operations per year.

Solar farm maintenance would consist of cleaning, inspecting, and replacing solar panels, equipment, and other system components. Maintenance trips associated with these activities would be limited to trucks

transporting materials, equipment, and supplies to and from the farm. To maintain uninterrupted power generation for BIG, maintenance activities would occur incrementally. The solar farm would also require vegetative maintenance (e.g., mowing and weeding, and other grass control measures). No grading would occur during solar farm maintenance.

Natural Gas

BIG construction activities would not require construction of new natural gas facilities, although protection in place or relocation of existing natural gas facilities would be required to accommodate BIG.

Stormwater

To collect stormwater runoff, BIG proposes stormwater basins that would detain any stormwater in excess of predevelopment flows then discharge to existing drainageways through stormwater best management practices. BIG would include various outlets to the Mojave River. Exact sizing and locations of transload warehouse center basins would be dependent on final transload warehouse location, layout, and sizing. In addition, Lenwood Channel would be modified as discussed below.

Solid Waste

BIG would result in solid waste generation from construction (demolition debris, broken or excess materials, packaging, and other construction waste), as well as during operations from the rail yard and transload warehouse center. BIG's solid waste would be collected within on-site trash bins and be disposed of at the Barstow Sanitary Landfill, with 65 percent being recycled (for instance, demolished concrete foundations can be crushed and re-used on-site as aggregate).

Telecommunications

Telecommunication lines cross BIG footprint along Lenwood Road and along the southern edge of the existing tracks. Underground utilities may also be present. All underground communication facilities are assumed to have shallow depths except those crossing under existing features such as underpasses and creeks. Lines within BIG footprint may be relocated adjacent to/within existing and proposed rights of way or abandoned. In addition, BNSF Telecommunications would install approximately 12 communication towers with heights generally between 100 - 120 feet, though two communication towers would be 160 feet tall. Additionally, various existing telecommunications lines owned by Frontier Communications and Lumen would be removed from within BIG footprint, and, in their place, new communications line would be run beginning at the Jasper Road at Lenwood Road intersection, running to the western extent of the BIG Specific Plan area, and then running eastward back to Lenwood Road in a "loop."

On-Site Circulation Improvements

BIG would include various on-site circulation improvements as discussed below.

Hinkley Road Realignment: BIG would vacate Hinkley Road between the south side of the Mojave River bridge crossing and Main Street, closing the existing at-grade rail crossing. Hinkley Road would be realigned beginning at the north side of the Mojave River bridge crossing to connect through the transload warehouse center to the Jasper Road/Lenwood Road intersection. Transload warehouse center

employees and heavy-duty trucks destined for the transload warehouse center would enter from the Lenwood Road/Hinkley Road/Jasper Road intersection.

Internal private roadways: In addition to the realigned public Hinkley Road (discussed above), BIG would include four dedicated internal private roadways for electric hostlers (private streets A, B, D, and E), and two internal private roadways for employee, visitor, and truck access (private streets C and F).

Country Club Drive: Country Club Drive would be widened along the solar farm frontage for approximately 400 feet to the proposed realignment of Sweeten Lane. A new stop-controlled intersection is proposed at the Country Club Drive at Sweeten Lane intersection.

Main Street: Rail yard employees and heavy-duty trucks destined for the intermodal facility would enter BIG's rail yard from a new driveway on Main Street across from Country Club Road. Main Street would be widened from two lanes to four lanes for approximately 0.5 mile east of Country Club, resulting in a consistent four-lane roadway width through Barstow. Additionally, the existing two-lane Main Street over Lenwood Channel low water crossing would be replaced with a new four-lane bridge that accommodates the 100-year flood condition, substantially reducing the existing flood conditions. Main Street would be raised over Lenwood channel, modifying the vertical alignment of Main Street for approximately 0.8 mile. The intent of this design is to keep flood waters contained in Lenwood Channel and convey the flow to the Mojave River under the bridge at MP 6.5, avoiding the overflow of the bank that can occur under existing conditions.

To accommodate BIG, various on-site public rights-of-way within the City and unincorporated San Bernardino County would also need to be vacated.

Off-Site Improvements

In addition to the on-site improvements described above, BIG also proposes off-site rail and non-rail improvements, as discussed below:

Off-Site Rail Improvements

BIG proposes lead track extensions to the east of approximately two miles and lead track extensions to the west of approximately seven miles (east lead track and west lead track). These off-site rail improvements would be primarily within existing BNSF right-of-way. These improvements would enable trains to safely enter and exit the mainline at mainline speeds, rather than slower "yard" speeds and risk fouling the track.[15] BIG east and west lead tracks would require modifications to existing culverts within the footprint; see also *Stormwater Drainage* discussion below.

[15] "Fouling the track" means the placement of an individual or an item of equipment in such proximity to a track that the individual or equipment could be struck by a moving train or on-track equipment, or in any case is within four feet of the field side of the near running rail (49 CFR Part 214). When a rail network becomes congested, trains can foul the track by moving slower than a train behind them.

Off-Site Non-Rail Improvements

BIG proposes ancillary and related stormwater drainage, utility (i.e., water, sewer, electric power, natural gas, and telecommunications), and circulation/roadway improvements and modifications, described below.

Water. North of transload warehouse center, an existing Mojave Water Agency 48-inch recharge line would be relocated. The relocated line would stretch along the north side of the transload warehouse center to the west end of the BIG Specific Plan area, then continue along the north side of the mainline and lead tracks for a total of 8.3 miles.

Wastewater. An existing approximately 27-inch sanitary sewer line is within existing BNSF ROW for approximately 1.6 miles between Lenwood Road and Pettit Road. This line includes multiple north/south lateral connections to serve the land uses between Main Street and the existing BNSF tracks. BIG would relocate this line at Phillips Street south to within Main Street. Additionally, the transload warehouse center will connect to City sewer via a new 27-inch sewer line within Jasper Road extending to north of Paris Avenue.

Electric Power. Electrical demand would be handled through connecting to the Southern California Edison Tortilla Substation, located approximately 0.4 mile south of the Veterans Parkway at Diamond Avenue intersection. Three underground duct banks with electrical conductors would connect BIG to the Tortilla Substation utilizing existing franchise agreements with the City and County on a route following Main Street, Sunrise Road, N Street, and Bonanza Road before utilizing existing easements between Bonanza Road and the substation. This proposed 33KV distribution route would extend approximately 7.1 miles underground from the Tortilla Substation to the intermodal facility's eastern extent at Country Club Drive, then continue overhead approximately 3.5 miles from Country Club Drive to approximately Hinkley Road. For the 33kv line segment from Tortilla Substation to BIG, the 33kv circuits would be in underground utility lines resulting in an approximately 30-foot-wide disturbance to account for construction access and temporary spoils. From Tortilla substation to H Street (approximately 1.2 miles), the 33kv conduit could occur within a 450-foot-wide corridor, inclusive of the existing 150-foot wide SCE easement along Bonanza Road. However, the exact alignment is presently unknown and is being coordinated with SCE. Therefore, this EIR analyzes an approximately 30-foot wide disturbance within the 450-feet wide corridor ("33kv distribution corridor"). This EIR analyzes the "worst-case" environmental impacts within the 33kv distribution corridor. SCE would make modifications, which include constructing new feeders and new power distribution lines. Within the Tortilla Substation's existing fence line, SCE would also make modifications to supply the new feeders from their existing 115kV-33kV transformers. Various off-site existing electric power lines could be relocated, modified, or extended to accommodate BIG improvements.

Natural Gas. Various off-site existing natural gas lines could be relocated to accommodate BIG improvements.

Telecommunications. No off-site telecommunications improvements are proposed. Various minor existing telecommunications lines would be relocated toward the eastern end of the lead track improvements. Existing telecommunications lines passing through the intermodal facility and block swap yard would be relocated to the north side of the Main Street ROW.

Stormwater Drainage. As described above, the Lenwood Channel widening would continue off-site, south of Main Street. It would be widened by approximately 60 to 100 feet for a total of approximately 2.1 miles (of which 1 mile would be off-site) to improve flooding compared to existing conditions. At the Main Street crossing at Lenwood Channel, BIG would replace 0.8-mile of the existing Main Street low water crossing of Lenwood Channel with a bridge and raise and widen the road through this stretch west to the new intermodal facility entrance. These improvements accommodate the City/County master plan and improve flooding compared to existing conditions.

Other. To accommodate wildlife crossings from south of Main Street to the Mojave River without potential conflict with vehicular or train traffic, BIG proposes an underground wildlife crossing under Main Street west of the existing Hinkley Road.

Circulation/Roadway. Jiggs Road would be realigned generally from just east of Indian Trail to Hinkley Road to maintain emergency access from Indian Trails to Hinkley Road. In addition, a maintenance road would be constructed alongside the mainline to provide maintenance access to the tracks, generally from just east of Indian Trail to Hinkley Road. Various circulation and roadway improvements and modifications are proposed outside the BIG Specific Plan area. All circulation improvements would be permanent, except a temporary Main Street bypass. The temporary bypass would be constructed to maintain access along Main Street during Lenwood Channel Bridge reconstruction. To maintain access for adjacent residents, the temporary Main Street bypass would include private driveways for adjacent residential uses and would be open for the approximately 18-month bridge reconstruction period. Once the Lenwood Channel Bridge reconstruction is complete, the bypass would be removed and the site restored to its original condition. Additionally, construction of additional lead tracks over Pettit Road (approximately 1,100 feet west of SR 58) would require the road to be lowered by approximately 2.0 feet. BIG would also vacate various ROW within the City and County. Finally, Sweeten Lane would be vacated and realigned to eliminate the existing unimproved intersection with Main Street. A new paved access would extend from Country Club east approximately 1,000 feet and connect to the unimproved Sweeten Lane.

Maintenance Activities

While "light maintenance activities" [16] could occur at BIG, major maintenance activities[17] would still occur at the existing Barstow classification yard, thus, requiring short-distance trips via BNSF's existing mainline to and from the existing Barstow classification yard for heavy maintenance. Locomotive trips associated with maintenance activities would be based on the number of linehaul locomotives needed to move trains between the Ports and BIG intermodal facility, and the number of switcher locomotives needed to haul rail cars within BIG intermodal facility and block swap yard. All switcher locomotives at BIG would be Tier 4 locomotives, and BNSF would also retire all existing Tier 0/0+/1+ locomotives at the unrelated existing Barstow yard and, in their stead, add six Tier 4 switcher locomotives.

[16] "Light maintenance activities" means routine locomotive servicing (e.g., window washing, fueling, inspecting fluid levels and topping off fluids, stocking cabins with crew equipment such as water and trash bags, toilet servicing) and minor railcar servicing (e.g., wheel changes, brake and friction shoes, and loose or missing bolts)

[17] "Major maintenance activities" means repair of railing and platform, railcar suspension, hitches, engine, etc.

2.3 Project Construction Activities and Phasing

For analysis purposes, construction is anticipated to occur over approximately 34 months beginning in the third quarter of 2025 and ending in the third quarter of 2028. The entirety of BIG's construction activities, including off-site improvements, are analyzed in this report and described below. The anticipated construction phase timing is shown in **Table 5: BIG Construction Schedule**. However, the current construction schedule anticipates that BIG construction would begin approximately August 2026, and end approximately July 2029, for an approximate 13-month shift from the schedule shown in **Table 5: BIG Construction Schedule** and analyzed in this technical report. However, construction duration (34 months) would remain unchanged. Further, given fleet turnover and compliance with increased regulatory requirements, construction and operational air quality emissions would improve over time as is reflected in CalEEMod, the California Air Resource Board's air quality emissions modeling platform.

During peak construction periods, work would be under way at several locations within BIG footprint simultaneously, with overlapping construction of various elements. Construction working hours and the number of workers present at any time would vary depending on the activities being performed. BIG construction would require approximately 8,177 construction workers per year.[18]

Table 5: BIG Construction Schedule

Phase	Start Date	End Date
South Mainlines	8/7/2025	10/2/2026
Intermodal Facility	8/7/2025	1/4/2027
Block Swap Yard	1/22/2026	6/8/2028
North Mainlines	5/27/2027	6/8/2028
Transload Warehouse	2/5/2026	12/6/2027
33 kV Distribution Undergrounding	9/13/2025	5/7/2027
Solar Site	3/20/2026	2/27/2027

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line). To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within the BIG footprint.

BIG components would involve the following construction activities:

Construction of Off-Site Rail Improvements

Off-site rail improvements would include clearing and grubbing, bridge crossing construction, ballast placement, track laying, and connection to the mainline. Off-site rail improvements would parallel the existing mainline and primarily be within existing BNSF right-of-way. BIG's rail deliveries of rail ties and ballast would include materials for construction of off-site rail improvement.

[18] Based on 23,200 construction worker "job years"

Demolition and Grading

The BIG footprint is primarily vacant, undeveloped land traversed by an existing BNSF railroad and containing scattered residential, commercial, and industrial land uses. Existing land uses within BIG's footprint are listed in **Table 3: Existing Land Uses**. All existing land uses not demolished during acquisition to avoid trespassing and safety concerns would be demolished prior to, or during, mass grading. In addition, existing utilities (underground and aboveground) within BIG footprint would be removed or temporarily relocated as needed.

Six culverts/bridges would need to be demolished within the existing BIG footprint. Demolition would involve excavators to break apart bridge abutments and foundations.

Mass grading would occur in one phase across the BIG footprint and require approximately 26 million cubic yards of cut and fill. Mass grading would be typified by large construction equipment establishing the area's general grading contours. For locations supporting future buildings, roadways, or track, mass grading would include watering and compaction of soil to provide a stable subgrade. Earthwork on-site would be balanced, with excess cut from the rail yard being used as fill within the transload warehouse center.

Fine grading would include site-specific grading for the transload warehouse center, as well as finish grading around buildings, parking areas, curb and gutter, etc.

Construction of Rail Yard (Intermodal Facility and Block Swap Yard)

The likely sequence for BIG rail yard construction (intermodal facility and block swap yard) would include mass grading; compacting the rail bed and internal roadways/parking areas; installing underground improvements/utilities; fine grading; installing crushed rock subballast; laying track and ballast; and installing train signals and communications systems. To reduce construction trucking, BIG would bring rail ties, welded rail, and rail ballast in via train.

Rail yard construction elements would include surface and elevated track work where the track would cross a water feature, a grade-separated roadway crossing for electric hostlers to access (and return from) the transload warehouse center, and installation of an intermodal facility. Major construction activities would include grading and excavation support, underground utility installation, systems construction, bridge construction, and railway systems construction (including trackwork, signaling, and communications). High-mast lights (up to 120 feet in height) would be constructed throughout the rail yard, including foundation work, conduits, and security camera positions. Rail yard construction would also include foundations and tracks for gantry cranes.

Furthermore, the proposed rail yard area would be excavated to result in a nearly-level grade between the east and west ends. With the proposed grading, most of the rail yard would be approximately 30-45 feet below Main Street. Various key BIG elements are also shown below.

Rail materials such as rail ties, welded rails, and ballast would be delivered by train. As noted above, the two existing north mainlines would be protected in place except at the bridge crossings, and two new south mainlines constructed. The south mainlines would be constructed first, and, during the first year of construction, existing rail traffic would use the new south mainlines so that the existing mainlines can be

rebuilt and their bridge crossings upgraded. Mainline, rail yard, and lead track construction would utilize a Track-Laying Machine for approximately 20 months to lay track.

Intermodal facility construction would include various administrative and support buildings and substantial paving for the container parking and storage.

Solar Farm Construction

Solar farm construction, which would occur in a single phase, would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Fencing would be installed around the solar farm's perimeter of the solar farm, internal drive-aisles would be graded and paved, and the proposed substation would be constructed per SCE standards.

Construction of Transload Warehouse Center

Construction elements for the transload warehouse center would include grading, over-excavation,[19] footing and foundation excavation and pouring, tilt-up panel concrete construction, parking lot grading and paving, utility installation and undergrounding, and hydrology/drainage improvements.

Construction of On-Site Bridges and Roadway Improvements

Railroad bridge and roadway construction may use various methods including segmented pre-cast, cast-in-place, box girder or pre-cast, and span-by-span techniques.

Pre-construction activities would occur during final design and would include geotechnical investigations, identification of staging areas, initiation of site preparation and demolition, relocation of utilities, and implementation of temporary, long-term, and permanent road closures. Two bridges would be constructed over Lenwood Channel (BR 6.5D, 6.5E, and BR 6.5F) to enable traffic to flow from either side of Lenwood Channel.

Construction of Off-Site Non-Rail Improvements

Off-site non-rail improvements would include construction of drainage, utility, and roadway improvements.

Drainage. Lenwood Channel improvements would consist of scouring and widening the channel. Construction equipment would be within Lenwood Channel in order to accomplish the widening.

Utilities. Additionally, off-site construction would include utility improvements including the 33kv distribution/Tortilla Substation improvements. Construction processes are anticipated to include clearing and grubbing, saw cuts and demolition of existing pavement, excavation to approximately ten feet below ground surface, installation of temporary shoring, placement of circuits and distribution lines, fill placement and removal of temporary shoring, and roadway repair.

Roadways/Intersections. A bridge over Lenwood Channel for Main Street would be constructed to replace the existing low water crossing and accommodate widening of Main Street in that immediate

[19] "Over-excavation" refers to removal and re-compaction of soil.

area. Additionally, BIG proposes roadway/intersection improvements/modifications, including the installation of traffic signals at various intersections.

Typical construction processes for these off-site non-rail improvements would include clearing and grubbing, over-excavation, bridge construction, traffic signals with associated underground conduits and cabling, and restriping and asphalt or concrete pavement placement, where needed.

3.0 METHODS FOR EVALUATING DEFICIENCIES

This section describes the methodology for developing the LOS assessment study area, analysis scenarios, and determining transportation deficiencies.

3.1 Definition of Study Area

Per the County TIS Guidelines, at a minimum, the following types of facilities should be included in the LOS assessment study area (included verbatim below):

- *Site Access Driveways*
- *Roadway(s) adjacent to the project (if requested by County staff)*
- *Intersections in the immediate vicinity of the project*
- *Any intersection on which the project will add 50 or more peak hour project trips*

Freeway mainline LOS analysis is not required since freeway widening is not consistent with State policies and goals; therefore, analysis of freeway mainline segments is not included. An evaluation of LOS and queueing at the freeway off-ramps is provided. Project trip assignment along freeway mainline segments is provided for informational purposes.

The LOS assessment study area includes the following transportation facilities:

- Intersections and roadway segments immediately adjacent to the BIG Specific Plan area
- Intersections where BIG operations are expected to generate an increase of 50 or more directional trips[20] in the peak hour.
    - Intersections 33 and 34 along Barstow Road do not meet the 50 trip threshold but are included since they are considered key study intersections.
- Roadway segments that are between study area intersections (it is noted, roadway segments with similar characteristics and volumes may be grouped together to simplify analysis).
    - Hinkley Road does not fit this criterion; however, it was analyzed since BIG proposes realignment and substantial improvements.
- Freeway off-ramps that intersect with study area intersections where BIG is expected to generate an increase in trips. Freeway off-ramp queueing analysis is discussed further in **Section 6.0 Plus BIG Transportation Modifications**.

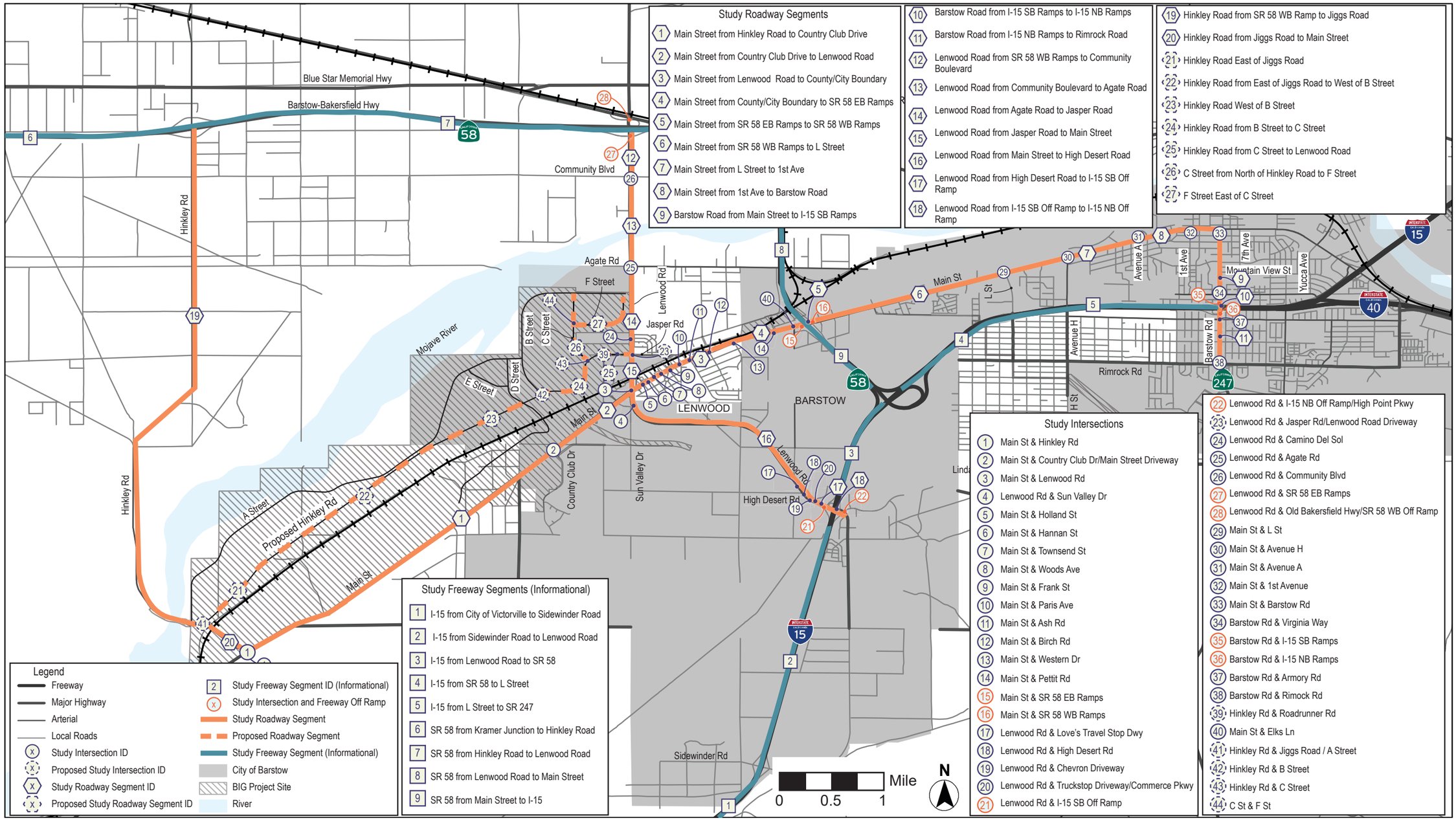
The study area transportation facilities were selected by applying the Trip Generation to the Trip Distribution (**Section 5.3 BIG Trip Generation and Distribution**) to develop the Trip Assignment[21] (**Section 5.4 Trip Assignment**). Based on the above criteria, the proposed study area consists of 44 intersections (16 signalized and 28 unsignalized), 27 roadway segments, and 8 freeway off-ramps. Trip assignment is

[20] Trips include both passenger vehicle and heavy-duty truck trips (converted to passenger car equivalents (PCE)). See Section 3.2 Trip Generation, Distribution and Assignment Methodology.

[21] Trip generation refers to the number of vehicle trips that would start or end at BIG. Trip generation is calculated for am peak hour, pm peak hour, and daily trips. Trip distribution (i.e., trip percent distribution) forecasts where BIG trips originate at and are destined for. The trip generation is applied to the trip distribution to develop trip assignment, or the number of vehicle trips each study area transportation facility would experience because of BIG.

also provided for 18 freeway mainline segments (9 freeway sections with one segment in each direction) for informational purposes.

The study area intersections, roadway segments, freeway off-ramps, and freeway mainline segments (informational) are depicted in **Figure 12: BIG Transportation Resource Study Area – Intersections, Roadway Segments, and Freeway Off-Ramps**. The study area intersections, and their respective control, jurisdiction, and LOS thresholds for applicable LOS standards consistency per their respective jurisdictions' standards, as discussed in detail in **Section 3.5 Consistency with Applicable LOS Standards**, are listed in **Table 6: Study Area Intersections**. The study area roadway segments, and their respective capacities, jurisdiction, and LOS thresholds for applicable LOS standards consistency per their respective jurisdictions' standards, as discussed in detail **Section 3.5 Consistency with Applicable LOS Standards**, are listed in **Table 7: Study Area Roadway Segments.** The study area freeway off-ramps and their respective controls are listed in **Table 8: Study Area Freeway Off-Ramps**. The freeway mainline segments that are included for trip assignment informational purposes are listed in **Table 9: Freeway Segments for Informational Purposes**.



Source: Author Compilation, 2025

Figure 12: BIG Transportation Resource Study Area – Intersections, Roadway Segments, and Freeway Off-Ramps

Table 6: Study Area Intersections					
ID	**Intersection**	**Existing Traffic Controls**	**Jurisdiction**	**LOS Threshold[1]**	**In CMP[2]?**
1	Main Street & Hinkley Road	One-Way Stop	City-County[3]	C	No
2	Main Street & Country Club Drive/Main Street Driveway	One-Way Stop	City	C	No
3	Main Street & Lenwood Road	Signal	Both City/ County[4]	C	No
4	Lenwood Road & Sun Valley Drive	One-Way Stop	City	C	No
5	Main Street & Holland Street	Two-Way Stop	County	C	No
6	Main Street & Hannan Street	Two-Way Stop	County	C	No
7	Main Street & Townsend Street	Two-Way Stop	County	C	No
8	Main Street & Woods Avenue	Two-Way Stop	County	C	No
9	Main Street & Frank Street	Two-Way Stop	County	C	No
10	Main Street & Paris Avenue	One-Way Stop	County	C	No
11	Main Street & Ash Road	One-Way Stop	County	C	No
12	Main Street & Birch Road	One-Way Stop	County	C	No
13	Main Street & Western Drive	One-Way Stop	County	C	No
14	Main Street & Pettit Road	One-Way Stop	City	C	No
15	Main Street & SR 58 Eastbound Ramps	Signal	Caltrans	D	No
16	Main Street & SR 58 Westbound Ramps	Signal	Caltrans	D	No
17	Lenwood Road & Love's Travel Stop Driveway	Two-Way Stop	City	C	No
18	Lenwood Road & High Desert Road	Two-Way Stop	City	C	No
19	Lenwood Rd & Chevron Driveway	Two-Way Stop	City	C	No
20	Lenwood Road & Commerce Parkway	Signal	City	C	No
21	Lenwood Road & I-15 Southbound Ramp	Signal	Caltrans	D	No
22	Lenwood Road & I-15 Northbound Ramp	Signal	Caltrans	D	No
23	Lenwood Road & Jasper Road/Lenwood Road Driveway	Two-Way Stop	Both City/County	C	No
24	Lenwood Road & Camino Del Sol	One-Way Stop	Both City/County	C	No
25	Lenwood Road & Agate Road	Two-Way Stop	Both City/County	C	No
26	Lenwood Road & Community Blvd	Two-Way Stop	County	C	No
27	Lenwood Road & SR 58 Eastbound Ramps	All-Way Stop	Caltrans	D	No
28	Lenwood Road & SR 58 Westbound Ramps	All-Way Stop	Caltrans	D	No

Table 6: Study Area Intersections					
ID	**Intersection**	**Existing Traffic Controls**	**Jurisdiction**	**LOS Threshold[1]**	**In CMP[2]?**
29	Main Street & L Street	Signal	City	C	Yes
30	Main Street & Avenue H	Signal	City	C	Yes
31	Main Street & Avenue A	Signal	City	C	Yes
32	Main Street & 1st Avenue	Signal	City (Downtown)	D	Yes
33	Main Street & Barstow Road	Signal	City (Downtown)	D	Yes
34	Barstow Road & Virginia Way	Signal	City	C	Yes
35	Barstow Road & I-15 Southbound Ramps	Signal	Caltrans	D	Yes
36	Barstow Road & I-15 Northbound Ramps	Signal	Caltrans	D	Yes
37	Barstow Road & Armory Road	Signal	City	C	Yes
38	Barstow Road & Rimrock Road	Signal	City	C	Yes
39	Hinkley Road & Roadrunner Road	Future One-Way Stop	City	C	No
40	Main Street & Elks Lane	One-Way Stop	City	C	No
41	Hinkley Road & Jiggs Road / A Street	Future Two-Way Stop	City	C	No
42	Hinkley Road & B Street	Future One-Way Stop	City	C	No
43	Hinkley Road & C Street	Future One-Way Stop	City	C	No
44	C Street & F Street	Future One-Way Stop	City	C	No

Notes:
[1] LOS – Level of Service; The LOS Threshold represents the acceptable LOS for the intersection. All City (non-downtown) and County intersections within the study area are considered to operate acceptably at LOS C or better, consistent with City LOS standards and the County TIS Guidelines. All downtown City intersections along Main Street, between Otis Avenue to 7th Avenue, are considered to operate acceptably at LOS D or better. All Caltrans intersections located at freeway interchanges are considered to operate acceptably at LOS D or better.
[2] Notes if the intersection is part of the CMP network, per the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority, 2016). The CMP states that for the CMP roadway system, intersections are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP intersections located within the Downtown area of City and LOS C is considered acceptable for CMP intersections outside the Downtown area.
[3] City-County indicates the Main Street & Hinkley Road intersection is currently under County jurisdiction but would be annexed into the City as part of the proposed General Plan, thus, is analyzed according to City standards.
[4] Both City/County indicates the intersection is located under both City and County jurisdiction (i.e., a portion of the intersection is in City right-of-way and a portion is in County right-of-way).

Table 7: Study Area Roadway Segments						
Roadway	**ID**	**Segment**	**Jurisdiction**	**LOS Threshold[1]**	**Threshold Capacity**	**In CMP[2]?**
Main Street	1	Hinkley Road to Country Club Drive	City-County[3]	D	14,300	No
	2	Country Club Drive to Lenwood Road	City	D	14,300 Ex. 30,200 Fut.	No
	3	Lenwood Road to County/City Boundary	County	C	16,400	No
	4	County/City Boundary to SR 58 Eastbound Ramps	City	D	30,200	No
	5	SR 58 Eastbound Ramps to SR 58 Westbound Ramps	Caltrans	D	30,200	No
	6	SR 58 Westbound Ramps to L Street	City	D	30,200	No
	7	L Street to Avenue A	City	D	30,200	Yes
	8	Avenue A to Barstow Road	City	D	30,200	Yes
Barstow Road	9	Main Street to I-15 Southbound Ramps	City	D	22,300	Yes
	10	I-15 Southbound Ramps to I-15 Northbound Ramps	Caltrans	D	30,200	Yes
	11	I-15 Northbound Ramps to Rimrock Road	City	D	30,200	Yes
Lenwood Road	12	SR 58 Westbound Ramps to Community Boulevard	County	C	7,000	No
	13	Community Boulevard to Agate Road	County	C	7,000	No
	14	Agate Road to Jasper Road	County	C	7,000	No
	15	Jasper Road to Main Street	City	D	30,200	No
	16	Main Street to High Desert Road	City	D	14,300	No
	17	High Desert Road to I-15 Southbound Off Ramp	City	D	30,200	No
	18	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	Caltrans	D	30,200	No
Hinkley Road	19	SR 58 Westbound Ramp to Jiggs Road	County	C	7,000	No
	20	Jiggs Road to Main Street[4]	County	C	7,000	No
	21	East of Jiggs Road	City	D	30,200 Fut.	No
	22	East of Jiggs Road to West of B Street	City	D	30,200 Fut.	No
	23	West of B Street	City	D	30,200 Fut.	No
	24	Between B Street and C Street	City	D	30,200 Fut.	No

Table 7: Study Area Roadway Segments						
Roadway	**ID**	**Segment**	**Jurisdiction**	**LOS Threshold[1]**	**Threshold Capacity**	**In CMP[2]?**
	25	C Street to Lenwood Road	City	D	30,200 Fut.	No
C Street	26	North of Hinkley Road to F Street	City	D	30,200 Fut.	No
F Street	27	East of C Street	City	D	30,200 Fut.	No

Notes:
[1] LOS – Level of Service; The LOS Threshold represents the acceptable LOS for the roadway segment. All County roadway segments within the study area are considered to operate acceptably at LOS C or better, consistent with the County TIS Guidelines. All City roadway segments within the study area are considered to operate acceptably at LOS D or better, consistent with the recommendations included in the proposed Transportation Study for Barstow General Plan. All Caltrans roadway segments within the study area are considered to operate acceptably at LOS D or better.
[2] Notes if the roadway segment is part of the CMP network, per the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority, 2016). The CMP states that for the CMP roadway system, roadway segments are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP roadways segments located within the City, consistent with non-CMP roadway segments located within the City.
[3] City-County indicates the roadway segment is currently under County jurisdiction but would be annexed into the City as part of the proposed General Plan, thus, is analyzed according to City standards.
[4] Roadway segment proposed to be vacated as a BIG feature.

Source: *Author Compilation, 2025*

Table 8: Study Area Freeway Off-Ramps		
Intersection ID	**Off-Ramp**	**Existing Traffic Control**
15	SR 58 Eastbound Off-Ramp at Main Street	Signal
16	SR 58 Westbound Off-Ramp at Main Street	Signal
21	I-15 Southbound Off-Ramp at Lenwood Road	Signal
22	I-15 Northbound Off-Ramp at Lenwood Road	Signal
27	SR 58 Eastbound Off-Ramp at Lenwood Road	All-Way Stop
28	SR 58 Westbound Off-Ramp at Lenwood Road	All-Way Stop
35	I-15 Southbound Off-Ramp at Barstow Road	Signal
36	I-15 Northbound Off-Ramp at Barstow Road	Signal
Source: *Author Compilation, 2025*		

Table 9: Freeway Segments for Informational Purposes		
Freeway	**ID**	**Segment**
I-15	1	City of Victorville to Sidewinder Road
	2	Sidewinder Road to Lenwood Road
	3	Lenwood Road to SR 58
	4	SR 58 to L Street
	5	L Street to SR 247
SR-58	6	Kramer Junction to Hinkley Road
	7	Hinkley Road to Lenwood Road
	8	Lenwood Road to Main Street
	9	Main Street to I-15
Source: *Author Compilation, 2025*		

3.2 Trip Generation, Distribution and Assignment Methodology

Trip Generation

Trip generation for a future project is often calculated based on data from the latest edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, which is a standard reference used by jurisdictions nationally to estimate trip generation for a proposed project. The *ITE Trip Generation Manual* defines a trip as a single or one-directional vehicle movement with either the origin or destination at a project site and presents a summary of trip generation data that has been voluntarily collected and submitted to ITE. ITE processes the data to develop trip generation rates, which represent the average number of vehicle trips per unit of related independent variable (i.e. building square footage, number of employees, number of dwelling units, etc.). If it is available, however, more specific site operations data should be used instead to forecast a project's trip generation, since it is likely to be more accurate than ITE's trip generation rates, which are based on national averages. Therefore, BIG's trip generation was

estimated based on a combination of data from the ITE Trip Generation Manual, *11th Edition* (Institute of Transportation Engineers, 2021) and site-specific operations data provided by BNSF.

BIG's operational trip generation was estimated through a series of progressive steps, as outlined below. The County TIS Guidelines do not include requirements for construction period traffic analysis. Therefore, construction period trip generation is disclosed under CEQA, independent of this *LOS Assessment,* and can be found in **Appendix 5.15 BIG-1: CEQA Assessment – Transportation Analysis** (Kimley-Horn & Associates, Inc., 2025a).

Step 1 – Employee (Passenger Car) Trip Generation

Rail yard employee trip generation was calculated based on estimated employee counts provided by BNSF. Transload warehouse center employee trip generation was calculated using the land use code 154: High Cube Transload and Short-Term Storage Warehouse in the *ITE Trip Generation Manual 11th Edition* (Institute of Transportation Engineers, 2021) and estimated operations information provided by BNSF. Employee trip generation is discussed in detail in **Section 5.3 BIG Trip Generation and Distribution.**

Step 2 – Heavy-Duty Truck Trip Generation

Heavy-duty truck trip generation for the IMF and transload warehouse center was calculated based on data provided by BNSF. Heavy-duty truck trip generation is discussed in detail in **Section 5.3 BIG Trip Generation and Distribution.**

Step 3 – Convert Heavy-Duty Truck Trips to Passenger Car Equivalents

Heavy-duty truck trips were converted to passenger car equivalents (PCE) based on vehicle classification data provided by BNSF, which estimated fleet mix type to be 50 percent 3-axle trucks and 50 percent 4-axle trucks. Heavy-duty truck trips were converted to PCE based on CMP PCE values, for an average PCE rate of 2.5. **Table 10: PCE Conversion Criteria** summarizes the PCE conversion rates based on vehicle type.

Table 10: PCE Conversion Criteria

Federal Highway Administration Classification Number	Vehicle Type	Passenger Car Equivalent (PCE) Value
1	Motorcycle	1
2	Passenger Car	1
3	Four tire, single unit truck	1
4	Bus	1.5
5	Two axle, six tire, single unit truck	1.5
6	Three axle, single unit truck	2
7 to 13	Four or more axle truck	3

Sources:
- *County of San Bernardino, 2016*

Step 4 – Removed Land Use Trip Credits

While BIG would remove various existing land uses within the BIG footprint (i.e., residential, commercial, and industrial), BIG's trip generation does not take credit for the trips associated with the removed land

uses. This approach was selected to provide a more conservative analysis and since the occupancy of the existing land uses was unknown when the traffic counts were collected.

Step 5 – Total Trip Generation

BIG's total trip generation was calculated by adding employee trips and PCE heavy-duty truck trips.

Trip Distribution

Independent trip distributions were devised for rail yard employees, transload warehouse center employees, and heavy-duty trucks (i.e., for the rail yard and transload warehouse center). Rail yard employees and transload warehouse center employees were each assigned unique trip distributions for Opening Year 2028 Plus BIG, Interim Year 2033 Plus BIG, and Horizon Year 2048 Plus BIG conditions. The heavy-duty truck trip distribution (for the transload warehouse center) was assumed to be the same for all analysis scenarios. Trip distribution is discussed in detail in **Section 5.3 BIG Trip Generation and Distribution**.

Trip Assignment

BIG trip distribution percentages were applied to BIG trip generation to determine trip assignments. Trip assignment is discussed in detail in **Section 5.4 Trip Assignment**.

3.3 Analysis Scenarios

Consistent with the County TIS Guidelines, this report includes study area traffic operations analysis for the following scenarios, which are described in further detail in the following sections:

- Existing Conditions:
  - Existing No BIG Baseline
- Opening Year 2028:
  - Opening Year 2028 No BIG Baseline
  - Opening Year 2028 Plus BIG
- Interim Year 2033:
  - Interim Year 2033 No BIG Baseline
  - Interim Year 2033 Plus BIG
- Horizon Year 2048:
  - Horizon Year 2048 No BIG Baseline
  - Horizon Year 2048 Plus BIG

Existing Conditions

The Existing Conditions analysis addresses the Existing No BIG Baseline scenario.

Existing No BIG Baseline

The Existing No BIG Baseline scenario represents transportation conditions in the BIG study area in 2023, the year in which the majority of traffic data was collected.

Intersection turning movement counts were collected during typical weekday AM (7:00 to 9:00 am) and PM (4:00 to 6:00 pm) peak hours across multiple dates: August 2021, December 2021, November 2022, April 2023, and supplemented in May 2025.

- Initial August 2021 counts covered the original study area, but irregular patterns at intersections 27 and 28 prompted recounts in December 2021.
- Intersection 3 was recounted in November 2022 for verification.
- The study area was expanded in 2023 to include intersections 29–38, with counts taken in April 2023.
- In 2025, the City requested further expansion, leading to supplemental counts at intersection 40 and at locations identified for potential signalization for the purpose of signal warrant evaluations.

All intersection counts were converted to Passenger Car Equivalent (PCE) volumes using available classification data and San Bernardino CMP PCE values. For minor side streets lacking classification data, a default assumption of 2% heavy vehicles with a PCE of 2.0 was applied.

Daily roadway segment traffic counts were collected in August 2021 and March/April 2023, including vehicular classification data.

- August 2021 counts preceded the study area expansion.
- April 2023 counts covered newly added segments east of SR 58 and updated select previously counted segments.
- PCE conversions followed the same methodology as intersection counts.
- Consistent with the City's proposed General Plan, Thursday counts were included.

Traffic volumes collected between 2021 and 2025 showed consistent or decreasing volumes. Therefore, no growth factors were applied to earlier data, aligning with the City's proposed General Plan assumptions, which did not project 2021 data forward due to observed negative growth.

Signal timing sheets from Caltrans and the City of Barstow can be found in **Appendix B: Signal Timing Data**. If signal timing sheets were not available, signal timings were assumed. Under Plus BIG conditions, signal timings were optimized to reflect the shift in travel patterns.

Traffic volumes for Caltrans freeway off-ramps use the same data sources as intersection counts, as all freeway ramps are connected to study area intersections. Existing traffic count data is provided in **Appendix C: Existing Traffic Count Data.** The Existing No BIG Baseline conditions analyses are discussed in **Section 4.2 No BIG Baseline LOS Analysis.**

A separate evaluation of 22 roadway segments over a 7-day period in 2021 revealed significantly lower traffic volumes during weekends compared to weekdays. Therefore, weekend traffic operations were not analyzed.

Horizon Year 2048

The Horizon Year 2048 analysis addresses the following scenarios:

- Horizon Year 2048 No BIG Baseline
- Horizon Year 2048 Plus BIG

Horizon Year 2048 Plus BIG

The Horizon Year 2048 Plus BIG analysis scenario represents 2048 conditions with BIG. Traffic volumes derived for segments that are included in the City's proposed General Plan under the Cumulative Plus Project Conditions, which includes BIG and the Electric Vehicle Charging Station and Logistics Facility project (cumulative project), match the forecast traffic volumes in the proposed General Plan. For roadway segments that are not included in the City's proposed General Plan, these volumes were developed by applying the same methodology for development. Volume development calculations are included in **Appendix E: Traffic Volume Growth Calculations.**

The cumulative project is expected to be operational by 2028 and includes an electric vehicle charging hub and three warehouse buildings, generating an estimated 7,466 daily PCE trips, 581 AM peak hour PCE trips, and 623 PM peak hour PCE trips. The site is located along the east side of Lenwood Road between Agate Road and Jasper Road. While this project is not included in the 2023 SBTAM+ model, it is incorporated into the 2050 Plus BIG SBTAM+ model. Although the project is scheduled for completion in 2028, only a portion of its traffic is reflected in the Opening Year 2028 and Interim Year 2033 volumes due to the growth being modeled between 2023 and 2050. To ensure full representation of cumulative traffic impacts, the complete trip assignment for this project was modeled for the Opening Year 2028, Interim Year 2033, and Horizon Year 2048 No BIG Baseline scenarios. Cumulative project volumes are disclosed in in **Appendix F: Cumulative Projects Near Term Volumes**.

Roadway Segment Volumes

Traffic volumes were developed using the San Bernardino Transportation Analysis Model Plus (SBTAM+), a refined version of the Southern California Association of Governments TransCAD Version 5 (V5) trip-based regional travel demand model. Its structure is consistent with the Southern California Association of Governments V5 model while employing a more refined traffic analysis zone within the County. SBTAM+ was developed through application of the Southern California Association of Governments Subregional Model Development Tool. The SBTAM+ outputs estimated and forecast daily and peak hour traffic volumes for the years 2023 and 2050. Within the 2023 SBTAM+, all City of Barstow and sphere of influence (SOI)[22] land uses and employment conditions are modeled based on existing (2023) conditions. To forecast future traffic in the study area with the addition of BIG traffic, cumulative project traffic, and other growth in the area, the "2050 Plus BIG SBTAM+" scenario was developed, replacing the 2023 SBTAM+ data that was modeled within the BIG TAZs with the forecasted BIG land use and employment data.

[22] The sphere of influence (SOI) includes Lenwood and areas adjacent to the City, as illustrated in **Figure 8: Local Vicinity Map**.

Within the 2050 Plus BIG SBTAM+, the following network changes are incorporated:

- **Lenwood Road:** As described in **Table 19: Study Area Roadways**, Lenwood Road is classified as an industrial arterial with two lanes in each direction from north of High Desert Road to Coyote Road.
- **Future Primary Arterial:** Proposed to connect Lenwood Road at High Point Parkway to Rimrock Road at Diamond Avenue.

The resulting Horizon Year 2048 Plus BIG conditions are compared to the Horizon Year 2048 No BIG Baseline conditions to identify BIG transportation deficiencies. The Horizon Year 2048 Plus BIG conditions analyses are discussed in **Section 5.5 Plus BIG LOS Analysis.**

Horizon Year 2048 No BIG Baseline

The Horizon Year 2048 No BIG Baseline scenario represents future year 2048 conditions without BIG. Volume development calculations are included in **Appendix E: Traffic Volume Growth Calculations.**

Roadway Segment Volumes

The roadway segment volumes for this scenario were developed by removing the BIG traffic (trip generation, distribution, and assignment) from the traffic volumes developed for the Horizon Year 2048 Plus BIG conditions.

Intersection Volumes

Horizon Year 2048 No BIG Baseline intersection turning movement volumes were developed by removing average daily traffic that is expected to be generated by BIG and the cumulative project from the Horizon Year 2048 Plus BIG roadway segment volumes. The resulting average daily traffic along the individual roadway segments were used to modify the Existing No BIG Baseline intersection turning movement volumes proportionally based on the estimated change of average daily traffic volumes on each of the intersection legs. Each respective movement was derived using an iterative approach that balances the inflows and outflows for each approach. The input values include the existing turning movement volumes and future year peak hour approach and departure volumes along each leg of the intersection. The future peak-hour approach volumes were estimated by applying the existing peak-hour factor (K-factor) and directional distributional percentage (D-factor) to the future ADT volumes along each approach. A detailed description of this methodology used to forecast turning movement volumes is contained in the *National Cooperative Highway Research Program Report 255 Highway Traffic Data for Urbanized Area Project Planning and Design*, Chapter 8 (Transportation Research Board, 1982). Following the development of these initial intersection peak hour volumes, the peak hour turning movements from the cumulative project were added on top of the resulting volumes.

The Horizon Year 2048 No BIG Baseline conditions analyses are discussed in **Section 4.2 No BIG Baseline LOS Analysis**.

Horizon Year 2048 Plus BIG (Continued)

Intersection Volumes

The Horizon Year 2048 Plus BIG analysis scenario represents 2048 conditions with BIG. The intersection traffic volumes developed for the Horizon Year 2048 No BIG Baseline conditions were used as the basis for applying BIG trip generation, distribution, and assignment. The resulting Horizon Year 2048 Plus BIG conditions are compared to the Horizon Year 2048 No BIG Baseline conditions to identify BIG transportation deficiencies.

The Horizon Year 2048 Plus BIG conditions analyses are discussed in **Section 5.5 Plus BIG LOS Analysis.**

Opening Year 2028 and Interim Year 2033

The Opening Year 2028 analysis addresses the following scenarios:

- Opening Year 2028 No BIG Baseline
- Opening Year 2028 Plus BIG

The Interim Year 2033 analysis addresses the following scenarios:

- Interim Year 2033 No BIG Baseline
- Interim Year 2033 Plus BIG

Opening Year 2028 No BIG Baseline and Interim Year 2033 No BIG Baseline

The Opening Year 2028 No BIG Baseline and Interim Year 2033 No BIG Baseline scenarios represent year 2028 and 2033 traffic conditions without BIG. Volume development calculations are included in **Appendix E: Traffic Volume Growth Calculations.**

Roadway Segment Volumes

Opening Year 2028 and Interim Year 2033 No BIG Baseline roadway segment volumes were developed by first removing the trips associated with the cumulative project, then interpolating between the Existing No BIG Baseline and the Horizon Year 2048 No BIG Baseline volumes. The volumes generated by the cumulative project were then added back in since the entire development is expected to be constructed and operational under the 2028 and 2033 baseline conditions.

Intersection Volumes

Opening Year 2028 and Interim Year 2033 No BIG Baseline intersection turning movement volumes were developed by interpolating between the Existing No BIG Baseline conditions and the Horizon Year 2048 No BIG baseline volumes (without the cumulative project). The resulting average daily traffic along the individual roadway segments were used to modify the Existing No BIG Baseline intersection turning movement volumes proportionally based on the estimated change of average daily traffic volumes on each of the intersection legs following the same methodology outline for the Horizon Year No BIG Baseline conditions. Following the development of these initial intersection peak hour volumes, the peak hour turning movements from the cumulative project were added on top of the resulting volumes.

The Opening Year 2028 and Interim Year 2033 No BIG Baseline conditions analyses are discussed in **Section 4.2 No BIG Baseline LOS Analysis**.

Opening Year 2028 Plus BIG

The Opening Year 2028 Plus BIG analysis scenario represents 2028 conditions with BIG. The traffic volumes developed for the Opening Year 2028 No BIG Baseline conditions were used as the basis for applying BIG trip generation, distribution, and assignment. The resulting Opening Year 2028 Plus BIG conditions are compared to the Opening Year 2028 No BIG Baseline conditions to identify BIG transportation deficiencies.

The Opening Year 2028 Plus BIG conditions analyses are discussed in **Section 5.5 Plus BIG LOS Analysis.**

Interim Year 2033 Plus BIG

The Interim Year 2033 Plus BIG analysis scenario represents 2033 conditions with BIG. The traffic volumes developed for the Interim Year 2033 No BIG Baseline conditions were used as the basis for applying BIG trip generation, distribution, and assignment. The resulting Interim year 2033 Plus BIG conditions are compared to the Interim Year 2033 No BIG Baseline conditions to identify BIG transportation deficiencies.

The Interim Year 2033 Plus BIG conditions analyses are discussed in **Section 5.5 Plus BIG LOS Analysis.**

3.4 Level of Service Assessment Methodology

Traffic operations efficiency at a location is measured in terms of LOS. LOS is the primary unit of measure for stating the operating quality of an intersection or roadway segment. For intersections, LOS measures the time delay experienced per vehicle. For roadway segments, LOS is calculated by comparing the number of vehicles using a roadway to its carrying capacity, known as the V/C ratio.

The *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis* (HCM) (Transportation Research Board, 2022) is a widely referenced source, providing techniques to measure transportation facility performance. Using the manual's procedures, the quality of traffic operations is graded using one of six LOS designations: A, B, C, D, E, or F. LOS A represents excellent (free-flow) conditions, while LOS F represents oversaturated (congested) conditions. For freeway ramps, performance is based on the HCM queueing methodology, where theoretical queue lengths are compared to storage capacity.

In addition to the HCM, traffic operations analyses are based on relevant City of Barstow, County of San Bernardino, and Caltrans standards and guidelines. Level of Service assessment methodology is relevant to operations analysis for consistency with applicable LOS standards. The County TIS Guidelines do not include requirements for construction period traffic operations analysis. Therefore, construction period trip generation is disclosed under CEQA in **Appendix 5.15 BIG-1: CEQA Assessment – Transportation Analysis** (Kimley-Horn & Associates, Inc., 2025a).

Intersection Level of Service Assessment

Peak hour intersection operations were evaluated based on HCM 7th Edition methodologies using Synchro 12 software. Intersection LOS is evaluated for weekday AM and PM peak hours.

Per HCM methodology, LOS for signalized intersections is defined in terms of average vehicle delay for all intersection movements during the peak hour. The average vehicle delay includes initial deceleration delay, queue move-up time, final acceleration time, and stop delay. LOS for unsignalized one-way or two-way stop-controlled intersections is based on the vehicle delay for the worst movement (highest delay), which is typically the left-turn from the minor street approach.

The standards for the various LOS designations for intersections are provided in **Table 11: Level of Service and Average Vehicular Control Delay Definition for Signalized and Unsignalized Intersections**.

Table 11: Level of Service and Average Vehicular Control Delay Definition for Signalized and Unsignalized Intersections			
Level of Service	Control Delay (seconds per vehicle)		Description
	Signalized Intersections[1]	Unsignalized Intersections[1, 2]	
A	< 10	< 10	LOS A describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	>10 to <20	>10 to <15	LOS B describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted, and control delay at the boundary intersections is not substantial. The travel speed is between 67% and 85% of the base free-flow speed.
C	>20 to <35	>15 to <25	LOS C describes stable operation. The ability to maneuver and change lanes at midsegment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	>35 to <55	>25 to <35	LOS D indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	>55 to <80	>35 to <50	LOS E is characterized by unstable operation and substantial delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	>80	>50	LOS F is characterized by flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections has a volume-to-capacity ratio greater than 1.0.
Note: 1 At a signalized and all-way stop control intersections, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. 2 For one-way stop control or two-way stop control intersections, the delay reported represents the worst movement, which is typically the left-turn from the minor street approach.			
Sources: *Transportation Research Board, 2022*			

The Synchro analysis sets the heavy vehicle percentage to zero percent because all intersection turning movement volumes are input as PCE. The calculations to convert raw traffic counts to PCE are included in **Appendix E: Traffic Volume Growth Calculations**.

Roadway Segment Level of Service Assessment

Roadway Segment Capacity

Roadway segment LOS is based on the roadway's daily capacity. Roadway segment capacities are based on the proposed Transportation Study for Barstow General Plan and the *San Bernardino Countywide Plan Transportation Existing Conditions Report* (2017). County roadway segment capacities are determined based on the number of travel lanes and are summarized in **Table 12: County Roadway Capacities**.

Table 12: County Roadway Capacities

Lanes	LOS A	LOS B	LOS C	LOS D	LOS E
2	-	-	7,000	7,875	8,750
4	-	-	16,400	18,450	20,500
6	-	-	25,700	28,913	32,125

Source:
County of San Bernardino. (2017). *San Bernardino Countywide Plan Transportation Existing Conditions Report*.

City roadway segment capacities are determined based on the number of travel lanes and the type of roadway (arterial vs. collector) and are summarized in **Table 13: City Roadway Segment Capacities**.

Table 13: City Roadway Segment Capacities

Lanes	LOS A	LOS B	LOS C	LOS D	LOS E
Arterial					
2	-	-	7,000	14,300	16,500
3	-	-	11,000	22,300	24,800
4	-	-	14,900	30,200	33,100
Collector					
2	-	-	1,700	11,800	17,800
4	-	-	2,200	24,700	35,800

Source:
Proposed Transportation Study for Barstow General Plan

Roadway segment volumes represent the average daily PCE traffic volumes for the roadway based on vehicle classification data, as available. The calculations to convert raw traffic counts to PCE are included in **Appendix E: Traffic Volume Growth Calculations**.

Table 14: Roadway Segment Level of Service Criteria describes the LOS thresholds for the roadway segment analysis.

Table 14: Roadway Segment Level of Service Criteria

Level of Service	Description
A	Free-flow speeds prevail. Vehicles are almost unimpeded in their ability to maneuver within the traffic stream.
B	Reasonably free-flow speeds are maintained. The ability to maneuver within traffic is only slightly restricted.
C	Flow with speeds at or near free-flow speed of the roadway. Freedom to maneuver within the traffic stream is noticeably restricted and lane changes require more care and vigilance on the part of the driver.

Table 14: Roadway Segment Level of Service Criteria	
Level of Service	**Description**
D	Speeds begin to decline slightly with increasing flows. In this range, density begins to increase somewhat more quickly with increasing flow. Freedom to maneuver within the traffic stream is noticeably limited.
E	Operation at capacity with no usable gaps in the traffic stream. Any disruption to the traffic stream has little or no room to dissipate.
F	Breakdown in the traffic flow with long queues of traffic. Unacceptable conditions.
Source: Transportation Research Board. (2022). *Highway Capacity Manual (7th Edition).*	

While daily roadway capacity thresholds, or V/C ratios remain a common tool for planning-level roadway LOS assessments, they provide only a generalized snapshot of operations and often overlook the nuances of travel behavior and driver experience. This limitation is especially evident in areas like the BIG Specific Plan, where traffic patterns differ from the typical AM and PM peak hour assumptions used in developing the roadway capacities.

Intersection performance offers a more accurate reflection of corridor-level operations than segment-level capacity thresholds. The roadway capacity methodology assumes peak-hour surges, yet the BIG Specific Plan area experiences sustained traffic volumes throughout the day, allowing the roadway to accommodate higher daily volumes than the capacity thresholds might suggest. This can lead to mischaracterizations of capacity and performance.

To prevent overbuilt infrastructure, which can increase VMT, maintenance costs, pedestrian crossing distances, and negatively affect community character, a more context-sensitive approach was applied. This includes using Synchro Arterial Analysis and Highway Capacity Software (HCS) to evaluate both interrupted and uninterrupted flow conditions. These tools provide a holistic understanding of operational dynamics by incorporating intersection behavior, corridor-level performance, and travel patterns beyond average daily traffic (ADT) assumptions.

A comprehensive transportation network analysis was also considered to ensure infrastructure recommendations align with actual operational needs. Tools such as Synchro and HCS for two-lane and multi-lane highways offer more context-sensitive evaluations, focusing on travel behavior, intersection dynamics, and corridor-level operations rather than relying solely on ADT and generalized capacity assumptions.

Arterial Analysis

Arterial analysis was only performed on roadway segments showing poor LOS based on ADT and roadway capacities with intersection control devices spaced at less than 1 mile. Arterial analysis was conducted using Synchro 12 software based on *HCM 2000* methodologies for both AM and PM peak hours. Synchro 12 applies HCM 2000 standards for arterial LOS evaluations, as later versions of the HCM are not supported within the software.

Per HCM methodology, LOS for arterials is determined by average travel speed along the corridor during the peak hour, with thresholds determined by urban street class. An arterial's urban street class is determined by travel volume, mileage, posted speed limit, signal density, driveway/access point density,

and other design features per the HCM 2000 Chapter 10 – Urban Street Concepts (Transportation Research Board, 2000). **Table 15: Urban Street LOS by Class** shows the LOS thresholds for each urban street class that are used to determine a roadway segment's LOS using arterial analysis.

Table 15: Urban Street LOS by Class				
Urban Street Class	**I**	**II**	**III**	**IV**
Range of free-flow speeds (FFS, mph)	55.9 to 43.5	43.5 to 34.2	34.2 to 31.1	34.2 to 24.9
Typical FFS (mph)	49.7	40.4	34.2	28
LOS	**Average Travel Speed (mph)**			
A	>44.7	>36.7	>31.1	>25.5
B	>34.8 - 44.7	>28.6 - 36.7	>24.2 - 31.1	>19.9 - 25.5
C	>24.9 - 34.8	>20.5 - 28.6	>17.4 - 24.2	>14.3 - 19.9
D	>19.9 - 24.9	>16.2 - 20.5	>13.7 - 17.4	>11.2 - 14.3
E	>16.2 - 19.9	>13 - 16.2	>10.6 - 13.7	>8.7 - 11.2
F	≤16.2	≤13	≤10.6	≤8.7
Source: Transportation Research Board. (2000). *Highway Capacity Manual 2000.*				

HCS Two-Lane and Multi-Lane Highway Analysis

HCS two-lane and multi-lane highway analysis was only performed on roadway segments showing poor LOS based on V/C ratio with intersection control devices spaced at greater than 1 mile. HCS two-lane and multi-lane highway analysis were evaluated using *HCM 7th Edition* methodologies for both AM and PM peak hours.

Two-lane and multi-lane highway segments are analyzed slightly differently per the *HCM 7th Edition* (Transportation Research Board, 2022).

Multi-lane highway segments are analyzed using their geometric characteristics and the amount and composition of the demand they experience per the *HCM 7th Edition Chapter 12*. Geometric characteristics include lane width, right-side lateral clearance, left-side lateral clearance, access point density, terrain type, and median type. Demand characteristics include directional hourly volume, heavy vehicle percentage, peak hour factor, and typical adjustment factors. LOS is determined by the density in passenger cars (pc) per mile per lane. The density LOS thresholds for multi-lane highway segments are shown in **Table 16: LOS Thresholds for Multi-Lane Highway Segments** below.

Table 16: LOS Thresholds for Multi-Lane Highway Segments	
LOS	**Density (pc/mi/lane)**
A	≤11
B	>11 – 18
C	>18 – 26
D	>26 – 35
E	>35 – 45
F	Demand exceeds capacity OR density > 45
Source: Transportation Research Board. (2022). *Highway Capacity Manual 7th Edition*.	

Two-lane highway segments are analyzed using their geometric characteristics and the amount and composition of the demand they experience per the *HCM 7th Edition Chapter 15*. Geometric characteristics include lane width, grade, posted speed limit, access point density, and shoulder width. Demand characteristics include directional hourly volume and heavy vehicle percentage. LOS is determined by the follower density, which is defined as the number of vehicles in a "follower state" per mile per lane. The "follower state" is defined as any vehicle following another vehicle at a headway of 2.5 seconds or less. The follower density LOS thresholds for two-lane highway segments are shown in **Table 17: LOS Thresholds for Two Lane Highway Segments** below.

Table 17: LOS Thresholds for Two Lane Highway Segments

LOS	Follower Density (followers/mi/lane)	
	Higher-Speed Highways Posted Speed Limit ≥ 50 mph	Lower-Speed Highways Posted Speed Limit < 50 mph
A	≤ 2.0	≤ 2.5
B	> 2.0 – 4.0	> 2.5 – 5.0
C	> 4.0 – 8.0	> 5.0 – 10.0
D	> 8.0 – 12.0	> 10.0 – 15.0
E	> 12.0	> 15.0
F	Demand exceeds capacity	

Source: Transportation Research Board. (2022). *Highway Capacity Manual 7th Edition*.

Freeway Off-Ramp Queueing Assessment

Freeway off-ramp queuing was evaluated using SimTraffic, a microsimulation tool included in the Synchro software. While Synchro is primarily a macrosimulation tool designed for intersection analysis, such as signal timing, delay, and LOS, it is not suitable for analyzing intersection and off-ramp queueing. Therefore, SimTraffic was used to assess queueing at a network level.

SimTraffic builds upon the data input into Synchro to create a dynamic model that captures the full impact of intersection queuing and potential spillback. It calculates various measures of effectiveness, including queue lengths, travel times, and delays, by simulating traffic over a defined period. For this analysis, SimTraffic was run five times for both AM and PM peak hour models to obtain average queue lengths. The queuing report generated by SimTraffic includes both 50th percentile (median) and 95th percentile queue lengths for each movement at an intersection, providing a range of expected conditions.

These simulated queue lengths were then compared against the existing storage capacity of the off-ramps to identify potential deficiencies. This approach offers a more realistic representation of traffic behavior and queuing impacts than static, intersection-only models, especially in congested areas where spillback can affect upstream operations.

3.5 Consistency with Applicable LOS Standards

This LOS analysis identifies transportation deficiencies based on the thresholds noted in the following documents:

- Proposed Transportation Study for Barstow General Plan
- San Bernardino County Transportation Impact Study Guidelines (County of San Bernardino, 2019)

- San Bernardino Congestion Management Program (CMP) 2016 Update (San Bernardino County Transportation Authority , 2016)

If a relevant threshold is exceeded for a signalized or unsignalized intersection, BIG is considered to create a transportation deficiency inconsistent with applicable LOS standards, and transportation modifications to improve operations should be considered.

If a relevant V/C threshold is exceeded for a roadway segment, additional analysis was performed to determine if BIG is considered to create a transportation deficiency inconsistent with applicable LOS standards. If a transportation deficiency is identified, transportation modifications to improve operations should be considered.

The transportation deficiency thresholds are described below by facility type.

Signalized Intersections

City Criteria

The City of Barstow proposed General Plan notes the following Policy:

- *POLICY CM-1.1: Strive to maintain a citywide level of service (LOS) standard not exceeding LOS D for roadways and LOS C for City-controlled intersections for weekday peak. Allow LOS D for intersections in the downtown in recognition of the built-out nature and desire for lower speeds for safety (motorist, bicyclist, or pedestrian), and greater business exposure.*

County Criteria

The County TIS Guidelines (County of San Bernardino, 2019) note the following "*Signalized Intersection General Plan Consistency Requirements":*

> *Consistent with the acceptable LOS for the Desert, Valley, and Mountain regions as described in the General Plan, the County should consider the following signalized intersection criteria for application in a traffic study:*
>
> - *Any signalized study intersection in the Desert region that is operating at an LOS C or better without project traffic in which the addition of project traffic causes the intersection to degrade to an LOS D, E, or F shall identify improvements to improve operations to LOS C.*
> - *Any signalized study intersection in the Desert region that is operating at LOS D, E, or F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.*

CMP Criteria

Additionally, the San Bernardino County Associated Governments (SANBAG), now called the San Bernardino County Transportation Authority (SBCTA), prepared the San Bernardino Congestion Management Program (CMP) 2016 Update (SBCTA, 2016), which identifies LOS standards for a system of highways and roadways designated by the agency. The CMP notes the following:

- *For the CMP roadway system, the LOS standard shall be E for all segments and intersections except those designated LOS F, as listed in Table 2-1 [of the CMP].*

Unsignalized Intersections

City Criteria

The City of Barstow proposed General Plan notes the following Policy:

- *POLICY CM-1.1: Strive to maintain a citywide level of service (LOS) standard not exceeding LOS D for roadways and LOS C for City-controlled intersections for weekday peak. Allow LOS D for intersections in the downtown in recognition of the built-out nature and desire for lower speeds for safety (motorist, bicyclist, or pedestrian), and greater business exposure.*

County Criteria

The County TIS Guidelines (County of San Bernardino, 2019) note the following "*Unsignalized Intersection General Plan Consistency Requirements"*:

An operational improvement would be required if the study determines that either section a) or both sections b) and c) occur:

a) The addition of project related traffic causes the intersection to degrade from an LOS C or better to an LOS D or worse in the Desert region.

OR

b) The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at an LOS D, E, or F in the Desert region (per Section 10.5.2 b))

AND

c) One or both of the following conditions are met:

- *The project adds ten (10) or more trips to any minor street approach*
- *The intersection meets the peak hour traffic signal warrant after the addition of project traffic (per Section 10.5.2 c)).*

If the conditions above are satisfied, improvements should be identified that achieve the following:

- *In the Desert region, improvements should be identified that would achieve LOS C or better for case a) above or to pre-project LOS and delay for case b) above*

CMP Criteria

Additionally, the SBCTA prepared the San Bernardino Congestion Management Program (CMP) 2016 Update (SBCTA, 2016), which identifies LOS standards for a system of highways and roadways designated by the agency. The CMP notes the following:

- *For the CMP roadway system, the LOS standard shall be E for all segments and intersections except those designated LOS F, as listed in Table 2-1 [of the CMP].*

Roadway Segments

City Criteria

The City of Barstow proposed General Plan notes the following Policy:

- *POLICY CM-1.1: Strive to maintain a citywide level of service (LOS) standard not exceeding LOS D for roadways and LOS C for City-controlled intersections for weekday peak. Allow LOS D for intersections in the downtown in recognition of the built-out nature and desire for lower speeds for safety (motorist, bicyclist, or pedestrian), and greater business exposure.*

County Criteria

The County TIS Guidelines note the following regarding "Roadway Segment Analysis":

- *Intersections typically provide the transportation constraint on vehicle capacity. As such, these guidelines focus on the evaluation of intersections. However, in some instances, roadway segment assessment could be appropriate and may be requested by the County Transportation Department. The following sections describe the appropriate methodology for evaluating roadway segments in those situations where required by the department.*

The County TIS Guidelines (County of San Bernardino, 2019) note the following roadway segment "*General Plan Consistency Requirements"*:

> *Consistent with the acceptable LOS for the Desert, Valley, and Mountain regions as described in the current General Plan, the County should consider the following roadway segment thresholds and improvement requirements:*
>
> - *Any study roadway segment in the Desert region that is operating at an LOS C or better without project traffic in which the addition of project traffic causes the segment to degrade to an LOS D, E, or F should identify improvements to achieve LOS D.*
> - *Any roadway segment that operates unacceptably in the no project scenario where the project adds traffic in excess of 5% of the roadway capacity (e.g. a volume-to-capacity ratio increase of 0.05) should identify improvements to add capacity to the segment.*

CMP Criteria

Additionally, the SBCTA prepared the San Bernardino Congestion Management Program (CMP) 2016 Update (SBCTA, 2016), which identifies LOS standards for a system of highways and roadways designated by the agency. The CMP notes the following:

- *For the CMP roadway system, the LOS standard shall be E for all segments and intersections except those designated LOS F, as listed in Table 2-1 [of the CMP].*

Additional Discussion

Where roadway segment V/C thresholds were exceeded under the Plus BIG conditions, supplemental analysis was conducted to determine whether the BIG Specific Plan would result in transportation

deficiencies inconsistent with applicable LOS standards. This additional evaluation was necessary because V/C methodologies assume pronounced traffic volume increases during AM and PM peak hours. However, traffic patterns near the BIG Specific Plan area are more evenly distributed throughout the day, without significant peak-hour surges. This indicates that these segments may accommodate higher daily traffic volumes than V/C analysis suggests.

To better reflect actual operating conditions, roadway segments were classified by flow type and analyzed using context-sensitive methodologies:

- **Uninterrupted Flow Segments**: Defined as segments with traffic control devices spaced more than one (1) mile apart. These segments were evaluated using Highway Capacity Software (HCS), which assesses LOS based on vehicle density.
- **Interrupted Flow Segments**: Defined as segments with traffic control devices spaced one (1) mile or less apart. These segments were evaluated using Synchro arterial analysis, which assesses LOS based on travel speeds.

The following criteria were applied to determine whether a roadway segment exhibits a transportation deficiency:

- *For roadway segments with uninterrupted flow, if the Plus BIG condition operates at LOS of E or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and HCS analysis indicates vehicle density that results in LOS E or worse during the AM and PM peak hour conditions, except the following:*
  - For segments with uninterrupted flow within unincorporated County right-of-way, if the Plus BIG condition operates at LOS D or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and HCS analysis indicates vehicle density that results in LOS D or worse during the AM and PM peak hour conditions.
- *For roadway segments with interrupted flow, if the Plus BIG condition operates at LOS of E or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and roadway segment arterial analysis indicates travel speeds that result in LOS E or worse during the AM and PM peak hour conditions, except the following:*
  - For roadway segments with interrupted flow conditions within unincorporated County right-of-way, if the Plus BIG condition operates at LOS D or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and the roadway segment arterial analysis indicates travel speeds that result in LOS D or worse during the AM and PM peak hour conditions.

Freeway Mainline Segments

Caltrans

The Caltrans *Vehicle Miles Traveled-Focused Transportation Impact Study Guide* (Caltrans, 2020) notes the following:

- *For land use projects and plans, automobile delay is no longer considered a significant impact on the environment under CEQA (SB 743, 2013). Caltrans review of land use projects and plans is focused on a VMT metric, consistent with changes to the State CEQA Guidelines (California Code of Regulations §15064.3(b)(1)). This VMT-focused TISG provides a foundation for review of how lead agencies apply the VMT metric to CEQA project analysis.*

- *Beyond or in addition to the use of the VMT metric, determining how the State Highway System may otherwise be affected by a land use project may still be necessary at times, particularly as it relates to the safety of the traveling public. Additional future guidance will include the basis for requesting transportation impact analysis that is not based on VMT. This guidance will include a simplified safety analysis approach that reduces risks to all road users and focuses on multi-modal conflict analysis as well as access management issues. With this guidance the Department will transition away from requesting LOS or other vehicle operations analyses of land use projects.*

Consistent with the Caltrans VMT-Focused TIS Guide (Caltrans, 2020), the Caltrans Local Development Review (LDR) Safety Review Practitioner's Guidance (Caltrans, 2024) provides considerations for safety analysis, and notes the following:

- This guidance is intended to apply to proposed land use projects and plans affecting the State Highway System. Specific effects may include but are not limited to adding new automobile, bicycle, or pedestrian trips to State roadways; modifying access to State roadways; or affecting the safety of connections to or travel on State roadways.
- This guidance does not establish thresholds of significance for determining safety impacts under the CEQA.
- Traffic safety reviews should be based on, but are not limited to, traffic safety investigations generated from [a range of resources].
- A queueing analysis should be performed for relevant freeway off-ramps to examine if project traffic would cause a queue increase that would extend into the freeway mainline.

Freeway Mainline Segment Volumes for Informational Purposes

Freeway mainline segment LOS analysis is not required, since freeway widening is not consistent with State policies and goals; therefore, freeway mainline segments are not included in the LOS study area. Project trip assignment along freeway mainline segments is provided for informational purposes.

Freeway Off-Ramps

Caltrans

Consistent with the Caltrans VMT-Focused TIS Guide (Caltrans, 2020), the Caltrans Local Development Review (LDR) Safety Review Practitioner's Guidance (Caltrans, 2024) provides considerations for safety analysis, and notes the following:

- This guidance is intended to apply to proposed land use projects and plans affecting the State Highway System. Specific effects may include but are not limited to adding new automobile, bicycle, or pedestrian trips to State roadways; modifying access to State roadways; or affecting the safety of connections to or travel on State roadways.
- This guidance does not establish thresholds of significance for determining safety impacts under the CEQA.
- Traffic safety reviews should be based on, but are not limited to, traffic safety investigations generated from [a range of resources].
- A queueing analysis should be performed for relevant freeway off-ramps to examine if project traffic would cause a queue increase that would extend into the freeway mainline.

Threshold

Caltrans does not have an established LOS standard for its facilities. Because intersections at freeway interchanges fall under Caltrans jurisdiction, no formal LOS threshold is applied. However, for the purposes of this study, these intersections are assumed to operate acceptably at LOS D or better.

This analysis proposes the following thresholds to determine transportation deficiencies related to queueing for study area freeway off-ramps:

- *For intersections at freeway interchanges, if the Plus BIG condition creates an increase in queuing that would cause the off-ramp queues to exceed the ramp facility's functional storage capacity. The exit ramp functional storage capacity is based on the ramp's total length minus stopping sight distance.*

3.6 Summary of Proposed Operational Phase Thresholds

BIG would be considered to cause a transportation deficiency inconsistent with applicable LOS standards if the following occurs:

- For signalized intersections, if the Plus BIG condition operates at LOS D or worse and BIG increases the average traffic delay by 5 seconds or more over the No BIG Baseline condition, except the following:
  - For signalized intersections at freeway interchanges and within the City's Downtown, if the Plus BIG condition operates at LOS E or worse and BIG increases the average traffic delay by 5 seconds or more over the No BIG Baseline condition

The assumed 5 second threshold is consistent with the County TIS Guidelines.

- For unsignalized intersections, if the Plus BIG condition operates at LOS D or worse and BIG increases the traffic delay by 5 seconds or more (measured as average delay for all-way stop or worst-movement delay for a side-street-stop intersection) over the No BIG Baseline condition, except the following:
    - For unsignalized intersections at freeway interchanges and within the City's Downtown, if the Plus BIG condition operates at LOS E or worse and BIG increases the average traffic delay by 5 seconds or more over the No BIG Baseline condition

The assumed 5 second threshold is consistent with the County TIS Guidelines.

- For roadway segments with uninterrupted flow, if the Plus BIG condition operates at LOS of E or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and HCS analysis indicates vehicle density that results in LOS E or worse during the AM and PM peak hour conditions, except the following:
    - For segments with uninterrupted flow within unincorporated County right-of-way, if the Plus BIG condition operates at LOS D or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and HCS analysis indicates vehicle density that results in LOS D or worse during the AM and PM peak hour conditions.

The assumed 0.05 threshold is consistent with the County TIS Guidelines.

- For roadway segments with interrupted flow, if the Plus BIG condition operates at LOS of E or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and roadway segment arterial analysis indicates travel speeds that result in LOS E or worse during the AM and PM peak hour conditions, except the following:
    - For roadway segments with interrupted flow conditions within unincorporated County right-of-way, if the Plus BIG condition operates at LOS D or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and the roadway segment arterial analysis indicates travel speeds that result in LOS D or worse during the AM and PM peak hour conditions.
- For freeway off-ramps, if the Plus BIG condition creates an increase in queuing that would cause the off-ramp queues to exceed the ramp facility's functional storage capacity. The exit ramp functional storage capacity is based on ramp length minus stopping sight distance.

4.0 NO BIG BASELINE CONDITIONS

This section describes the study area's existing transportation network and future No BIG Baseline conditions. The study area includes roadway segments and intersections that may experience a meaningful change because of BIG, as discussed in **Section 3.1 Definition of Study Area.**

4.1 Regional and Local Roadway Network

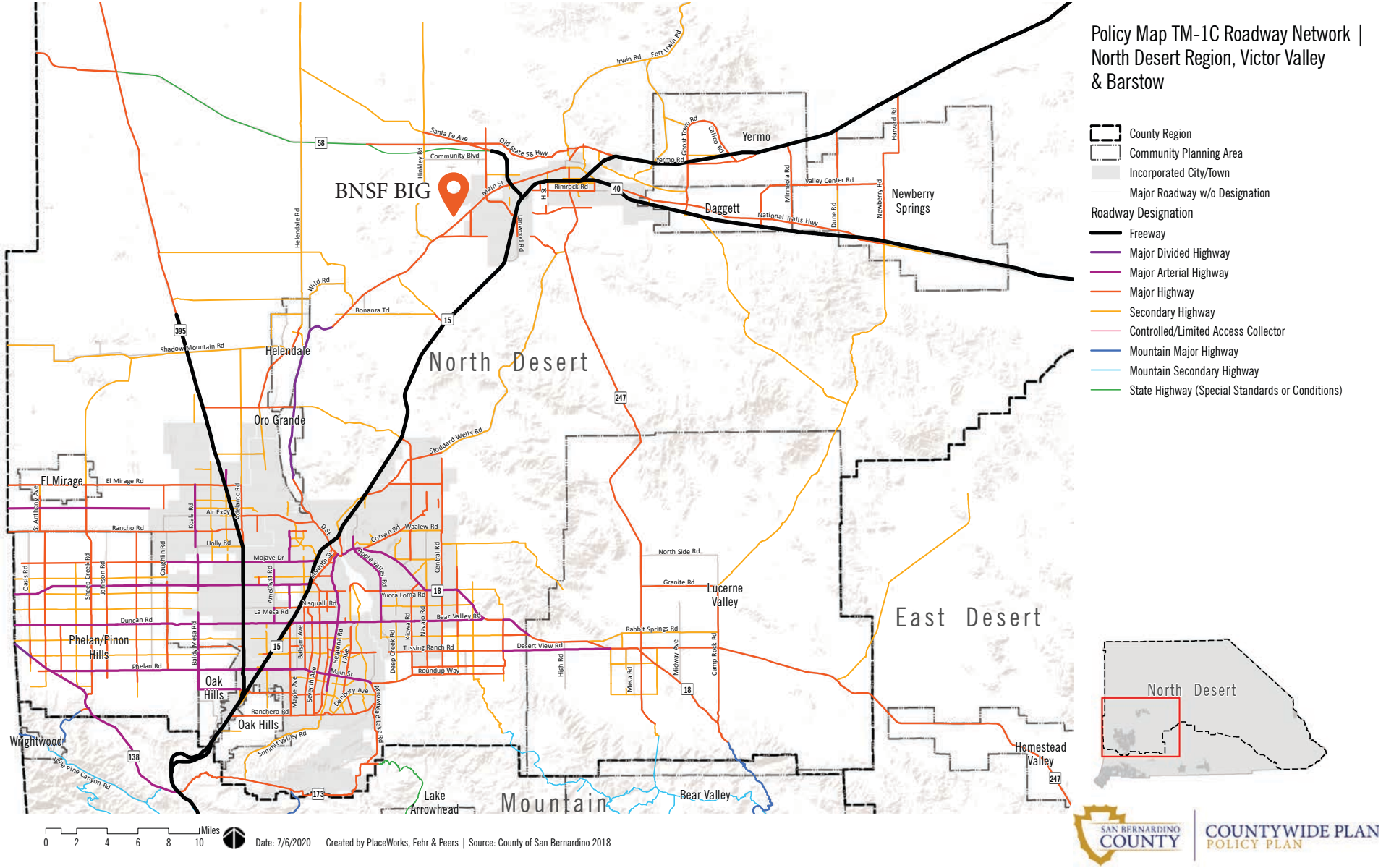
The study area's roadway network is located within the City of Barstow and portions of unincorporated San Bernardino County. Roadway classifications and associated characteristics in these jurisdictions are summarized in **Table 18: Roadway Classifications for Local Agencies in Study Area. Figure 13: County Roadway Network – North Desert Region** depicts the study area and regional roadway network around BIG as presented in the San Bernardino County North Desert Region Roadway Network map from the *County of San Bernardino Countywide Plan (CWP)* (2020). **Figure 14: City Proposed Circulation Map** depicts the roadway network as presented in the City of Barstow proposed General Plan. **Figure 15: City Proposed General Plan and County CWP Roadway Classification Map** illustrates a layered comparison between the City and County planned roadway network classifications.

Table 18: Roadway Classifications for Local Agencies in Study Area

Functional Classification	Number of Lanes	Right-of-Way Width (ft)	Curb to Curb Width (ft)
SAN BERNARDINO COUNTY			
Major Divided Highway	4 to 6	120	94
Major Arterial Highway	4 to 6	120	94
Major Highway	2 to 4	104	80
Secondary Highway	2 to 4	88	64
Controlled/Limited Access Collector	2	66	44
Mountain Major Highway	2 to 4	80	64
Mountain Secondary Highway	2	60	44
CITY OF BARSTOW			
Freeways	N/A	160	N/A
Primary Arterials	N/A	100	N/A
Secondary Arterials	N/A	80	N/A
Collectors	N/A	60	N/A
Local Streets	N/A	50-60	N/A

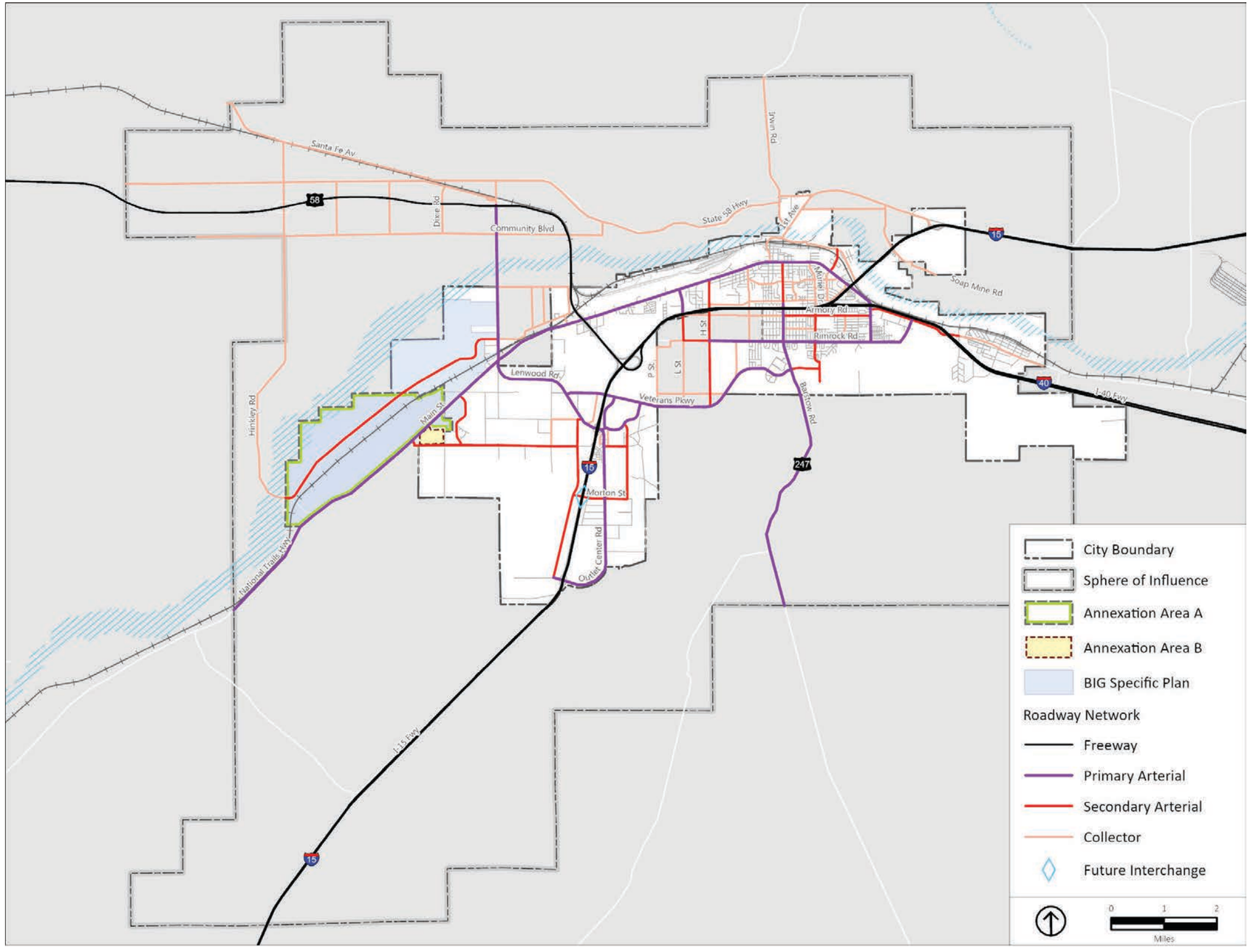
Note:
[1] ft = feet
[2] N/A = Not available

Sources:
City of Barstow.(2020).
County of San Bernardino. (2020)



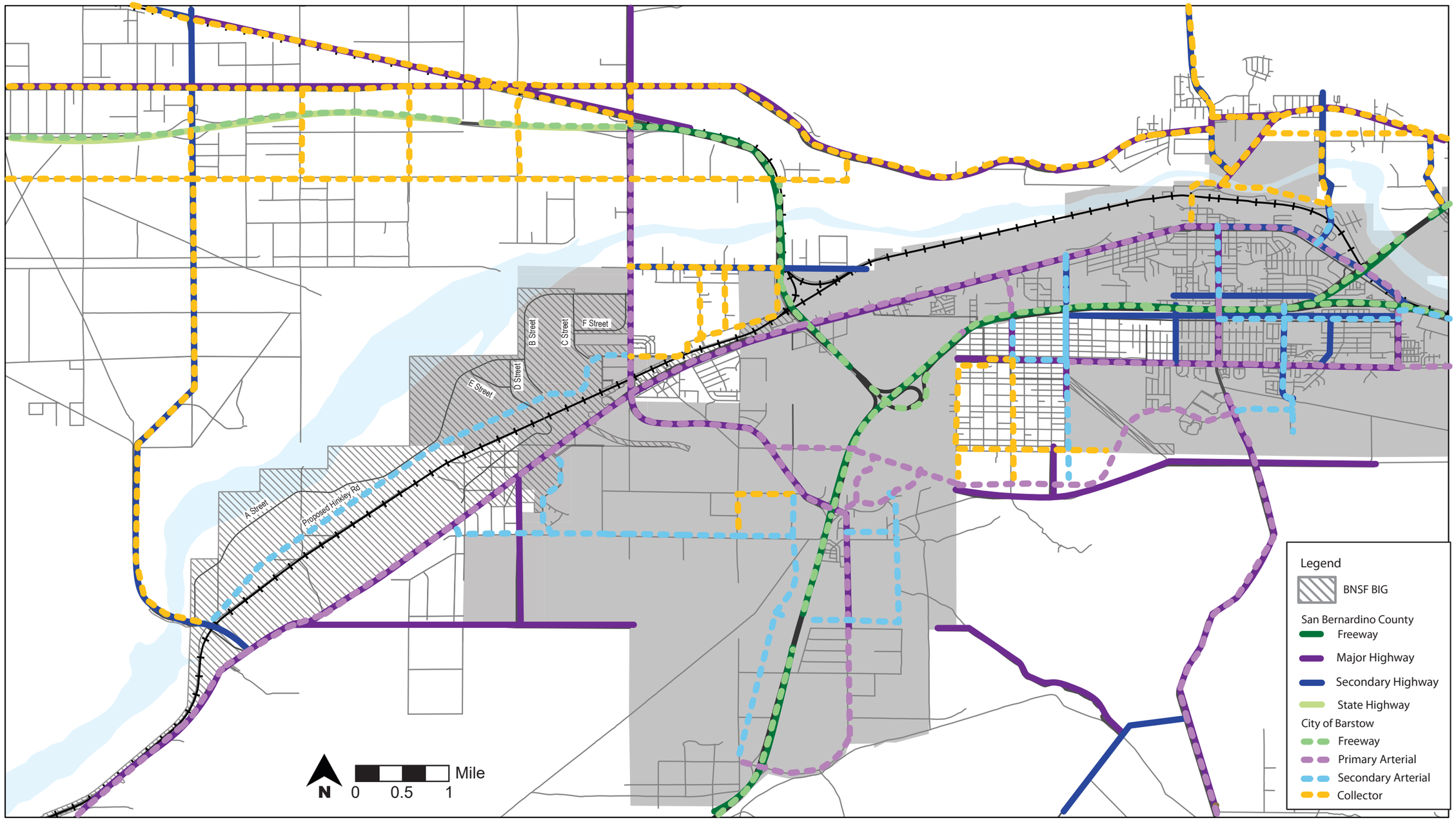
Source: San Bernardino County Countywide Plan Transportation & Mobility Element, 2020

Figure 13: County Roadway Network - North Desert Region



Source: City of Barstow proposed General Plan

Figure 14: City Proposed Circulation Map



Sources: City of Barstow proposed General Plan
San Bernardino County Countywide Plan Transportation & Mobility Element, 2020

Figure 15: City Proposed General Plan and County CWP Roadway Classification Map

Major Freeways and State Routes

Regional and interregional access to the BIG Specific Plan area is provided via I-15, I-40, SR 58, and SR 247.

Interstate 15

I-15 is approximately 4.0 miles southeast of BIG. I-15 is a major north-south route through the United States, connecting California to Nevada, Utah, Idaho, Montana, and Alberta, Canada. The average daily traffic (ADT) in the study area range from approximately 54,000 to 70,000 (Caltrans, 2022).

Interstate 40

I-40 runs east-west and converges with I-15 approximately 6.5 miles east of the proposed BIG Specific Plan area. I-40 is a major freight route through the southern United States, connecting California to Arizona, New Mexico, Texas, Oklahoma, Arkansas, Tennessee, and North Carolina. The I-40 ADT near its western terminus at I-15 is approximately 23,000 (Caltrans, 2022).

State Route 58

SR 58 runs east-west approximately 4.0 miles north of BIG. SR 58 primarily serves as a connector between Barstow, California and Bakersfield, California. The ADT in the study area is approximately 12,600 (Caltrans, 2022).

State Route 247/Barstow Road

SR 247's northern terminus is approximately 6.0 miles east of BIG. SR 247 primarily serves as a connector between Yucca Valley, Lucerne Valley, and Barstow, California. The ADT in the study area is approximately 15,500 (Caltrans, 2022). SR 247 is also known as Barstow Road within the City's downtown area and is analyzed as part of the roadway network.

Roadway Network

Table 19: Study Area Roadways lists the study area roadway segments by classification and notes the facility's jurisdiction and key characteristics.

Table 19: Study Area Roadways

Existing Street Classification	Roadway	#	From	To	Existing ADT[1,2] (PCE)	Existing # of Lanes	Existing Median Type	Existing Sidewalks	Existing Bike Lanes	Existing Transit Routes	Existing Posted Speed Limit	Existing Jurisdiction	Barstow Proposed General Plan Proposed Classification	Barstow Proposed General Plan Proposed # of Lanes	Barstow Proposed General Plan Proposed Bike Lanes
Major Highway	Main Street[5]	1	Hinkley Road	Country Club Drive	3,800	1EB/1WB	None	None	None	28, 115	55 MPH	City-County	Primary Arterial	2EB/2WB	Class II
Primary Arterial	Main Street	2	Country Club Drive	Lenwood Road	3,800	1EB/1WB[3]	None	None	None	28, 115	45 MPH, 55 MPH	City	Primary Arterial	2EB/2WB	Class II
		3	Lenwood Road	County/City Boundary	10,330	2EB/2WB	None	Intermittent Both Sides	None	3, 28, 115	45 MPH, 55 MPH	County	Primary Arterial	2EB/2WB	Class II
		4	County/City Boundary	SR 58 Eastbound Ramps	10,330	2EB/2WB	None (TWLTL[4] in Eastern Portion)	Intermittent Both Sides	None	3, 28, 115	55 MPH	City	Primary Arterial	2EB/2WB	Class II
		5	SR 58 Eastbound Ramps	SR 58 Westbound Ramps	9,180	2EB/2WB	Left-Turn Pockets	None	None	3, 115	55 MPH	Caltrans	Primary Arterial	2EB/2WB	Class II
		6	SR 58 Westbound Ramps	L Street	8,020	2EB/2WB	TWLTL	Intermittent Both Sides	Class II	3, 115	55 MPH	City	Primary Arterial	2EB/2WB	Class II
		7	L Street	Avenue A	13,910	2EB/2WB	TWLTL	Intermittent Both Sides	None	3	40 MPH, 45 MPH		Commercial Arterial	2EB/2WB	Class II
		8	Avenue A	Barstow Road	13,050	2EB/2WB	TWLTL (Raised in Eastern Portion)	Intermittent Both Sides	None	1	35 MPH, 40 MPH		Commercial Arterial	2EB/2WB	Class II/III
	Barstow Road	9	Main Street	I-15 Southbound Ramps	11,670	1NB/2SB	TWLTL	Both Sides	None	1, 15, 28, 29, 111, 115	35 MPH		Secondary Arterial	1NB/2SB	Class II/III
		10	I-15 Southbound Ramps	I-15 Northbound Ramps	11,940	2NB/2SB	TWLTL	East Side	None	2, 6, 15, 28, 29, 111, 115	35 MPH	Caltrans	Primary Arterial	2NB/2SB	Class II
		11	I-15 Northbound Ramps	Rimrock Road	12,210	2NB/2SB	Raised	Intermittent Both Sides	None	2, 6	45 MPH	City	Primary Arterial	2NB/2SB	Class II
	Lenwood Road	12	SR 58 Westbound Ramp	Community Boulevard	1,640	1NB/1SB	None	Intermittent East Side	None	3	55 MPH	County	Industrial Arterial	2NB/2SB	Class II/None
		13	Community Boulevard	Agate Road	1,640	1NB/1SB	None	None	None	3	55 MPH		Industrial Arterial	2NB/2SB	Class II/None
		14	Agate Road	Jasper Road	4,270	1NB/1SB	None	None	None	3	55 MPH		Industrial Arterial	2NB/2SB	Class II/None
		15	Jasper Road	Main St	6,890	2NB/2SB	None	Both Sides	None	3	55 MPH	City	Industrial Arterial	2NB/2SB	Class II

Table 19: Study Area Roadways

Existing Street Classification	Roadway	#	From	To	Existing ADT[1,2] (PCE)	Existing # of Lanes	Existing Median Type	Existing Sidewalks	Existing Bike Lanes	Existing Transit Routes	Existing Posted Speed Limit	Existing Jurisdiction	Barstow Proposed General Plan Proposed Classification	Barstow Proposed General Plan Proposed # of Lanes	Barstow Proposed General Plan Proposed Bike Lanes
		16	Main Street	High Desert Road	4,270	1NB/1SB	None (TWLTL in Southern Portion)	None	None	3	55 MPH, 40 MPH	City	Industrial Arterial	2NB/2SB	Class I
		17	High Desert Road	I-15 Southbound Off-Ramp	11,790	2NB/2SB	TWLTL	Both Sides	None	3	40 MPH		Industrial Arterial	2NB/2SB	Class II
		18	I-15 Southbound Off-Ramp	I-15 Northbound Off-Ramp	9,880	2NB/2SB	Left-Turn Pockets	Both Sides	None	3	40 MPH	Caltrans	Industrial Arterial	2NB/2SB	Class II
Secondary Highway	Hinkley Road	19	SR 58 Westbound Ramp	Jiggs Road	410	1NB/1SB	None	Intermittent East Side	None	28	55 MPH	County	Industrial Arterial	2NB/2SB	None
		20[6]	Jiggs Road	Main St	410	1NB/1SB	None	None	None	28	55 MPH	City	Industrial Arterial	2NB/2SB	None
		21	Jiggs Road	East of Jiggs Road	0	Does Not Exist	None	None	None	None	None		Industrial Arterial	2EB/2WB	None
None	Proposed Hinkley Road	22	East of Jiggs Road	West of B St	0	Does Not Exist	None	None	None	None	None		Industrial Arterial	2EB/2WB	None
None		23	B Street	West of B St	0	Does Not Exist	None	None	None	None	None		Industrial Arterial	2EB/2WB	None
None		24	B Street	C Street	0	Does Not Exist	None	None	None	None	None		Industrial Arterial	2EB/2WB	None
None		25	C Street	Lenwood Road	0	Does Not Exist	None	None	None	None	None		Industrial Arterial	2EB/2WB	None
None	C Street	26	North of Hinkley Road	F St	0	Does Not Exist	None	None	None	None	None		Industrial Arterial	2NB/2SB	None
None	F Street	27	C Street	East of C St	0	Does Not Exist	None	None	None	None	None		Industrial Arterial	2EB/2WB	None

Note:
[1] All volumes listed are two-way average daily traffic volumes.
[2] ADT = average daily traffic (vehicles per day)
[3] *The eastern portion of Main Street between Country Club Drive and Lenwood Road is 2EB/2WB*
[4] *TWLTL = Two-Way Left Turn Lane*
[5] *This segment is currently within both City and County Jurisdiction but would be annexed to the City as part of the proposed General Plan.*
[6] *Roadway segment proposed to be vacated as a BIG feature*

Sources:
National Data & Surveying Services traffic counts. (2021-2022).
City of Barstow (2015). *City of Barstow General Plan – Circulation Element*.
County of San Bernardino. (2020). *Countywide Plan*.

Roadway Network General Plan Improvements

The *County of San Bernardino Countywide Plan (CWP) (2020)* and *City of Barstow 2015-2020 General Plan (2015 General Plan) (2015)* do not identify any specific improvements within the study area.

4.2 No BIG Baseline LOS Analysis

The No BIG Baseline conditions represent existing, opening year, interim year, and horizon year conditions without BIG. These scenarios are used as the baseline to compare with Plus BIG conditions to determine BIG transportation deficiencies.

Existing No BIG Baseline

LOS analyses for the study area intersections, freeway off-ramps, and roadway segments were conducted for Existing No BIG Baseline conditions to understand existing traffic conditions; see **Section 3.3 Analysis Scenarios** for a description of Existing No BIG Baseline conditions development.

Intersection Operations

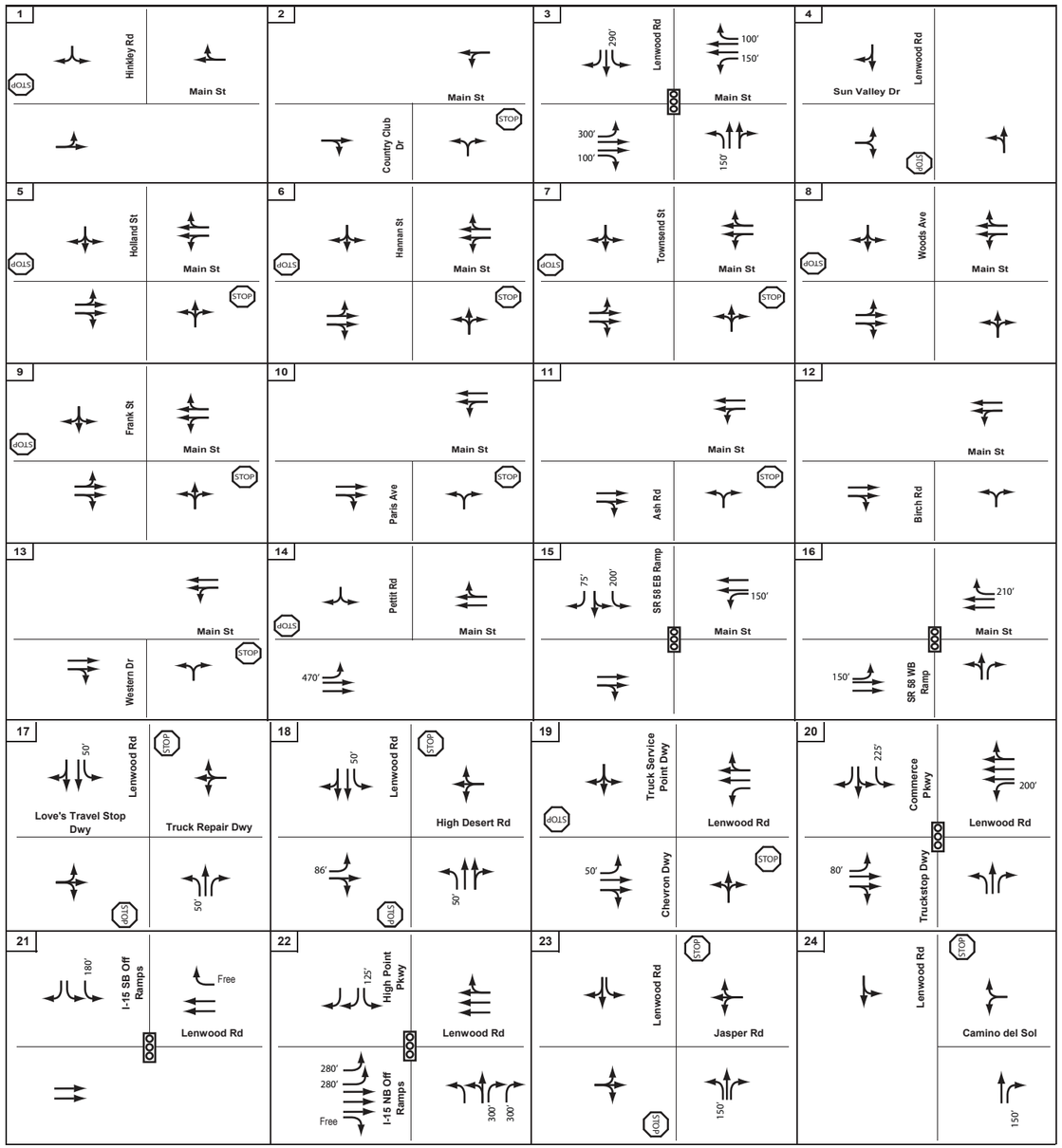
Figure 16: Existing Lane Configuration and Traffic Control shows the study area intersection locations, and existing lane configurations and traffic control. Existing peak hour turning movement volumes are illustrated in **Figure 17: Study Area Intersection Peak Hour Turning Movement Volumes – Existing No BIG Baseline**. Existing peak hour turning movement volumes, converted to passenger car equivalent (PCE), are illustrated in **Figure 18: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Existing No BIG Baseline.**

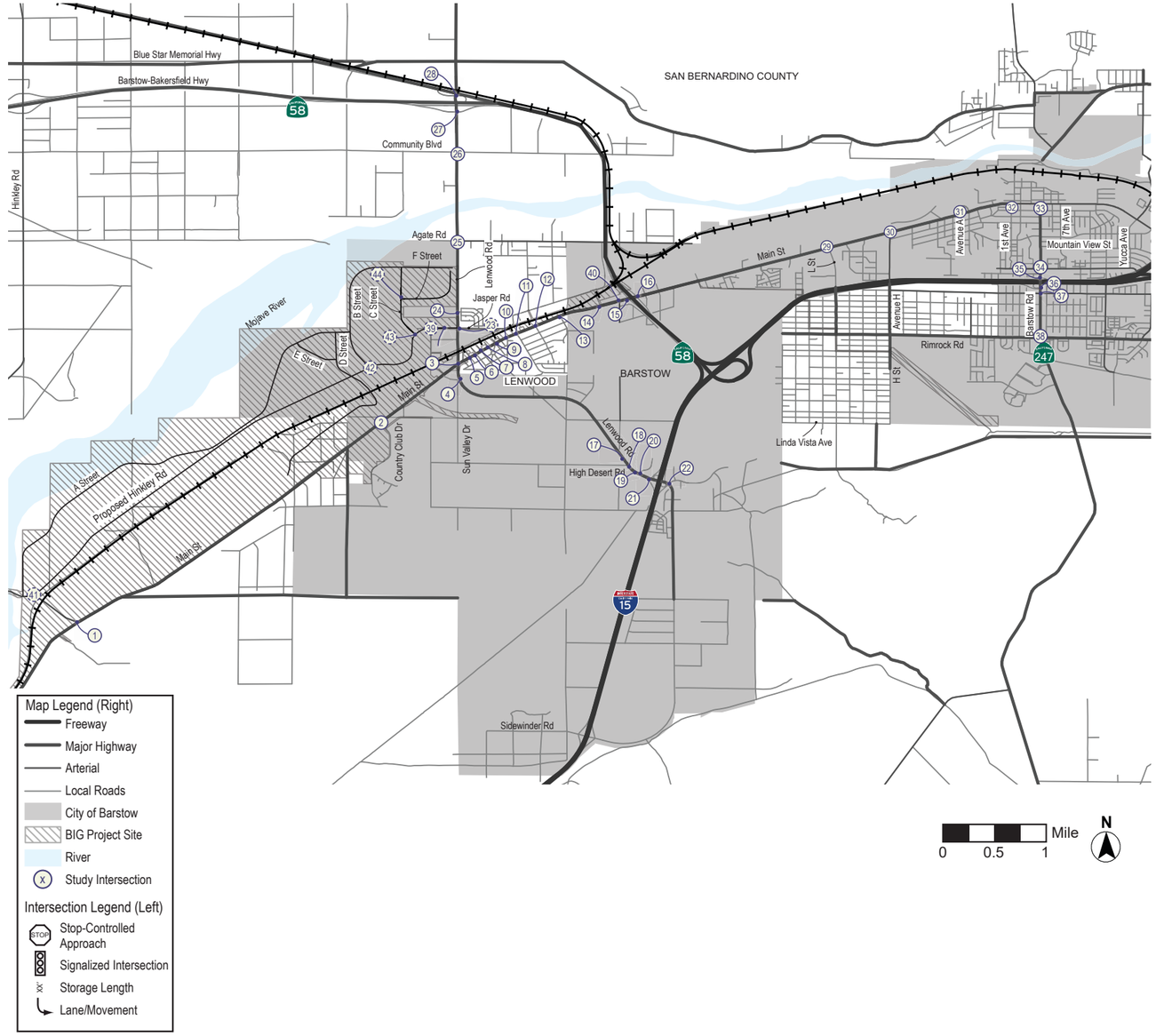
LOS analysis was conducted based on the methodology documented in **Section 3.4 Level of Service Assessment Methodology**, using Synchro 12 software. **Table 20: Study Area Intersection Operations - Existing No BIG Baseline** and **Figure 19: Study Area Intersection Level of Service – Existing No BIG Baseline** summarize the study area intersection LOS analysis results and indicate all study area intersections operate at an acceptable LOS according to agency performance criteria under Existing No BIG Baseline conditions. Detailed Synchro reports for intersection analysis are in **Appendix G: Synchro Analysis Worksheets.**

Roadway Segment Operations

Figure 20: Study Area Roadway Segment Volumes – Existing No BIG Baseline shows the study area roadway segments and their existing ADT volumes, speeds, and heavy vehicle percentages. Roadway segment analysis was conducted using volume to capacity ratios and arterial analysis methodologies, as discussed in **Section 3.4 Level of Service Assessment Methodology**.

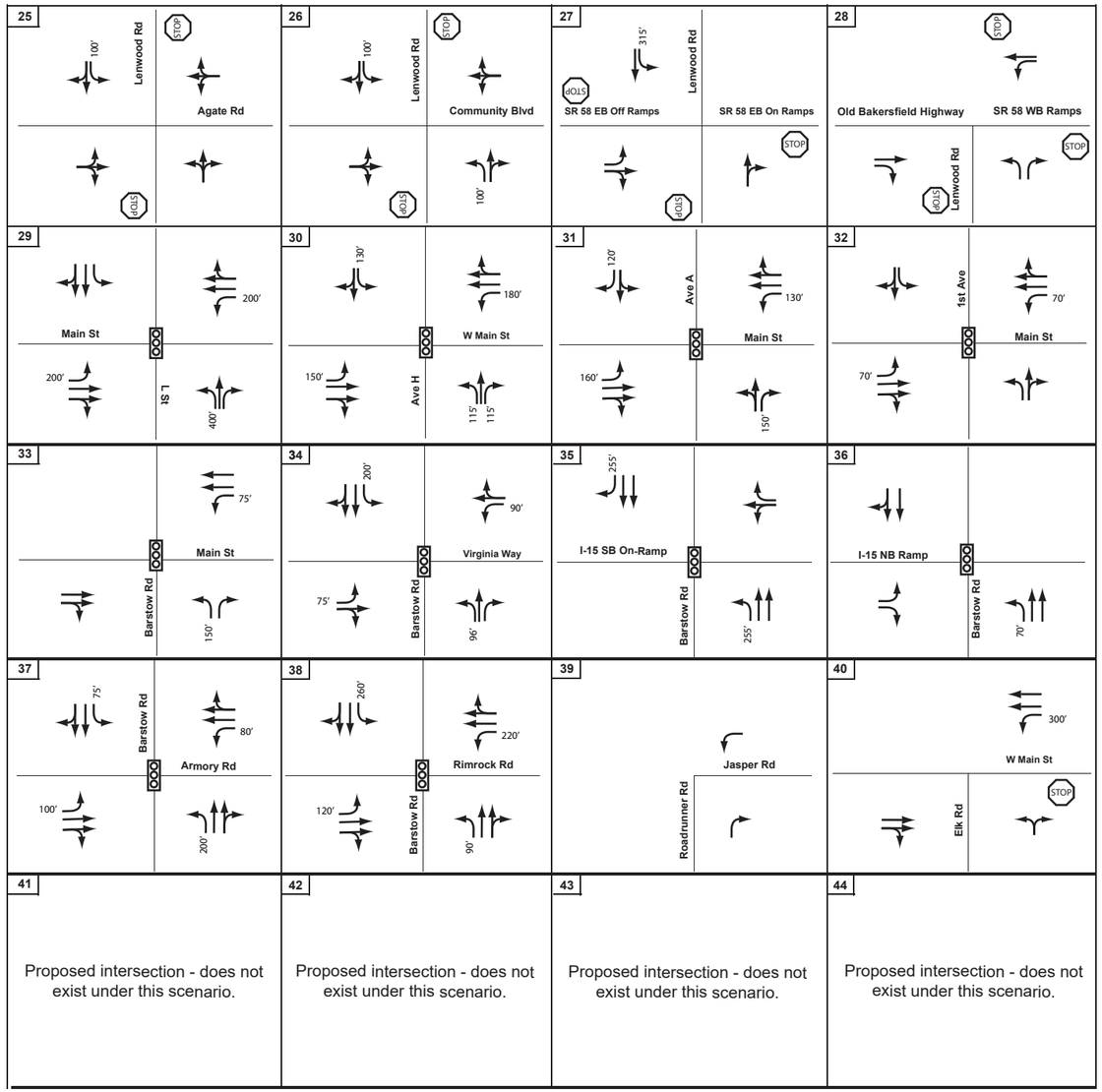
Table 21: Study Area Roadway Segment Operations – Existing No BIG Baseline and **Figure 21: Study Area Roadway Segment Level of Service – Existing No BIG Baseline** summarize the study area roadway segment LOS analysis results and indicate all study area roadway segments operate at an acceptable LOS according to agency performance criteria under Existing No BIG Baseline conditions.

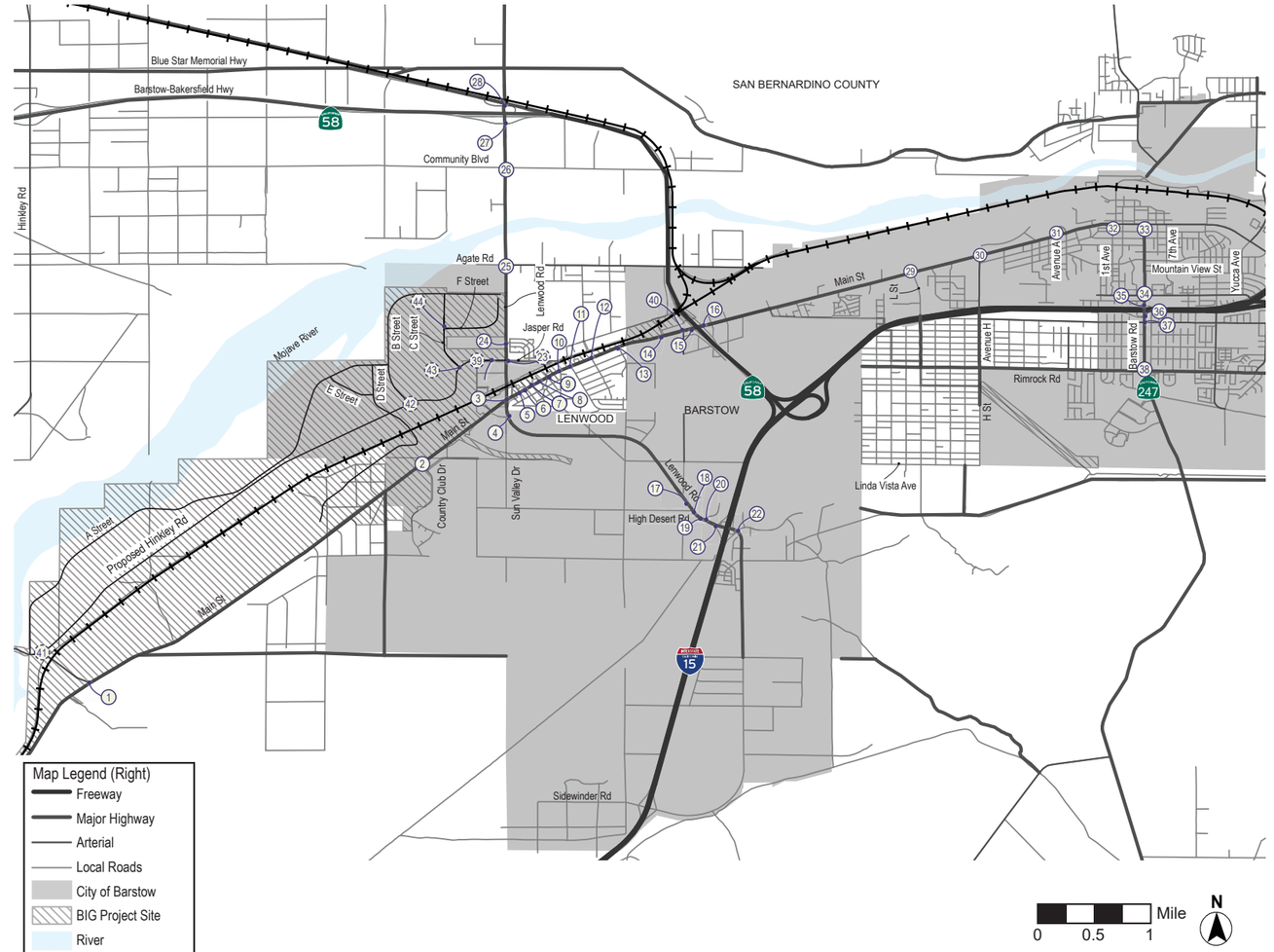




Source: Author Compilation, 2025

Figure 16: Existing Lane Configuration and Traffic Control
(Page 1/2)





Source: Author Compilation, 2025

Figure 16: Existing Lane Configuration and Traffic Control
(Page 2/2)

1

	11 / 27	3 / 7
		Hinkley Rd
	7 / 8	
	51 / 255	
	Main St	
8 / 7		
126 / 74		

2

		74 / 268
		2 / 21
		Main St
114 / 87		
0 / 3		
	Rail Yard Dwy	
		6 / 10

3

7 / 29	50 / 68	52 / 43
	Lenwood Rd	
	32 / 64	
	59 / 139	
	38 / 40	
	Main St	
12 / 7		
131 / 85		
25 / 34		
	19 / 31	
	32 / 43	
	38 / 63	

4

1 / 0		91 / 107
Sun Valley Dr		Lenwood Rd
3 / 0		
0 / 2		
		0 / 2
		84 / 171

5

0 / 2		2 / 2
		Holland St
	110 / 320	
	2 / 3	
	Main St	
2 / 2		
188 / 183		
0 / 2		
2 / 2		4 / 3

6

	2 / 2	
		110 / 322
		2 / 2
		Main St
2 / 2		
192 / 186		
1 / 0		
	Hannan St	
2 / 2		

7

0 / 4	2 / 2	
	Townsend St	
	1 / 0	
	107 / 318	
	2 / 2	
	Main St	
2 / 2		
189 / 185		
2 / 1		
	2 / 2	

8

	2 / 3	
	Woods Ave	
		0 / 1
		100 / 320
		2 / 2
		Main St
2 / 2		
203 / 185		
0 / 1		
		2 / 3

9

0 / 1	2 / 2	
		96 / 301
		3 / 15
		Main St
2 / 2		
187 / 174		
6 / 17		
Frank St		
10 / 20		10 / 13

10

		89 / 317
		15 / 14
		Main St
197 / 182		
4 / 9		
Paris Ave		
8 / 3		15 / 7

11

		89 / 301
		13 / 19
		Main St
184 / 165		
28 / 20		
Ash Rd		
13 / 21		11 / 19

12

		117 / 316
		10 / 53
		Main St
190 / 183		
3 / 8		
Birch Rd		
4 / 7		30 / 26

13

		144 / 381
		8 / 23
		Main St
200 / 207		
4 / 4		
Western Dr		
2 / 4		22 / 17

14

6 / 11	94 / 81	
	Pettit Rd	
	40 / 109	
	132 / 395	
	Main St	
5 / 12		
228 / 214		

15

14 / 20	1 / 4	16 / 21
	SR 58 EB Ramp	
	158 / 487	
	29 / 16	
	Main St	
198 / 212		
128 / 85		

16

	SR 58 WB Ramp	
		13 / 20
		143 / 334
		Main St
18 / 18		
195 / 212		
		59 / 169
		18 / 20

17

20 / 13	71 / 94	4 / 1
	Lenwood Rd	
	0 / 2	
	1 / 13	
	Love's Travel Stop Dwy	
10 / 17		
1 / 0		
23 / 18		
22 / 24	80 / 155	9 / 5

18

5 / 4	96 / 130	
	Lenwood Rd	
High Desert Rd		High Desert Rd
3 / 1		
76 / 63		
53 / 64		
120 / 166		

19

8 / 6	11 / 4	
	Truck Freightliner Service Point Dwy	
	16 / 17	
	139 / 244	
	43 / 79	
	Lenwood Rd	
1 / 6		
148 / 173		
10 / 13		
6 / 6		75 / 45

20

16 / 13	5 / 3	106 / 127
	Commerce Pkwy	
	74 / 89	
	186 / 274	
	41 / 50	
	Lenwood Rd	
13 / 12		
207 / 218		
10 / 13		
6 / 14	2 / 1	41 / 66

21

185 / 244	178 / 365	
	I-15 SB Off Ramps	
	157 / 215	
	Lenwood Rd	
194 / 253		

22

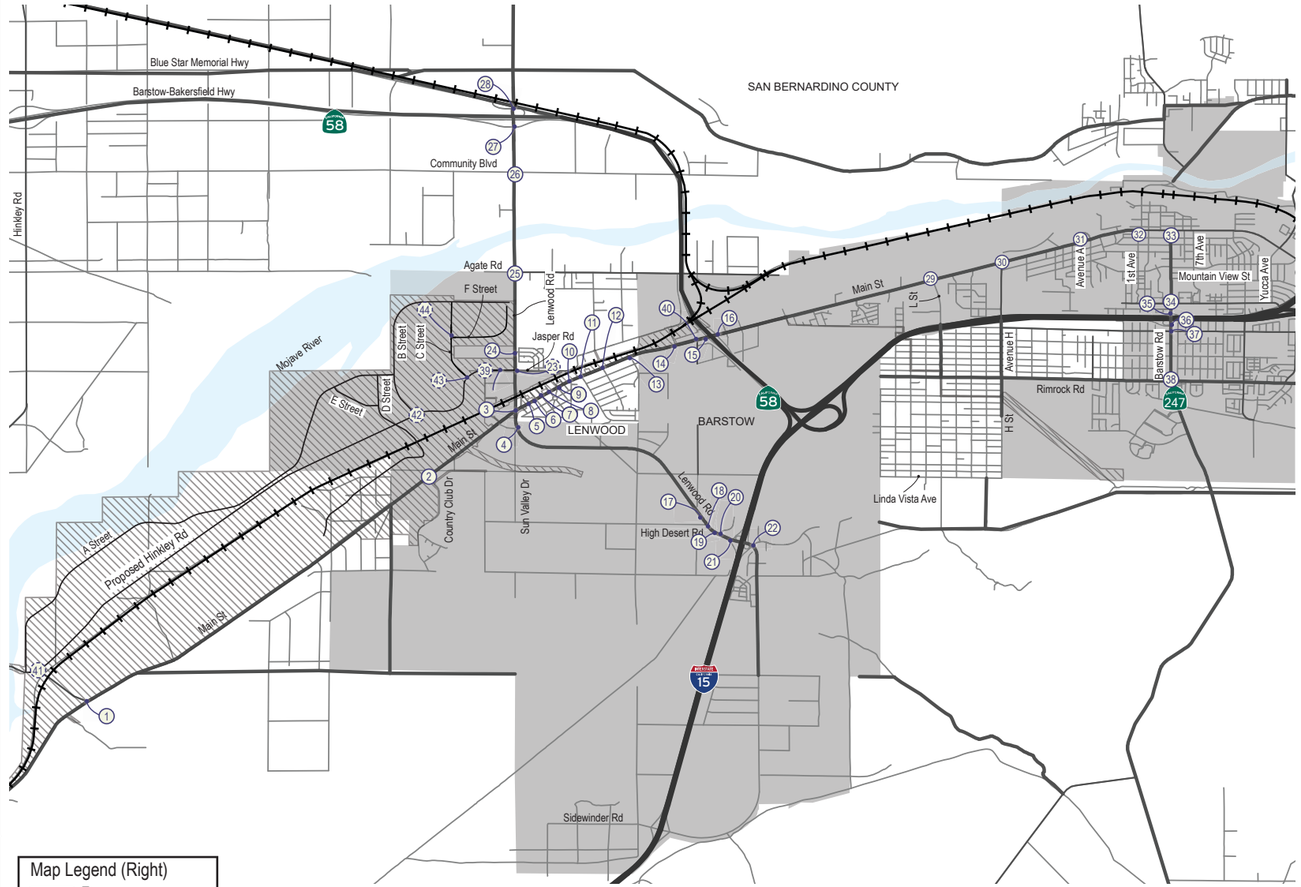
159 / 232	4 / 32	
	High Point Pkwy	
	25 / 82	
	284 / 496	
	Lenwood Rd	
57 / 134		
157 / 328		
	I-15 NB Off Ramps	
101 / 128	60 / 83	170 / 169

23

	52 / 57	2 / 3
		Lenwood Rd
	3 / 3	
	27 / 26	
	Jasper Rd	
Transload Warehouse Center Dwy		
0 / 1		
1 / 0		
3 / 5		
5 / 2	50 / 75	10 / 24

24

36 / 44	2 / 2	
	Lenwood Rd	
	3 / 2	
	18 / 16	
	Cam del Sol	
		39 / 52
		14 / 27



Map Legend (Right)
- Freeway
- Major Highway
- Arterial
- Local Roads
- City of Barstow
- BIG Project Site
- River
- (X) Study Intersection

Intersection Legend (Left)
X / Y = AM / PM PEAK HOUR TURNING VOLUMES

0 0.5 1 Mile

N

NOT TO SCALE

Figure 17: Study Area Intersection Peak Hour Turning Movement Volumes – Existing No BIG Baseline
(Page 1/2)

Source: Author Compilation, 2025

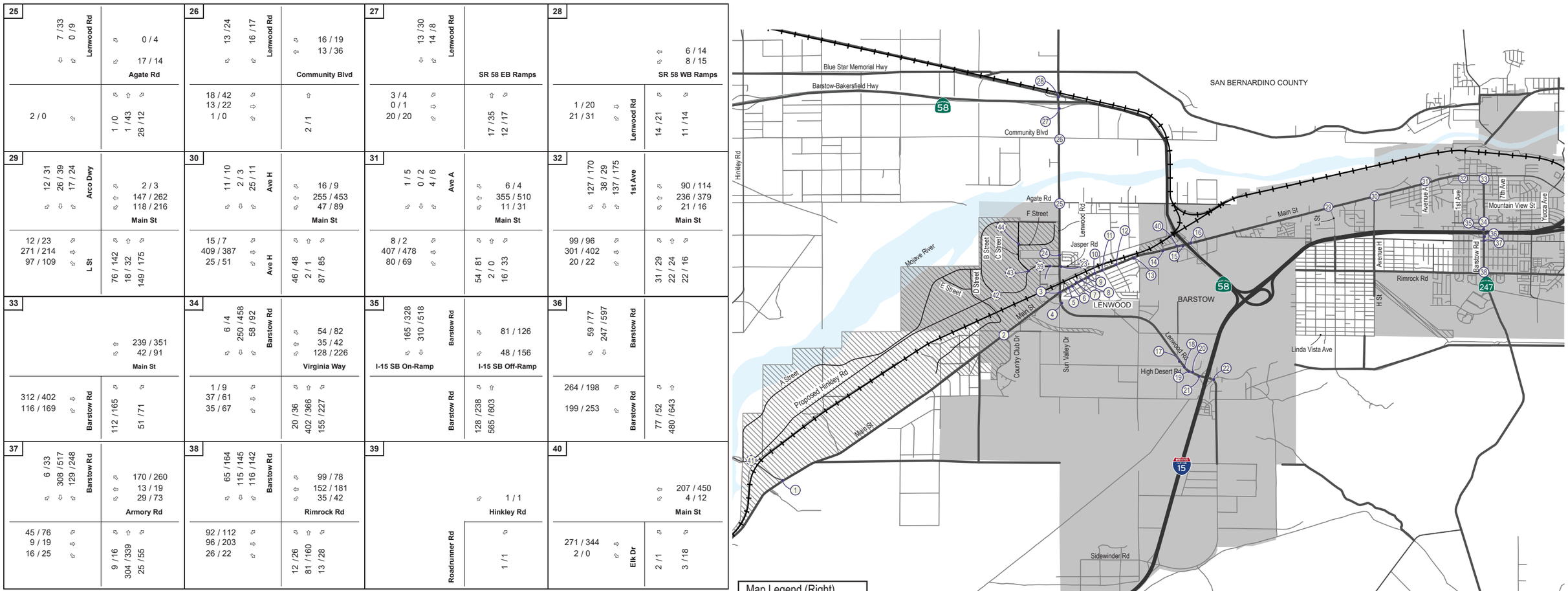


Figure 17: Study Area Intersection Peak Hour Turning Movement Volumes – Existing No BIG Baseline
(Page 2/2)

Source: Author Compilation, 2025

1 13 / 30 ⇦ 3 / 8 ⇨ **Hinkley Rd** ⇦ 7 / 9 ⇦ 53 / 269 **Main St** 9 / 7 132 / 78	**2** ⇦ 78 / 282 ⇦ 2 / 22 **Main St** 120 / 92 ⇦ ⇨ **Rail Yard Dwy** 0 / 3 ⇨ ⇦ 6 / 10	**3** 8 / 23 ⇦ 54 / 55 ⇩ 51 / 34 ⇨ **Lenwood Rd** ⇦ 34 / 82 ⇦ 62 / 177 ⇦ 40 / 51 **Main St** 13 / 7 126 / 90 27 / 36 ⇦ 21 / 38 ⇧ 35 / 52 ⇨ 37 / 77	**4** 1 / 0 ⇦ 108 / 126 ⇩ **Lenwood Rd** **Sun Valley Dr** 3 / 0 0 / 2 ⇨ ⇦ 0 / 2 ⇨ 99 / 202
5 0 / 2 ⇦ 2 / 2 ⇨ **Holland St** ⇦ 117 / 342 ⇦ 2 / 3 **Main St** 2 / 2 201 / 196 0 / 2 ⇦ 2 / 2 ⇨ 4 / 3	**6** 2 / 2 ⇦ ⇨ **Hannan St** ⇦ 117 / 344 ⇦ 2 / 2 **Main St** 2 / 2 205 / 199 1 / 0 ⇦ 2 / 2	**7** 0 / 4 ⇦ 2 / 2 ⇨ **Townsend St** ⇦ 1 / 0 ⇦ 114 / 340 ⇦ 2 / 2 **Main St** 2 / 2 202 / 198 2 / 1 ⇦ 2 / 2	**8** 2 / 3 ⇦ **Woods Ave** ⇦ 0 / 1 ⇦ 107 / 342 ⇦ 2 / 2 **Main St** 2 / 2 217 / 198 0 / 1 ⇦ 2 / 3
9 0 / 1 ⇩ 2 / 2 ⇨ ⇦ 103 / 322 ⇦ 3 / 16 **Main St** 2 / 2 200 / 186 6 / 18 ⇨ **Frank St** ⇦ 10 / 20 ⇦ 10 / 13	**10** ⇦ 96 / 339 ⇦ 16 / 15 **Main St** 211 / 195 4 / 10 ⇨ **Paris Ave** ⇦ 8 / 3 ⇦ 15 / 7	**11** ⇦ 96 / 322 ⇦ 14 / 20 **Main St** 197 / 176 30 / 21 ⇨ **Ash Rd** ⇦ 13 / 21 ⇦ 11 / 19	**12** ⇦ 125 / 338 ⇦ 11 / 57 **Main St** 203 / 196 3 / 9 ⇨ **Birch Rd** ⇦ 4 / 7 ⇦ 31 / 27
13 ⇦ 154 / 407 ⇦ 9 / 25 **Main St** 214 / 221 4 / 4 ⇨ **Western Dr** ⇦ 2 / 4 ⇨ 22 / 17	**14** 6 / 11 ⇦ 96 / 83 ⇨ **Pettit Rd** ⇦ 43 / 116 ⇦ 141 / 422 **Main St** 5 / 13 244 / 229 ⇨	**15** 14 / 20 ⇦ 1 / 4 ⇩ 16 / 21 ⇨ **SR 58 EB Ramp** ⇦ 169 / 521 ⇦ 31 / 17 **Main St** 212 / 227 137 / 91 ⇨	**16** **SR 58 WB Ramp** ⇨ ⇦ 14 / 23 ⇦ 163 / 383 **Main St** 21 / 21 223 / 243 ⇨ ⇦ 60 / 172 ⇨ 18 / 20
17 23 / 15 ⇦ 84 / 111 ⇩ 5 / 1 ⇨ **Lenwood Rd** ⇦ 0 / 2 ⇦ 1 / 13 **Love's Travel Stop Dwy** 10 / 17 1 / 0 23 / 18 ⇨ ⇦ 26 / 28 ⇧ 95 / 184 ⇨ 11 / 6	**18** 6 / 4 ⇦ 107 / 145 ⇩ **Lenwood Rd** **High Desert Rd** 3 / 1 ⇦ 78 / 64 ⇨ **High Desert Rd** ⇦ 59 / 71 ⇧ 134 / 185	**19** 8 / 6 ⇦ 11 / 4 ⇨ **Truck Freightliner Service Point Dwy** ⇦ 18 / 19 ⇦ 155 / 271 ⇦ 48 / 88 **Lenwood Rd** 1 / 7 164 / 192 ⇨ 11 / 15 ⇨ ⇦ 6 / 6 ⇨ 76 / 46	**20** 16 / 13 ⇦ 5 / 3 ⇩ 108 / 130 ⇨ **Commerce Pkwy** ⇦ 82 / 99 ⇦ 207 / 305 ⇦ 46 / 55 **Lenwood Rd** 15 / 13 231 / 243 ⇨ 11 / 15 ⇨ ⇦ 6 / 14 ⇧ 2 / 1 ⇨ 42 / 67
21 189 / 249 ⇦ 182 / 372 ⇨ **I-15 SB Off Ramps** ⇦ 174 / 240 **Lenwood Rd** 216 / 281 ⇨	**22** 162 / 237 ⇦ 4 / 33 ⇨ **I-15 NB Off Ramps** ⇦ 28 / 91 ⇦ 316 / 553 **Lenwood Rd** 63 / 150 174 / 366 ⇨ ⇦ 103 / 131 ⇧ 61 / 85 ⇨ 173 / 172	**23** 56 / 62 ⇩ 2 / 3 ⇨ **Lenwood Rd** ⇦ 3 / 3 ⇦ 28 / 27 **Jasper Rd** **Transload Warehouse Center Dwy** 0 / 1 1 / 0 3 / 5 ⇨ ⇦ 6 / 2 ⇧ 54 / 81 ⇨ 11 / 26	**24** 39 / 47 ⇩ 2 / 2 ⇨ **Lenwood Rd** ⇦ 3 / 2 ⇦ 18 / 16 **Cam del Sol** ⇧ 42 / 56 ⇨ 15 / 29

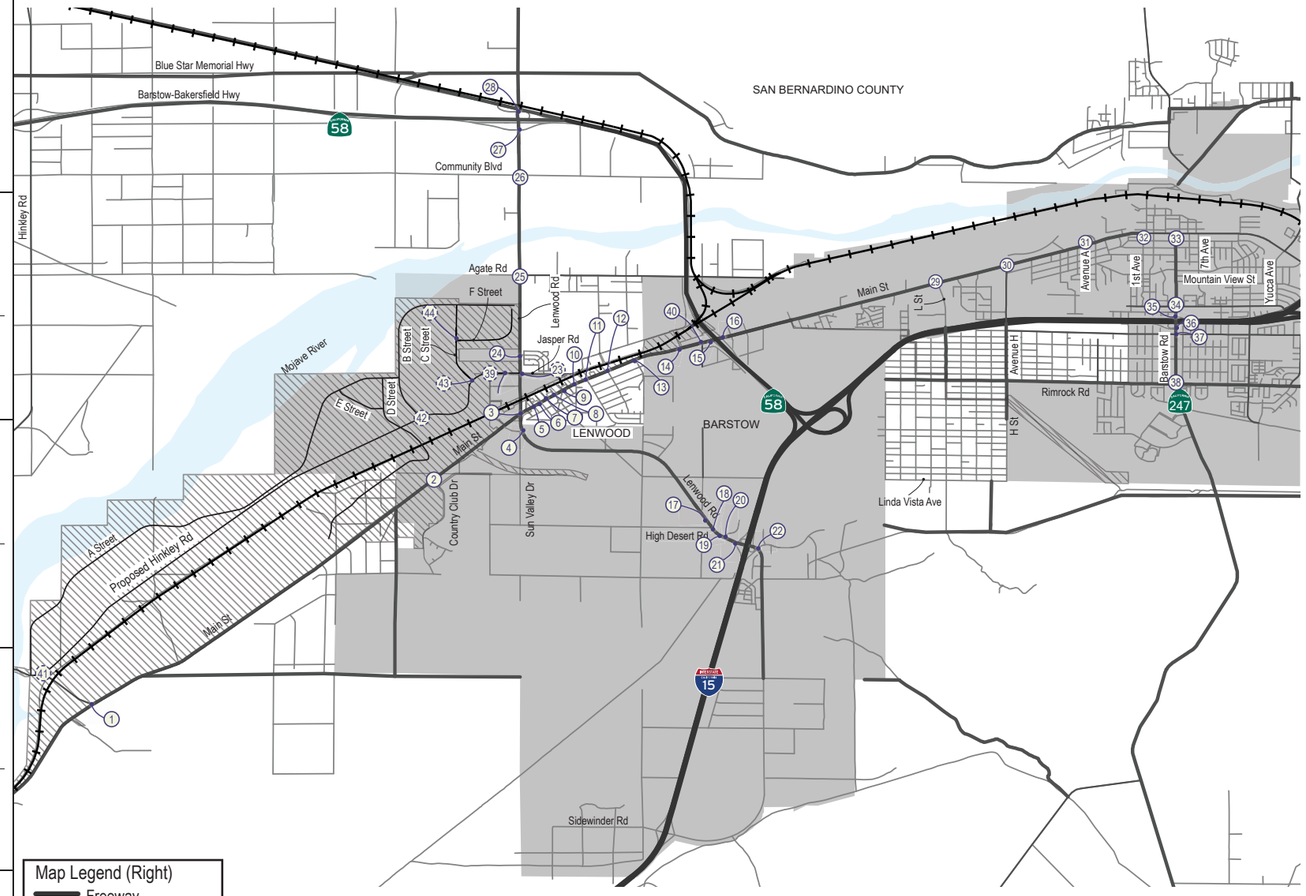


Figure 18: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Existing No BIG Baseline
(Page 1/2)

Source: Author Compilation, 2025

25 Lenwood Rd: 8 / 42 ⇦, 0 / 12 ⇩, 0 / 4 ⇨ Agate Rd: 17 / 14 ⇦ 2 / 0 ⇦ 1 / 0 ⇧, 1 / 54 ⇧, 34 / 16 ⇨	**26** Lenwood Rd: 17 / 30 ⇦, 20 / 22 ⇩ Community Blvd: 16 / 19 ⇦, 13 / 37 ⇧ 18 / 43 ⇦, 13 / 22 ⇩, 1 / 0 ⇩ 2 / 1 ⇧	**27** Lenwood Rd: 17 / 38 ⇩, 18 / 11 ⇩ SR 58 EB Ramps 3 / 4 ⇩, 0 / 1 ⇩, 20 / 20 ⇩ 22 / 44 ⇧, 16 / 22 ⇧	**28** SR 58 WB Ramps: 6 / 14 ⇦, 8 / 15 ⇦ 1 / 20 ⇩, 21 / 32 ⇩ Lenwood Rd 18 / 26 ⇧, 14 / 18 ⇧
29 Arco Dwy: 12 / 32 ⇦, 27 / 40 ⇩, 17 / 24 ⇩ Main St: 2 / 3 ⇦, 159 / 284 ⇧, 128 / 234 ⇨ 13 / 25 ⇦, 295 / 232 ⇩, 105 / 118 ⇩ L St 78 / 145 ⇧, 18 / 33 ⇧, 152 / 178 ⇨	**30** Ave H: 11 / 10 ⇦, 2 / 3 ⇩, 25 / 11 ⇩ Main St: 17 / 10 ⇦, 277 / 492 ⇧, 51 / 97 ⇨ 16 / 8 ⇦, 444 / 420 ⇩, 27 / 55 ⇩ 47 / 49 ⇧, 2 / 1 ⇧, 89 / 87 ⇨	**31** Ave A: 1 / 5 ⇦, 0 / 2 ⇩, 4 / 6 ⇩ Main St: 7 / 5 ⇦, 386 / 554 ⇧, 12 / 34 ⇨ 9 / 2 ⇦, 442 / 519 ⇩, 87 / 75 ⇩ 55 / 83 ⇧, 2 / 0 ⇧, 16 / 34 ⇨	**32** 1st Ave: 130 / 173 ⇦, 39 / 30 ⇩, 140 / 178 ⇩ Main St: 96 / 122 ⇦, 253 / 406 ⇧, 22 / 17 ⇨ 106 / 103 ⇦, 322 / 430 ⇩, 21 / 24 ⇩ 32 / 30 ⇧, 22 / 24 ⇧, 22 / 16 ⇨
33 Main St: 256 / 376 ⇦, 45 / 97 ⇨ 334 / 430 ⇦, 124 / 181 ⇩ Barstow Rd 118 / 174 ⇧, 54 / 75 ⇨	**34** Barstow Rd: 7 / 4 ⇦, 264 / 483 ⇩, 61 / 97 ⇩ Virginia Way: 55 / 84 ⇦, 36 / 43 ⇧, 131 / 231 ⇨ 1 / 9 ⇦, 38 / 62 ⇩, 36 / 68 ⇩ 21 / 38 ⇧, 424 / 386 ⇧, 163 / 239 ⇨	**35** Barstow Rd I-15 SB On-Ramp: 174 / 346 ⇩, 327 / 546 ⇩ I-15 SB Off-Ramp: 83 / 129 ⇦, 49 / 159 ⇧ 135 / 251 ⇧, 596 / 636 ⇧	**36** Barstow Rd I-15 NB Ramps: 65 / 84 ⇦, 271 / 654 ⇩ 269 / 202 ⇦ 203 / 258 ⇩ 84 / 57 ⇧, 526 / 704 ⇧
37 Barstow Rd: 7 / 36 ⇦, 337 / 566 ⇩, 141 / 272 ⇩ Armory Rd: 173 / 265 ⇦, 13 / 19 ⇧, 30 / 74 ⇨ 46 / 78 ⇦, 9 / 19 ⇩, 16 / 25 ⇩ 10 / 18 ⇧, 333 / 371 ⇧, 27 / 60 ⇨	**38** Barstow Rd: 71 / 180 ⇦, 126 / 159 ⇩, 127 / 156 ⇩ Rimrock Rd: 101 / 80 ⇦, 155 / 185 ⇧, 36 / 43 ⇨ 94 / 114 ⇦, 98 / 207 ⇩, 27 / 22 ⇩ 13 / 28 ⇧, 89 / 175 ⇧, 14 / 31 ⇨	**39** Hinkley Rd: 1 / 1 ⇦ Roadrunner Rd 1 / 1 ⇧	**40** Main St: 221 / 0 ⇦, 4 / 0 ⇨ 290 / 0 ⇦, 2 / 0 ⇩ Elk Dr 2 / 0 ⇧, 3 / 0 ⇧

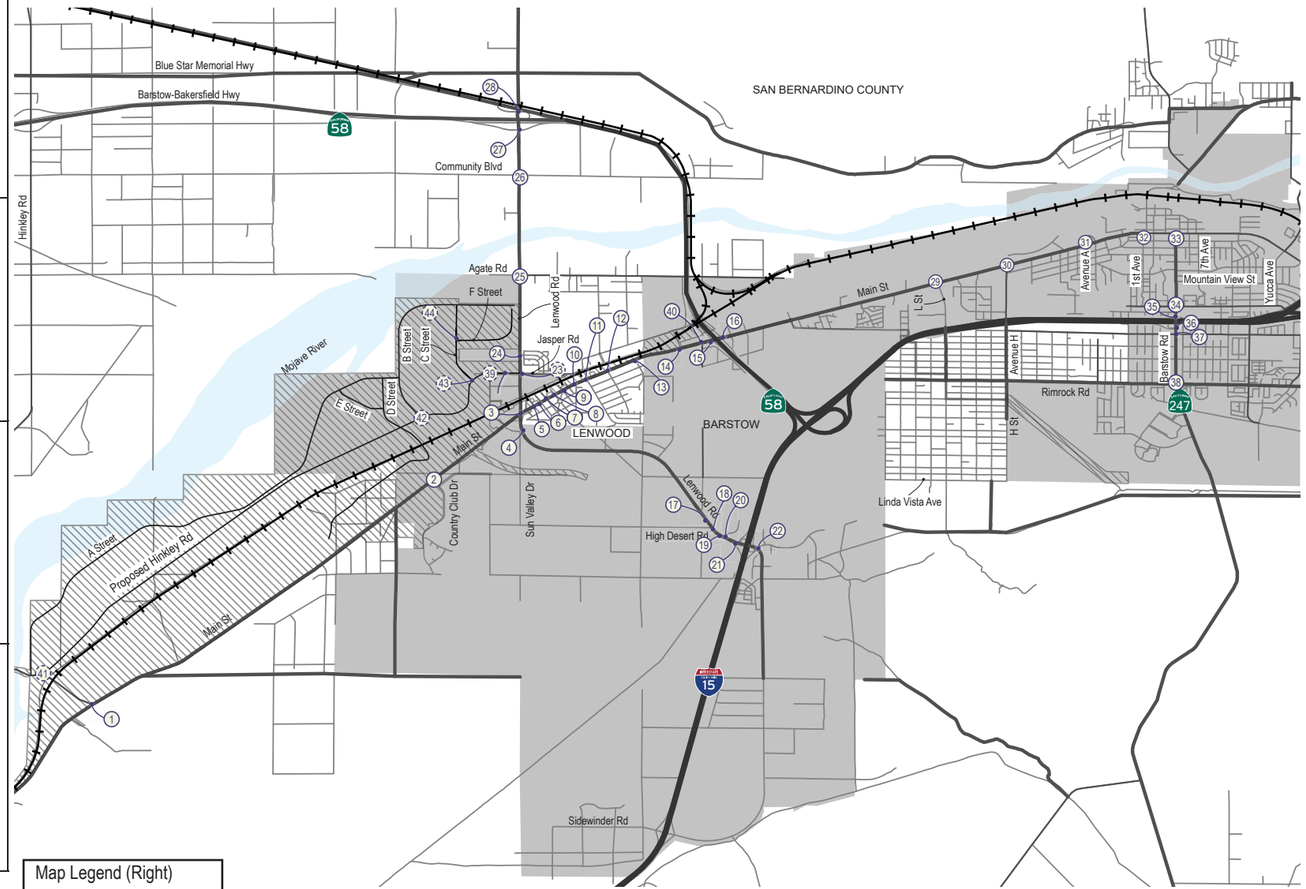


Figure 18: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Existing No BIG Baseline
(Page 2/2)

Source: Author Compilation, 2025

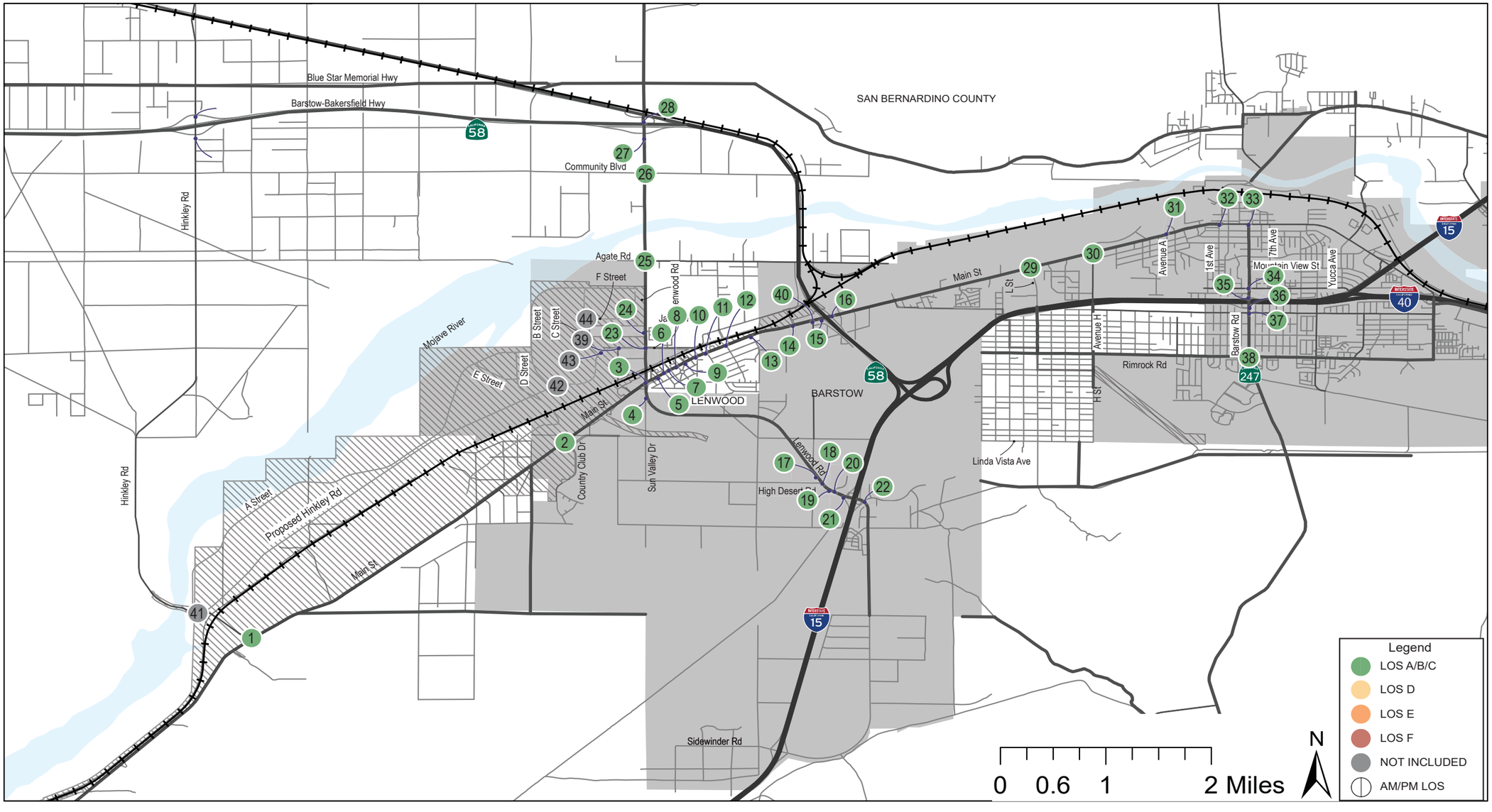


Figure 19: Study Area Intersection Level of Service – Existing No BIG Baseline

Source: Author Compilation, 2025

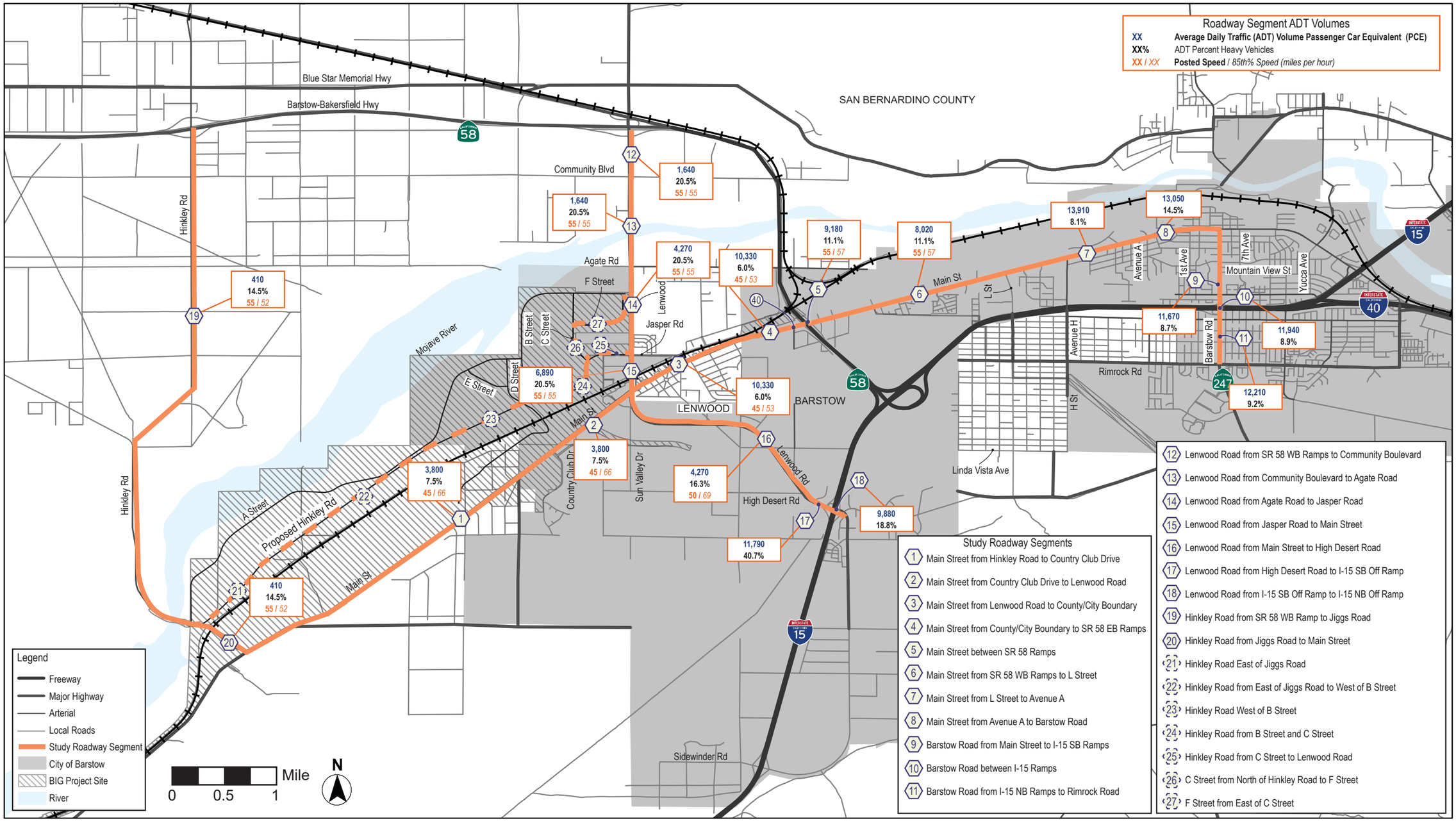


Figure 20: Study Area Roadway Segment Volumes – Existing No BIG Baseline

Source: Author Compilation, 2025

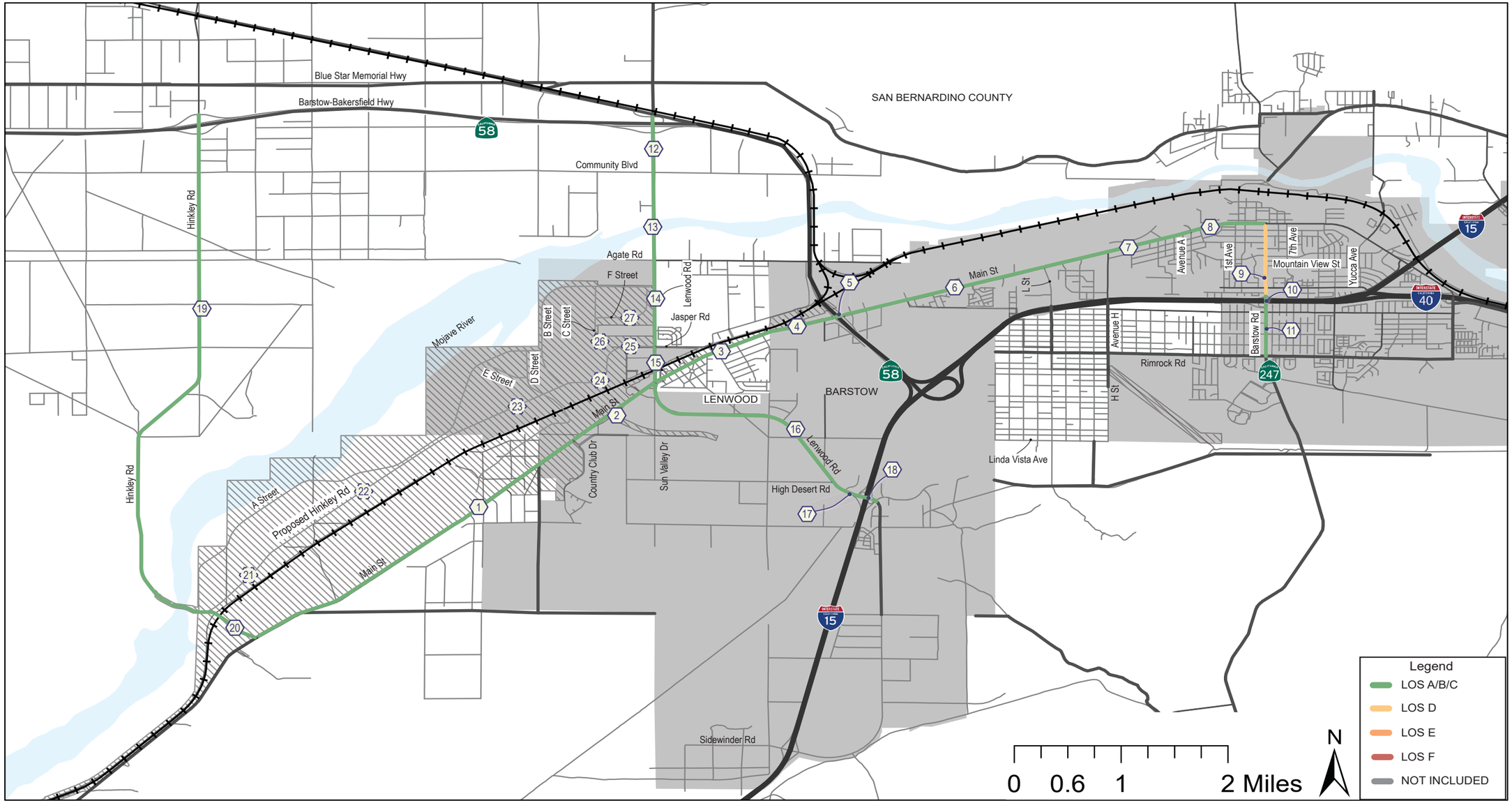


Figure 21: Study Area Roadway Segment Level of Service – Existing No BIG Baseline

Source: Author Compilation, 2025

Table 20: Study Area Intersection Operations - Existing No BIG Baseline							
Intersection		Traffic Control	Peak Hour	Delay (a)	LOS (b)	LOS Threshold (c)	In CMP? (d)
1	Main Street & Hinkley Road	One-Way Stop	AM	8.9	A	C	NO
			PM	11.0	B	C	NO
2	Main Street & Country Club Drive	One-Way Stop	AM	9.1	A	C	NO
			PM	8.9	A	C	NO
3	Main Street & Lenwood Road	Signal	AM	16.7	B	C	NO
			PM	16.1	B	C	NO
4	Lenwood Road & Sun Valley Drive	One-Way Stop	AM	10.1	B	C	NO
			PM	9.0	A	C	NO
5	Main Street & Holland Street	Two-Way Stop	AM	10.3	B	C	NO
			PM	11.0	B	C	NO
6	Main Street & Hannan Street	Two-Way Stop	AM	10.9	B	C	NO
			PM	13.5	B	C	NO
7	Main Street & Townsend Street	Two-Way Stop	AM	10.8	B	C	NO
			PM	12.3	B	C	NO
8	Main Street & Woods Avenue	Two-Way Stop	AM	14.5	B	C	NO
			PM	17.7	C	C	NO
9	Main Street & Frank Street	Two-Way Stop	AM	10.3	B	C	NO
			PM	14.0	B	C	NO
10	Main Street & Paris Avenue	One-Way Stop	AM	9.6	A	C	NO
			PM	9.8	A	C	NO
11	Main Street & Ash Road	One-Way Stop	AM	13.7	B	C	NO
			PM	14.3	B	C	NO
12	Main Street & Birch Road	One-Way Stop	AM	9.4	A	C	NO
			PM	10.6	B	C	NO
13	Main Street & Western Drive	One-Way Stop	AM	12.4	B	C	NO
			PM	10.1	B	C	NO
14	Main Street & Pettit Road	One-Way Stop	AM	12.9	B	C	NO
			PM	16.5	C	C	NO

Table 20: Study Area Intersection Operations - Existing No BIG Baseline							
Intersection		Traffic Control	Peak Hour	Delay (a)	LOS (b)	LOS Threshold (c)	In CMP? (d)
15	Main Street & SR 58 Eastbound Ramps	Signal	AM	7.8	A	D	NO
			PM	4.3	A	D	NO
16	Main Street & SR 58 Westbound Ramps	Signal	AM	11.2	B	D	NO
			PM	13.3	B	D	NO
17	Lenwood Road & Love's Travel Stop Driveway	Two-Way Stop	AM	10.6	B	C	NO
			PM	11.3	B	C	NO
18	Lenwood Road & High Desert Road	Two-Way Stop	AM	11.3	B	C	NO
			PM	12.7	B	C	NO
19	Lenwood Rd & Chevron Driveway	Two-Way Stop	AM	11.9	B	C	NO
			PM	12.5	B	C	NO
20	Lenwood Road & Commerce Parkway	Signal	AM	27.1	C	C	NO
			PM	27.4	C	C	NO
21	Lenwood Road & I-15 Southbound Ramp	Signal	AM	13.8	B	D	NO
			PM	15.6	B	D	NO
22	Lenwood Road & I-15 Northbound Ramp	Signal	AM	12.8	B	D	NO
			PM	14.1	B	D	NO
23	Lenwood Road & Jasper Road/Lenwood Road Driveway	Two-Way Stop	AM	9.9	A	C	NO
			PM	11.3	B	C	NO
24	Lenwood Road & Camino Del Sol	One-Way Stop	AM	9.1	A	C	NO
			PM	9.6	A	C	NO
25	Lenwood Road & Agate Road	Two-Way Stop	AM	9.2	A	C	NO
			PM	9.6	A	C	NO
26	Lenwood Road & Community Blvd	Two-Way Stop	AM	9.4	A	C	NO
			PM	9.9	A	C	NO
27	Lenwood Road & SR 58 Eastbound Ramps	All-Way Stop	AM	8.0	A	D	NO
			PM	8.0	A	D	NO
28	Lenwood Road & SR 58 Westbound Ramps	All-Way Stop	AM	7.3	A	D	NO
			PM	7.5	A	D	NO

Table 20: Study Area Intersection Operations - Existing No BIG Baseline							
Intersection		Traffic Control	Peak Hour	Delay (a)	LOS (b)	LOS Threshold (c)	In CMP? (d)
29	Main Street & L Street	Signal	AM	13.9	B	D	YES
			PM	15.1	B	D	YES
30	Main Street & Avenue H	Signal	AM	6.9	A	D	YES
			PM	6.9	A	D	YES
31	Main Street & Avenue A	Signal	AM	4.7	A	D	YES
			PM	5.9	A	D	YES
32	Main Street & 1st Avenue	Signal	AM	18.3	B	D	YES
			PM	20.3	C	D	YES
33	Main Street & Barstow Road	Signal	AM	8.2	A	D	YES
			PM	10.0	A	D	YES
34	Barstow Road & Virginia Way	Signal	AM	13.2	B	C	YES
			PM	18.7	B	C	YES
35	Barstow Road & I-15 Southbound Ramps	Signal	AM	17.0	B	D	YES
			PM	23.0	C	D	YES
36	Barstow Road & I-15 Northbound Ramps	Signal	AM	15.5	B	D	YES
			PM	18.0	B	D	YES
37	Barstow Road & Armory Road	Signal	AM	7.0	A	C	YES
			PM	18.8	B	C	YES
38	Barstow Road & Rimrock Road	Signal	AM	6.5	A	C	YES
			PM	7.4	A	C	YES
39	Hinkley Road & Roadrunner Road	DNE					
40	Main Street & Elks Lane	One-Way Stop	AM	10.1	B	C	NO
			PM	9.9	A	C	NO
41	Hinkley Road & Jiggs Road/A Street	DNE					
42	Hinkley Road & B Street	DNE					

Table 20: Study Area Intersection Operations - Existing No BIG Baseline							
Intersection		**Traffic Control**	**Peak Hour**	**Delay (a)**	**LOS (b)**	**LOS Threshold (c)**	**In CMP? (d)**
43	Hinkley Road & C Street	DNE					
44	Hinkley Road & Roadrunner Road	DNE					

Note:
Bold values indicate intersections operating below the LOS Threshold
ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.
DNE = Does Not Exist under this scenario and proposed as BIG Transportation Improvement.
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 7th Edition and performed using Synchro 12.
(c) The LOS Threshold represents the acceptable LOS for the intersection. All City (non-downtown) and County intersections within the study area are considered to operate acceptably at LOS C or better, consistent with City LOS criteria and the County TIS Guidelines. All downtown City intersections are considered to operate acceptably at LOS D or better. All Caltrans intersections located at freeway interchanges are considered to operate acceptably at LOS D or better.
(d) Notes if the intersection is part of the San Bernardino Congestion Management Program (CMP) network, per the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority, 2016). The CMP states that for the CMP roadway system, intersections are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP intersections located within the Downtown area of City and LOS C is considered acceptable for CMP intersections outside the Downtown area.

Sources: *Author Compilation.* (2025)

Table 21: Study Area Roadway Segment Operations – Existing No BIG Baseline								
Roadway	**Segment**	**Acceptable LOS E Capacity[3]**	**Existing No BIG Baseline**				**Jurisdiction**	**In CMP[1]?**
			ADT (PCE)	**V/C**	**LOS**	**Acceptable LOS Threshold**		
Main Street	1. Hinkley Road to Country Club Drive	14,300	3,800	0.266	C or Better	D	City/County[2]	No
	2. Country Club Drive to Lenwood Road	14,300	3,800	0.266	C or Better	D	City	No
	3. Lenwood Road to County/City Boundary	16,400	10,330	0.630	C or Better	C	County	No
	4. County/City Boundary to SR 58 Eastbound Ramps	30,200	10,330	0.342	C or Better	D	City	No
	5. SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	30,200	9,180	0.304	C or Better	D	Caltrans	No
	6. SR 58 Westbound Ramps to L Street	30,200	8,020	0.266	C or Better	D	City	No
	7. L Street to Avenue A	30,200	13,910	0.461	C or Better	D	City	Yes
	8. Avenue A to Barstow Road	30,200	13,050	0.432	C or Better	D	City	Yes
Barstow Road	9. Main Street to I-15 Southbound Ramps	22,300	11,670	0.523	D	D	City	Yes
	10. I-15 Southbound Ramps to I-15 Northbound Ramps	30,200	11,940	0.395	C or Better	D	Caltrans	Yes
	11. I-15 Northbound ramps to Rimrock Road	30,200	12,210	0.404	C or Better	D	City	Yes
Lenwood Road	12. SR 58 Westbound Ramps to Community Boulevard	7,000	1,640	0.234	C or Better	C	County	No
	13. Community Boulevard to Agate Road	7,000	1,640	0.234	C or Better	C	County	No
	14. Agate Road to Jasper Road	7,000	4,270	0.610	C or Better	C	County	No
	15. Jasper Road to Main Street	30,200	6,890	0.228	C or Better	D	City	No
	16. Main Street to High Desert Road	14,300	4,270	0.299	C or Better	D	City	No
	17. High Desert Road to I-15 Southbound Off Ramp	30,200	11,790	0.390	C or Better	D	City	No
	18. I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	30,200	9,880	0.327	C or Better	D	Caltrans	No
Hinkley Road	19. SR 58 Westbound Ramp to Jiggs Road	7,000	410	0.059	C or Better	C	County	No
	20. Jiggs Road to Main Street	7,000	410	0.059	C or Better	D	City	No
	21. East of Jiggs Road	30,200	DNE	DNE	DNE	D	City	No
	22. East of Jiggs Road to West of B Street	30,200	DNE	DNE	DNE	D	City	No
	23. West of B Street	30,200	DNE	DNE	DNE	D	City	No
	24. Between B Street and C Street	30,200	DNE	DNE	DNE	D	City	No
	25. C Street to Lenwood Road	30,200	DNE	DNE	DNE	D	City	No

Table 21: Study Area Roadway Segment Operations – Existing No BIG Baseline								
Roadway	**Segment**	**Acceptable LOS E Capacity[3]**	**Existing No BIG Baseline**				**Jurisdiction**	**In CMP[1]?**
			ADT (PCE)	**V/C**	**LOS**	**Acceptable LOS Threshold**		
C Street	26. North of Hinkley Road to F Street	30,200	DNE	DNE	DNE	D	City	No
F Street	27. East of C Street	30,200	DNE	DNE	DNE	D	City	No

[1]Notes if the roadway segment is part of the San Bernardino Congestion Management Program (CMP) network per the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority, 2016). The CMP states that for the CMP roadway system, roadway segments are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP roadways segments located within the City, consistent with non-CMP roadway segments located within the City.
[2]Roadway segment is currently under County jurisdiction but would be annexed into the City as part of the proposed General Plan, thus, is analyzed according to City standards.
[3]The Acceptable LOS Capacity represents the acceptable LOS for the roadway segment. All County roadway segments within the study area are considered to operate acceptably at LOS C or better, consistent with the County TIS Guidelines. All City roadway segments within the study area are considered to operate acceptably at LOS D or better, consistent with the recommendations in the City of Barstow proposed General Plan. All Caltrans roadway segments within the study area are considered to operate acceptably at LOS D or better.
Bolded values indicate segment with LOS exceeding the acceptable LOS threshold.
ADT = average daily traffic
I = Interstate
LOS = level of service
SR = State Route
V/C = volume-to-capacity ratio
DNE = Does Not Exist under this scenario and proposed as BIG Transportation Improvement.

Sources: *Author Compilation.* (2025)

Opening Year 2028 No BIG Baseline

LOS analyses for the study area intersections, freeway off-ramps, and roadway segments were conducted for Opening Year 2028 No BIG Baseline conditions to establish a baseline to evaluate BIG transportation deficiencies, considering future traffic growth. Opening Year 2028 No BIG Baseline conditions were derived using the methodology detailed in **Section 3.4 Level of Service Assessment Methodology**.

Intersection Operations

Forecast peak hour turning movements at study area intersections are illustrated in **Figure 22: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Opening Year 2028 No BIG Baseline**. **Table 22: Study Area Intersection Operations - Opening Year 2028 No BIG Baseline** and **Figure 23: Study Area Intersection Level of Service – Opening Year 2028 No BIG Baseline** summarize the study area intersection LOS analysis results and indicate all intersections are forecast to operate at acceptable LOS according to agency performance criteria under Opening Year 2028 No BIG Baseline conditions. Detailed Synchro reports for intersection analysis are in **Appendix G: Synchro Analysis Worksheets.**

Roadway Segment Operations

Forecast roadway segment ADT volumes are illustrated in **Figure 24: Study Area Roadway Segment Volumes – Opening Year 2028 No BIG Baseline**. **Table 23: Study Area Roadway Segment Operations - Opening Year 2028 No BIG Baseline** and **Figure 25: Study Area Roadway Segment Level of Service – Opening Year 2028 No BIG Baseline** summarize the study area roadway segment LOS analysis results and indicate all roadway segments are forecast to operate at acceptable LOS according to agency performance criteria under Opening Year 2028 No BIG Baseline conditions.

1	**2**	**3**	**4**
98 / 450 Main St 222 / 135	131 / 446 Main St 2 / 22 183 / 136 Country Club Dr 0 / 13 6 / 10	16 / 40 141 / 202 149 / 195 Lenwood Rd 213 / 216 122 / 269 40 / 60 Main St 31 / 18 148 / 120 30 / 40 30 / 40 200 / 175 40 / 80	1 / 0 189 / 268 Lenwood Rd Sun Valley Dr 3 / 0 0 / 2 0 / 2 259 / 317
5	**6**	**7**	**8**
0 / 3 2 / 3 Holland St 290 / 468 2 / 3 Main St 3 / 2 290 / 351 0 / 3 2 / 2 5 / 4	2 / 2 Hannan St 290 / 470 2 / 3 Main St 3 / 3 294 / 354 2 / 0 Hannan St 2 / 2	0 / 5 2 / 2 Townsend St 2 / 0 287 / 466 3 / 2 Main St 2 / 3 291 / 353 3 / 2 2 / 2	2 / 3 Woods Ave 0 / 2 280 / 468 3 / 2 Main St 3 / 2 306 / 353 0 / 2 2 / 3
9	**10**	**11**	**12**
0 / 2 2 / 2 276 / 448 5 / 20 Main St 3 / 3 289 / 341 6 / 18 Frank St 12 / 23 12 / 15	269 / 465 16 / 16 Main St 300 / 350 9 / 13 Paris Ave 10 / 3 16 / 8	269 / 448 17 / 24 Main St 286 / 331 32 / 23 Ash Rd 14 / 25 14 / 22	298 / 464 11 / 57 Main St 292 / 351 8 / 20 Birch Rd 7 / 14 33 / 27
13	**14**	**15**	**16**
327 / 533 9 / 25 Main St 303 / 376 8 / 11 Western Dr 3 / 7 25 / 18	21 / 31 96 / 83 Pettit Rd 43 / 116 314 / 548 Main St 19 / 38 333 / 384	14 / 20 3 / 10 23 / 31 SR 58 EB Ramp 342 / 647 56 / 44 Main St 244 / 281 195 / 191	SR 58 WB Ramp 28 / 42 223 / 427 Main St 21 / 21 255 / 297 172 / 254 50 / 76
17	**18**	**19**	**20**
23 / 23 165 / 253 5 / 1 Lenwood Rd 0 / 3 1 / 13 Love's Travel Stop Dwy 12 / 24 14 / 0 23 / 18 26 / 28 255 / 299 11 / 8	6 / 4 188 / 287 Lenwood Rd High Desert Rd 3 / 1 173 / 183 77 / 90 294 / 300	9 / 7 12 / 5 Truck Freightliner Service Point Dwy 19 / 20 321 / 397 53 / 98 Lenwood Rd 3 / 10 248 / 339 15 / 19 9 / 8 85 / 52	20 / 18 9 / 6 119 / 143 Commerce Pkwy 90 / 108 373 / 429 48 / 58 Lenwood Rd 21 / 19 316 / 389 16 / 20 8 / 18 3 / 3 47 / 74
21	**22**	**23**	**24**
234 / 314 182 / 372 I-15 SB Off Ramps 334 / 355 Lenwood Rd 219 / 285	180 / 263 6 / 41 High Point Pkwy 33 / 108 316 / 553 Lenwood Rd 67 / 162 174 / 366 I-15 NB Off Ramps 269 / 252 79 / 112 188 / 191	232 / 368 16 / 31 Lenwood Rd 52 / 54 28 / 27 Jasper Rd Transload Warehouse Center Dwy 0 / 11 2 / 0 3 / 5 6 / 2 397 / 330 11 / 26	215 / 353 5 / 6 Lenwood Rd 4 / 4 20 / 17 Cam del Sol 385 / 305 15 / 29

Source: Author Compilation, 2025

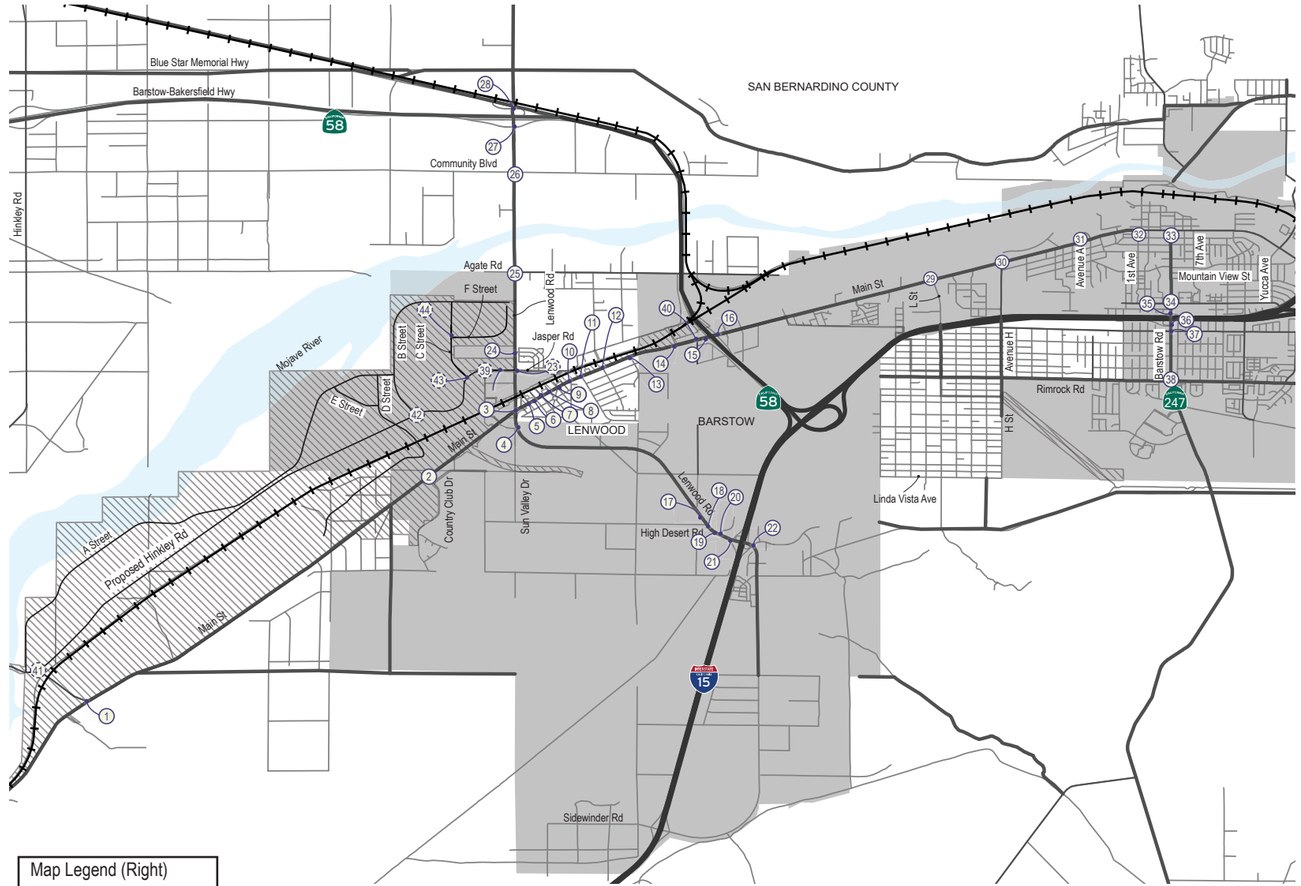
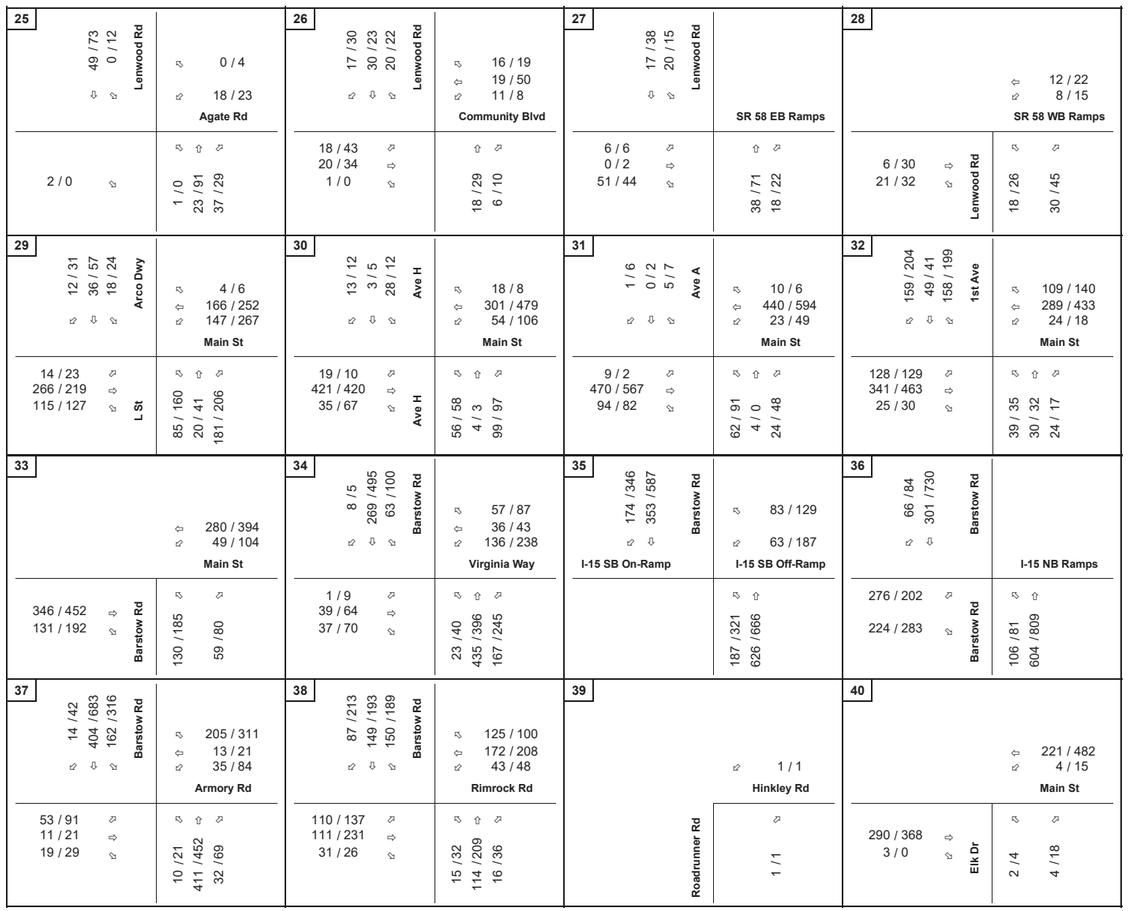


Figure 22: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Opening Year 2028 No BIG Baseline
(Page 1/2)



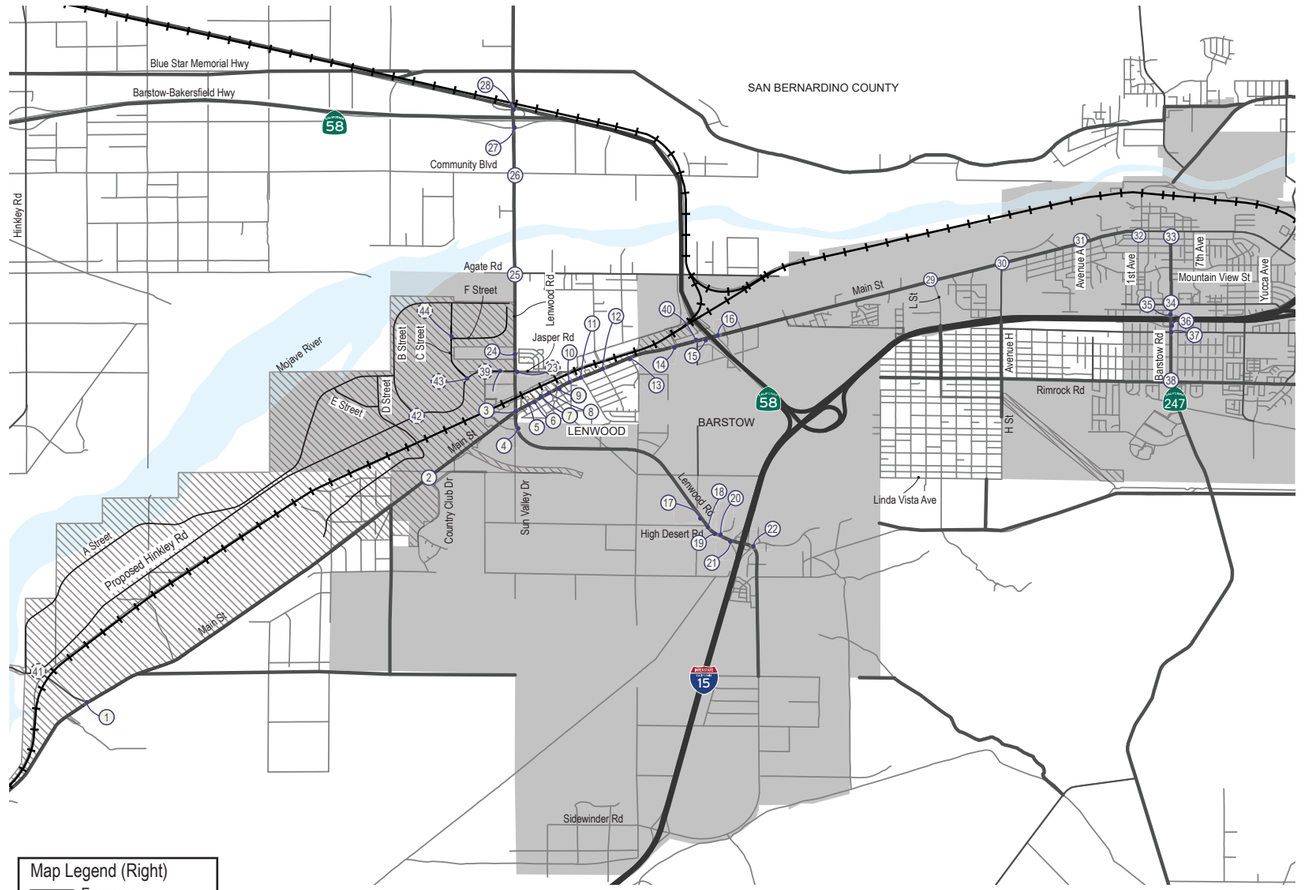


Figure 22: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Opening Year 2028 No BIG Baseline
(Page 2/2)

Source: Author Compilation, 2025

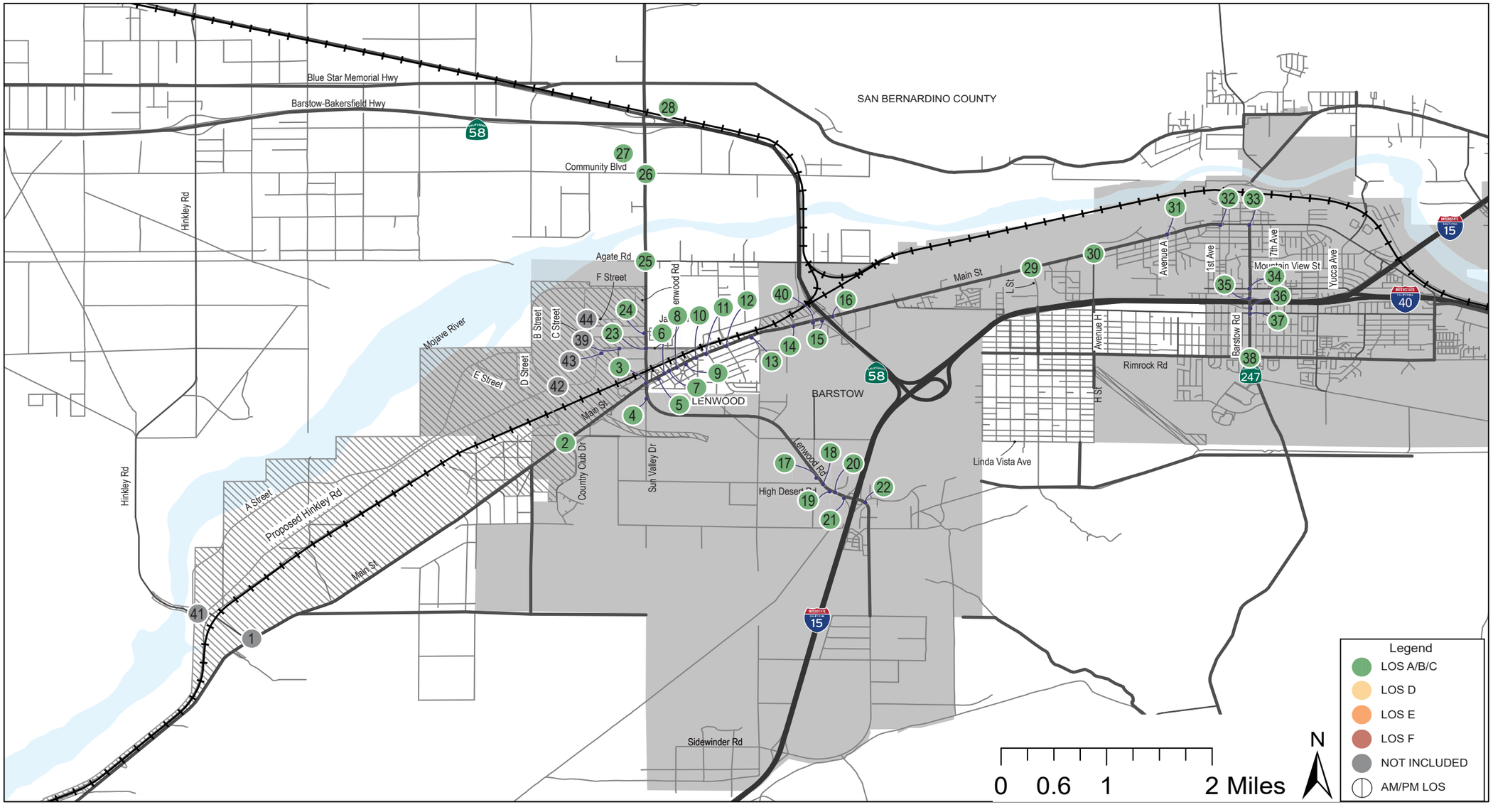


Figure 23: Study Area Intersection Level of Service – Opening Year 2028 No BIG Baseline

Source: Author Compilation, 2025

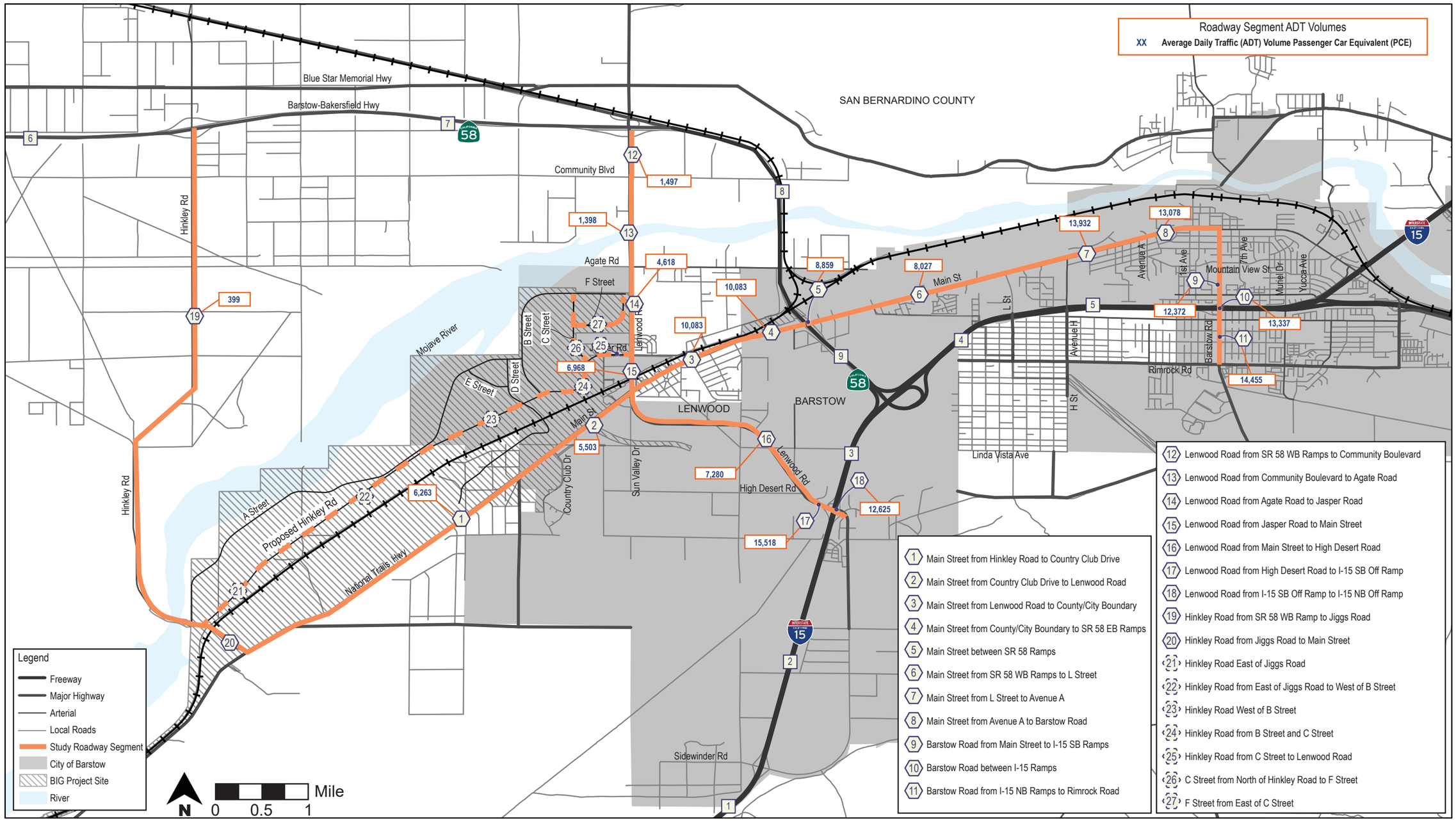


Figure 24: Study Area Roadway Segment Volumes – Opening Year 2028 No BIG Baseline

Source: Author Compilation, 2025

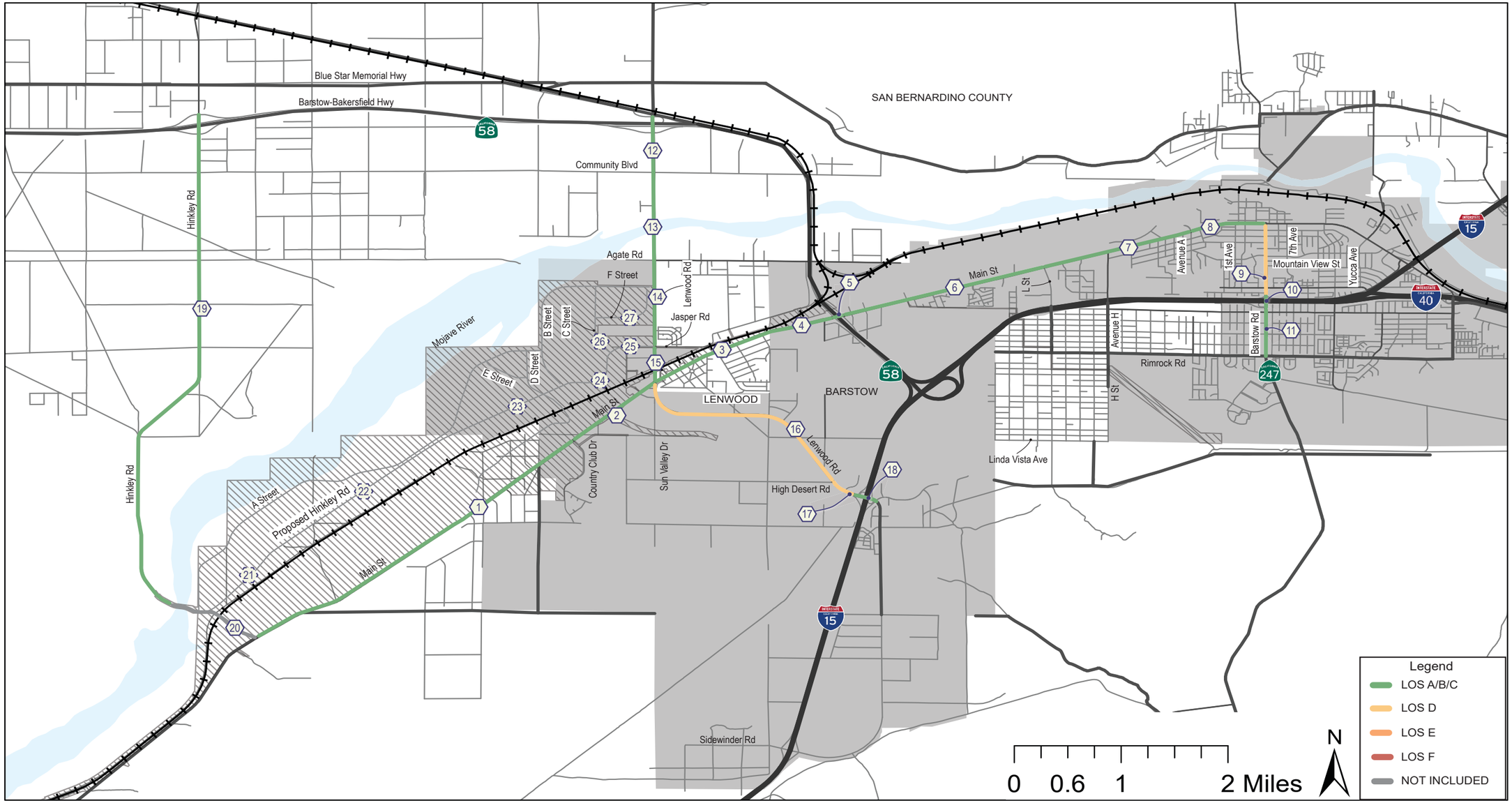


Figure 25: Study Area Roadway Segment Level of Service – Opening Year 2028 No BIG Baseline

Source: Author Compilation, 2025

Table 22: Study Area Intersection Operations - Opening Year 2028 No BIG Baseline							
Intersection		**Traffic Control**	**Peak Hour**	**Delay (a)**	**LOS (b)**	**LOS Threshold (c)**	**In CMP? (d)**
1	Main Street & Hinkley Road	One-Way Stop	(e)			C	NO
						C	NO
2	Main Street & Country Club Drive	One-Way Stop	AM	9.2	A	C	NO
			PM	9.0	A	C	NO
3	Main Street & Lenwood Road	Signal	AM	18.0	B	C	NO
			PM	18.8	B	C	NO
4	Lenwood Road & Sun Valley Drive	One-Way Stop	AM	11.5	B	C	NO
			PM	9.7	A	C	NO
5	Main Street & Holland Street	Two-Way Stop	AM	12.6	B	C	NO
			PM	12.9	B	C	NO
6	Main Street & Hannan Street	Two-Way Stop	AM	12.6	B	C	NO
			PM	15.9	C	C	NO
7	Main Street & Townsend Street	Two-Way Stop	AM	12.5	B	C	NO
			PM	14.8	B	C	NO
8	Main Street & Woods Avenue	Two-Way Stop	AM	12.7	B	C	NO
			PM	15.8	C	C	NO
9	Main Street & Frank Street	Two-Way Stop	AM	12.5	B	C	NO
			PM	17.4	C	C	NO
10	Main Street & Paris Avenue	One-Way Stop	AM	10.6	B	C	NO
			PM	10.7	B	C	NO
11	Main Street & Ash Road	One-Way Stop	AM	11.0	B	C	NO
			PM	12.5	B	C	NO
12	Main Street & Birch Road	One-Way Stop	AM	9.9	A	C	NO
			PM	12.1	B	C	NO
13	Main Street & Western Drive	One-Way Stop	AM	9.7	A	C	NO
			PM	11.4	B	C	NO
14	Main Street & Pettit Road	One-Way Stop	AM	13.0	B	C	NO
			PM	16.9	C	C	NO

Table 22: Study Area Intersection Operations - Opening Year 2028 No BIG Baseline							
Intersection		Traffic Control	Peak Hour	Delay (a)	LOS (b)	LOS Threshold (c)	In CMP? (d)
15	Main Street & SR 58 Eastbound Ramps	Signal	AM	7.6	A	D	NO
			PM	5.3	A	D	NO
16	Main Street & SR 58 Westbound Ramps	Signal	AM	11.6	B	D	NO
			PM	13.4	B	D	NO
17	Lenwood Road & Love's Travel Stop Driveway	Two-Way Stop	AM	12.4	B	C	NO
			PM	13.2	B	C	NO
18	Lenwood Road & High Desert Road	Two-Way Stop	AM	13.7	B	C	NO
			PM	15.9	C	C	NO
19	Lenwood Rd & Chevron Driveway	Two-Way Stop	AM	13.4	B	C	NO
			PM	14.7	B	C	NO
20	Lenwood Road & Commerce Parkway	Signal	AM	26.3	C	C	NO
			PM	27.5	C	C	NO
21	Lenwood Road & I-15 Southbound Ramp	Signal	AM	12.9	B	D	NO
			PM	15.0	B	D	NO
22	Lenwood Road & I-15 Northbound Ramp	Signal	AM	12.2	B	D	NO
			PM	13.2	B	D	NO
23	Lenwood Road & Jasper Road/Lenwood Road Driveway	Two-Way Stop	AM	13.9	B	C	NO
			PM	16.4	C	C	NO
24	Lenwood Road & Camino Del Sol	One-Way Stop	AM	13.2	B	C	NO
			PM	13.6	B	C	NO
25	Lenwood Road & Agate Road	Two-Way Stop	AM	9.1	A	C	NO
			PM	9.9	A	C	NO
26	Lenwood Road & Community Blvd	Two-Way Stop	AM	9.7	A	C	NO
			PM	10.4	B	C	NO
27	Lenwood Road & SR 58 Eastbound Ramps	All-Way Stop	AM	7.5	A	D	NO
			PM	7.9	A	D	NO
28	Lenwood Road & SR 58 Westbound Ramps	All-Way Stop	AM	7.2	A	D	NO
			PM	7.4	A	D	NO

Table 22: Study Area Intersection Operations - Opening Year 2028 No BIG Baseline							
Intersection		**Traffic Control**	**Peak Hour**	**Delay (a)**	**LOS (b)**	**LOS Threshold (c)**	**In CMP? (d)**
29	Main Street & L Street	Signal	AM	13.3	B	D	YES
			PM	15.6	B	D	YES
30	Main Street & Avenue H	Signal	AM	6.7	A	D	YES
			PM	6.7	A	D	YES
31	Main Street & Avenue A	Signal	AM	4.7	A	D	YES
			PM	5.4	A	D	YES
32	Main Street & 1st Avenue	Signal	AM	18.0	B	D	YES
			PM	20.5	C	D	YES
33	Main Street & Barstow Road	Signal	AM	8.1	A	D	YES
			PM	10.1	B	D	YES
34	Barstow Road & Virginia Way	Signal	AM	12.2	B	C	YES
			PM	16.3	B	C	YES
35	Barstow Road & I-15 Southbound Ramps	Signal	AM	12.7	B	D	YES
			PM	16.5	B	D	YES
36	Barstow Road & I-15 Northbound Ramps	Signal	AM	15.0	B	D	YES
			PM	14.8	B	D	YES
37	Barstow Road & Armory Road	Signal	AM	12.5	B	C	YES
			PM	21.3	C	C	YES
38	Barstow Road & Rimrock Road	Signal	AM	6.5	A	C	YES
			PM	7.8	A	C	YES
39	Hinkley Road & Jasper Road	DNE					
40	Main Street & Elks Lane	One-Way Stop	AM	9.9	A	C	NO
			PM	9.7	A	C	NO
41	Hinkley Road & Jiggs Road/A Street	DNE					
42	Hinkley Road & B Street	DNE					

Table 22: Study Area Intersection Operations - Opening Year 2028 No BIG Baseline							
Intersection		Traffic Control	Peak Hour	Delay (a)	LOS (b)	LOS Threshold (c)	In CMP? (d)
43	Hinkley Road & C Street	DNE					
44	Hinkley Road & Roadrunner Road	DNE					

Note:
Bold values indicate intersections operating below the LOS Threshold.
ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.
DNE = Does Not Exist under this scenario and proposed as BIG Transportation Improvement.
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 7th Edition and performed using Synchro 12
(c) The LOS Threshold represents the acceptable LOS for the intersection. All City (non-downtown) and County intersections within the study area are considered to operate acceptably at LOS C or better, consistent with City LOS criteria and the County TIS Guidelines. All downtown City intersections are considered to operate acceptably at LOS D or better. All Caltrans intersections located at freeway interchanges are considered to operate acceptably at LOS D or better.
(d) Notes if the intersection is part of the San Bernardino Congestion Management Program (CMP) network, per the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority, 2016). The CMP states that for the CMP roadway system, intersections are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP intersections located within the Downtown area of City and LOS C is considered acceptable for CMP intersections outside the Downtown area.
(e) Intersection removed by BIG due to Hinkley Road vacation.

Sources: *Author Compilation.*(2025).

Table 23: Study Area Roadway Segment Operations - Opening Year 2028 No BIG Baseline								
Roadway	**Segment**	**Acceptable LOS Capacity[3]**	**Opening Year 2028 No BIG Baseline**				**Jurisdiction**	**In CMP[1]?**
			ADT (PCE)	**V/C**	**LOS**	**Acceptable LOS Threshold**		
Main Street	1. Hinkley Road to Country Club Drive	14,300	6,263	0.438	C or Better	D	City/County[2]	No
	2. Country Club Drive to Lenwood Road	14,300	5,503	0.385	C or Better	D	City	No
	3. Lenwood Road to County/City Boundary	16,400	10,083	0.615	C or Better	C	County	No
	4. County/City Boundary to SR 58 Eastbound Ramps	30,200	10,083	0.334	C or Better	D	City	No
	5. SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	30,200	8,859	0.293	C or Better	D	Caltrans	No
	6. SR 58 Westbound Ramps to L Street	30,200	8,027	0.266	C or Better	D	City	No
	7. L Street to Avenue A	30,200	13,932	0.461	C or Better	D	City	Yes
	8. Avenue A to Barstow Road	30,200	13,078	0.433	C or Better	D	City	Yes
Barstow Road	9. Main Street to I-15 Southbound Ramps	22,300	12,372	0.555	D	D	City	Yes
	10. I-15 Southbound Ramps to I-15 Northbound Ramps	30,200	13,337	0.442	C or Better	D	Caltrans	Yes
	11. I-15 Northbound ramps to Rimrock Road	30,200	14,455	0.479	C or Better	D	City	Yes
Lenwood Road	12. SR 58 Westbound Ramps to Community Boulevard	7,000	1,497	0.214	C or Better	C	County	No
	13. Community Boulevard to Agate Road	7,000	1,398	0.200	C or Better	C	County	No
	14. Agate Road to Jasper Road	7,000	4,618	0.660	C or Better	C	County	No
	15. Jasper Road to Main Street	30,200	6,968	0.231	C or Better	D	City	No
	16. Main Street to High Desert Road	14,300	7,280	0.509	D	D	City	No
	17. High Desert Road to I-15 Southbound Off Ramp	30,200	15,518	0.514	D	D	City	No
	18. I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	30,200	12,625	0.418	C or Better	D	Caltrans	No
Hinkley Road	19. SR 58 Westbound Ramp to Jiggs Road	7,000	399	0.057	C or Better	C	County	No
	20. Jiggs Road to Main Street[4]	7,000	DNE	DNE	DNE	D	City	No
	21. East of Jiggs Road	30,200	DNE	DNE	DNE	D	City	No
	22. East of Jiggs Road to West of B Street	30,200	DNE	DNE	DNE	D	City	No
	23. West of B Street	30,200	DNE	DNE	DNE	D	City	No
	24. Between B Street and C Street	30,200	DNE	DNE	DNE	D	City	No
	25. C Street to Lenwood Road	30,200	DNE	DNE	DNE	D	City	No
C Street	26. North of Hinkley Road to F Street	30,200	DNE	DNE	DNE	D	City	No
F Street	27. East of C Street	30,200	DNE	DNE	DNE	D	City	No

Table 23: Study Area Roadway Segment Operations - Opening Year 2028 No BIG Baseline								
Roadway	**Segment**	**Acceptable LOS Capacity[3]**	**Opening Year 2028 No BIG Baseline**				**Jurisdiction**	**In CMP[1]?**
			ADT (PCE)	**V/C**	**LOS**	**Acceptable LOS Threshold**		

[1]Notes if the roadway segment is part of the San Bernardino Congestion Management Program (CMP) network per the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority, 2016). The CMP states that for the CMP roadway system, roadway segments are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP roadways segments located within the City, consistent with non-CMP roadway segments located within the City.
[2]Roadway segment is currently under County jurisdiction but would be annexed into the City as part of the proposed General Plan, thus, is analyzed according to City standards.
[3]The Acceptable LOS Capacity represents the acceptable LOS for the roadway segment. All County roadway segments within the study area are considered to operate acceptably at LOS C or better, consistent with the County TIS Guidelines. All City roadway segments within the study area are considered to operate acceptably at LOS D or better, consistent with the recommendations in the City of Barstow proposed General Plan. All Caltrans roadway segments within the study area are considered to operate acceptably at LOS D or better.
[4]Roadway segment would be closed upon completion of BIG. Since BIG is incorporated into the proposed General Plan, the San Bernardino Transportation Analysis Model (SBTAM) does not include this roadway segment. Therefore, 2028 Opening Year No BIG Baseline volumes are unavailable for this roadway segment.
Bolded values indicate segment with LOS exceeding the acceptable LOS threshold.
ADT = average daily traffic
I = Interstate
LOS = level of service
SR = State Route
V/C = volume-to-capacity ratio
DNE = Does Not Exist under this scenario and proposed as BIG Transportation Improvement.

Sources: *Author Compilation. (2025*).

Interim Year 2033 No BIG Baseline

LOS analyses for the study area intersections, freeway off-ramps, and roadway segments were conducted for Interim Year 2033 No BIG Baseline conditions to establish a baseline to evaluate BIG transportation deficiencies considering future traffic growth. Interim Year 2033 No BIG Baseline conditions were derived using the methods detailed in **Section 3.4 Level of Service Assessment Methodology**.

Intersection Operations

Forecast peak hour turning movements at study area intersections are illustrated in **Figure 26: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Interim Year 2033 No BIG Baseline**. **Table 24: Study Area Intersection Operations – Interim Year 2033 No BIG Baseline** and **Figure 27: Study Area Intersection Level of Service – Interim Year 2033 No BIG Baseline** summarize the study area intersection LOS analysis results and indicate all intersections are forecast to operate at acceptable LOS according to agency performance criteria under Interim Year 2033 No BIG Baseline conditions. Detailed Synchro reports for intersection analysis are in **Appendix G: Synchro Analysis Worksheets**.

Roadway Segment Operations

Forecast roadway segment ADT volumes are illustrated in **Figure 28: Study Area Roadway Segment Volumes – Interim Year 2033 No BIG Baseline**. **Table 25: Study Area Roadway Segment Operations – Interim Year 2033 No BIG Baseline** and **Figure 29: Study Area Roadway Segment Level of Service – Interim Year 2033 No BIG Baseline** summarize the study area roadway segment LOS analysis results and indicate all roadway segments are forecast to operate at acceptable LOS according to agency performance criteria under Interim Year 2033 No BIG Baseline conditions.

1	**2**	**3**	**4**
Main St: 138 / 637	Main St: 184 / 618; 2 / 22	Lenwood Rd: 16 / 50; 141 / 222; 149 / 205 — Main St: 213 / 196; 92 / 196; 40 / 50	Sun Valley Dr: 2 / 0; 189 / 268 — Lenwood Rd
311 / 189	Country Club Dr: 240 / 176; 0 / 20 — 7 / 12	31 / 18; 156 / 113; 106 / 114 — 90 / 150; 200 / 165; 50 / 70	4 / 0; 0 / 3 — 0 / 3; 259 / 317
5	**6**	**7**	**8**
Holland St: 0 / 4; 3 / 4 — Main St: 290 / 468; 2 / 4	Hannan St: 4 / 3 — Main St: 290 / 470; 2 / 2	Townsend St: 0 / 6; 4 / 3 — Main St: 2 / 0; 287 / 466; 3 / 2	Woods Ave: 3 / 4 — Main St: 0 / 2; 280 / 468; 2 / 2
3 / 3; 291 / 351; 0 / 3 — 3 / 2; 5 / 4	Hannan St: 2 / 2; 294 / 354; 1 / 0 — 3 / 3	3 / 2; 291 / 353; 3 / 1 — 3 / 3	3 / 2; 306 / 353; 0 / 2 — 3 / 4
9	**10**	**11**	**12**
Frank St: 0 / 2; 3 / 3 — Main St: 277 / 454; 5 / 22	Paris Ave: 270 / 468; 16 / 18 — Main St	Main St: 270 / 454; 20 / 26 — Ash Rd: 16 / 28; 15 / 24	Main St: 301 / 470; 11 / 59 — Birch Rd: 9 / 17; 35 / 27
3 / 3; 291 / 343; 7 / 20 — 12 / 26; 13 / 17	304 / 354; 11 / 13 — 11 / 4; 18 / 9	289 / 333; 34 / 26	295 / 353; 9 / 23
13	**14**	**15**	**16**
Main St: 327 / 536; 9 / 25 — Western Dr: 307 / 381; 9 / 13 — 5 / 8; 25 / 19	Petitt Rd: 26 / 39; 98 / 83 — Main St: 43 / 116; 315 / 552 — 24 / 45; 334 / 384	SR 58 EB Ramp: 14 / 23; 4 / 12; 26 / 33 — Main St: 342 / 654; 58 / 47 — 244 / 281; 195 / 191	SR 58 WB Ramp — Main St: 33 / 50; 223 / 427 — 21 / 23; 255 / 297; 172 / 254; 61 / 91
17	**18**	**19**	**20**
Lenwood Rd: 30 / 22; 165 / 253; 7 / 4 — Love's Travel Stop Dwy: 0 / 4; 1 / 16 — 15 / 23; 3 / 0; 28 / 23 — 30 / 34; 255 / 299; 11 / 6	Lenwood Rd: 6 / 4; 204 / 318 — High Desert Rd — 3 / 1; 134 / 115 — 81 / 97; 294 / 300	Truck Freightliner Service Point Dwy: 10 / 8; 15 / 5 — Lenwood Rd: 24 / 24; 373 / 489; 61 / 113 — 1 / 9; 312 / 409; 14 / 19 — 8 / 8; 98 / 60	Commerce Pkwy: 20 / 17; 6 / 4; 142 / 170 — Lenwood Rd: 107 / 125; 447 / 535; 59 / 70 — 18 / 17; 406 / 486; 14 / 19 — 8 / 18; 3 / 1; 54 / 88
21	**22**	**23**	**24**
I-15 SB Off Ramps: 278 / 369; 197 / 423 — Lenwood Rd: 377 / 414 — 296 / 386	High Point Pkwy: 206 / 300; 7 / 43 — Lenwood Rd: 38 / 117; 389 / 682 — I-15 NB Off Ramps: 79 / 189; 215 / 451 — 290 / 280; 78 / 109; 217 / 217	Transload Warehouse Center Dwy: 232 / 368; 18 / 34 — Lenwood Rd: 55 / 59; 28 / 27 — Jasper Rd — 0 / 12; 2 / 0; 4 / 5 — 6 / 2; 397 / 330; 11 / 26	Lenwood Rd: 215 / 353; 5 / 6 — Cam del Sol: 6 / 5; 21 / 18 — 385 / 305; 16 / 33

Source: Author Compilation, 2025

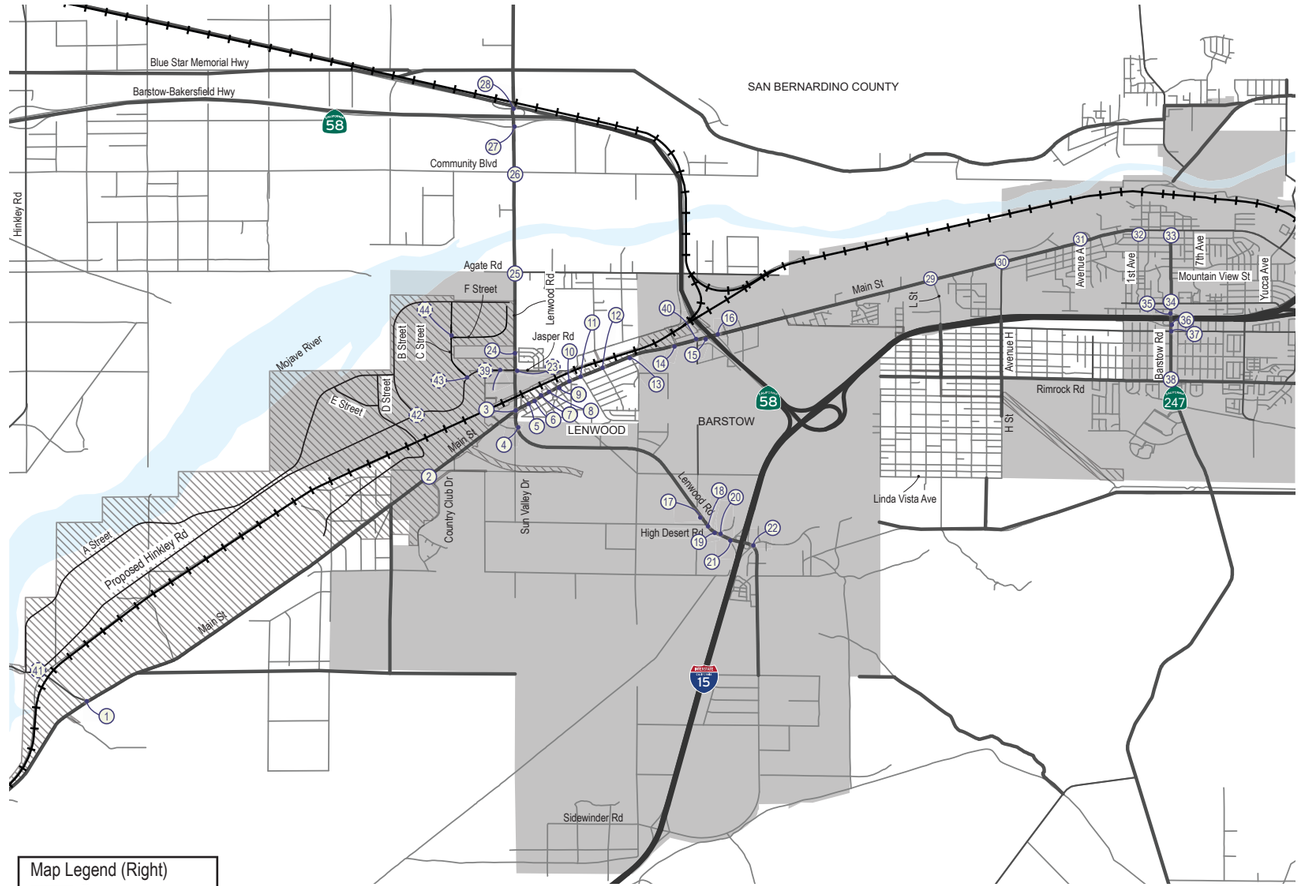


Figure 26: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Interim Year 2033 No BIG Baseline
(Page 1/2)

25 Lenwood Rd: 49 / 73 ⇩, 0 / 12 ⇧ Agate Rd: 0 / 4 ⇨, 19 / 31 ⇦ 3 / 0 ⇦ 1 / 0 ⇧, 23 / 91 ⇧, 41 / 33 ⇧	**26** Lenwood Rd: 17 / 30 ⇩, 30 / 23 ⇩, 20 / 22 ⇧ Community Blvd: 16 / 19 ⇨, 25 / 60 ⇦, 11 / 8 ⇦ 18 / 43 ⇨, 26 / 44 ⇨, 1 / 0 ⇦ 18 / 29 ⇧, 6 / 10 ⇧	**27** Lenwood Rd: 17 / 38 ⇩, 22 / 15 ⇧ SR 58 EB Ramps 8 / 7 ⇨, 0 / 4 ⇨, 52 / 45 ⇦ 38 / 71 ⇧, 20 / 23 ⇧	**28** SR 58 WB Ramps: 15 / 30 ⇦, 8 / 15 ⇦ Lenwood Rd 10 / 36 ⇨, 21 / 32 ⇦ 18 / 26 ⇧, 30 / 45 ⇧
29 Arco Dwy: 11 / 31 ⇩, 43 / 69 ⇩, 17 / 24 ⇧ Main St: 5 / 8 ⇨, 158 / 237 ⇦, 158 / 286 ⇦ L St 13 / 22 ⇦, 254 / 205 ⇨, 128 / 144 ⇦ 96 / 177 ⇧, 25 / 51 ⇧, 196 / 222 ⇧	**30** Ave H: 14 / 13 ⇩, 4 / 6 ⇩, 30 / 15 ⇧ Main St: 20 / 13 ⇦, 323 / 509 ⇦, 59 / 114 ⇦ 22 / 11 ⇨, 443 / 449 ⇨, 39 / 76 ⇦ Ave H 61 / 67 ⇧, 5 / 3 ⇧, 107 / 104 ⇧	**31** Ave A: 1 / 8 ⇩, 0 / 3 ⇩, 4 / 9 ⇧ Main St: 12 / 6 ⇦, 443 / 596 ⇦, 25 / 56 ⇦ 9 / 3 ⇨, 474 / 572 ⇨, 102 / 87 ⇨ 64 / 98 ⇧, 6 / 0 ⇧, 30 / 55 ⇧	**32** 1st Ave: 171 / 223 ⇩, 55 / 44 ⇩, 173 / 218 ⇧ Main St: 119 / 151 ⇦, 289 / 433 ⇦, 25 / 21 ⇦ 138 / 141 ⇨, 341 / 463 ⇨, 27 / 32 ⇨ 41 / 37 ⇧, 37 / 39 ⇧, 25 / 18 ⇧
33 Main St: 283 / 396 ⇦, 54 / 112 ⇦ Barstow Rd 347 / 454 ⇦, 137 / 201 ⇨ 135 / 191 ⇧, 65 / 89 ⇧	**34** Barstow Rd: 8 / 5 ⇩, 287 / 526 ⇩, 66 / 107 ⇧ Virginia Way: 61 / 91 ⇦, 37 / 47 ⇦, 143 / 251 ⇦ 1 / 10 ⇨, 42 / 67 ⇨, 39 / 74 ⇨ 24 / 43 ⇧, 460 / 420 ⇧, 177 / 259 ⇧	**35** Barstow Rd: 174 / 350 ⇩, 386 / 640 ⇧ I-15 SB On-Ramp I-15 SB Off-Ramp: 83 / 130 ⇦, 76 / 217 ⇦ 222 / 369 ⇧, 671 / 718 ⇧	**36** Barstow Rd: 66 / 84 ⇩, 339 / 826 ⇧ I-15 NB Ramps 281 / 202 ⇨, 239 / 314 ⇦ 125 / 102 ⇧, 694 / 926 ⇧
37 Barstow Rd: 15 / 46 ⇩, 470 / 799 ⇩, 183 / 355 ⇧ Armory Rd: 231 / 349 ⇦, 13 / 23 ⇦, 36 / 87 ⇦ 59 / 102 ⇦, 11 / 22 ⇨, 21 / 32 ⇨ 10 / 23 ⇧, 479 / 532 ⇧, 33 / 71 ⇧	**38** Barstow Rd: 103 / 246 ⇩, 170 / 217 ⇩, 172 / 221 ⇧ Rimrock Rd: 146 / 119 ⇦, 184 / 221 ⇦, 44 / 52 ⇦ 130 / 160 ⇨, 116 / 247 ⇨, 32 / 26 ⇨ 16 / 33 ⇧, 127 / 235 ⇧, 17 / 37 ⇧	**39** Hinkley Rd: 1 / 1 ⇦ Roadrunner Rd 1 / 1 ⇨	**40** Main St: 221 / 482 ⇦, 4 / 17 ⇦ Elk Dr 290 / 368 ⇨, 4 / 0 ⇨ 2 / 5 ⇧, 4 / 19 ⇧

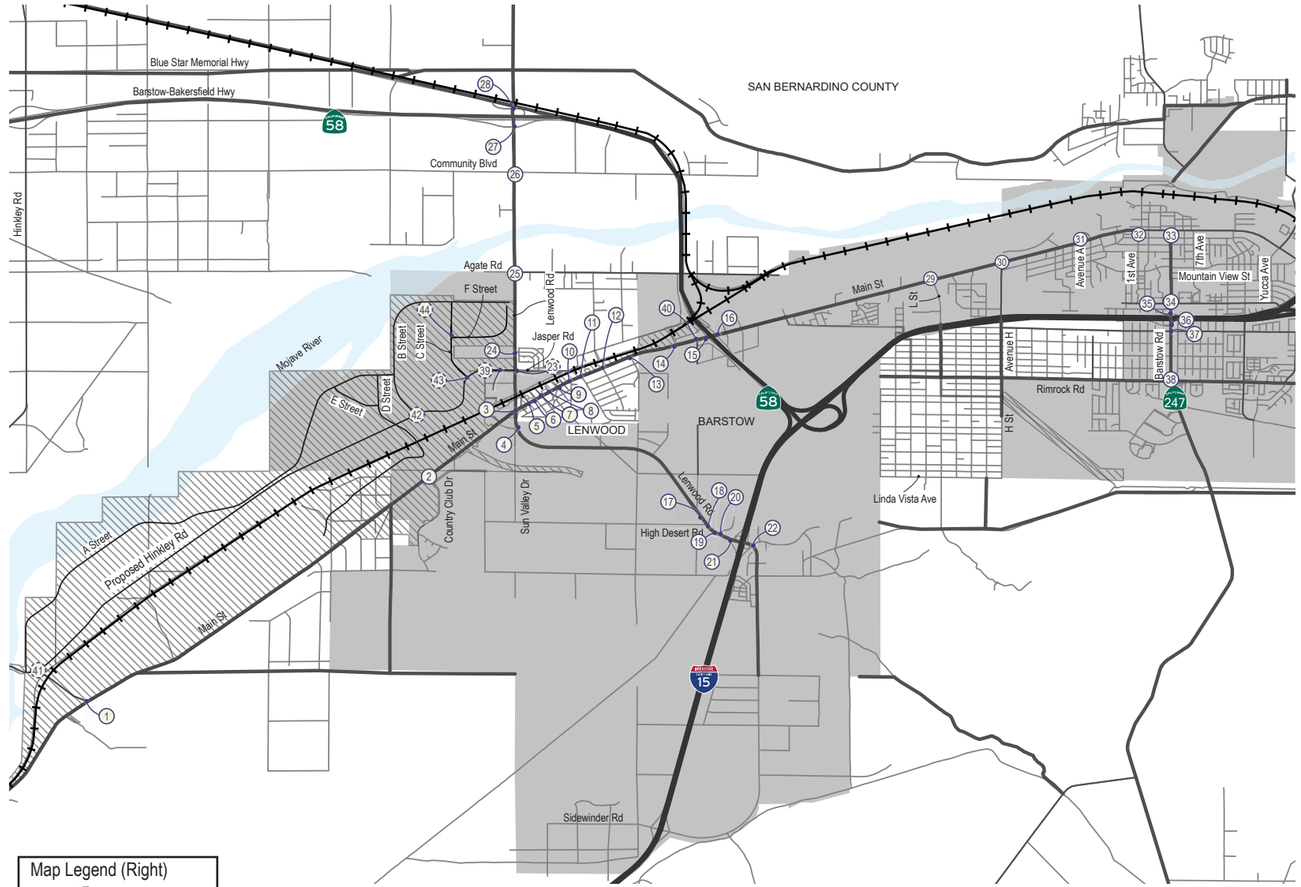


Figure 26: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Interim Year 2033 No BIG Baseline
(Page 2/2)

Source: Author Compilation, 2025

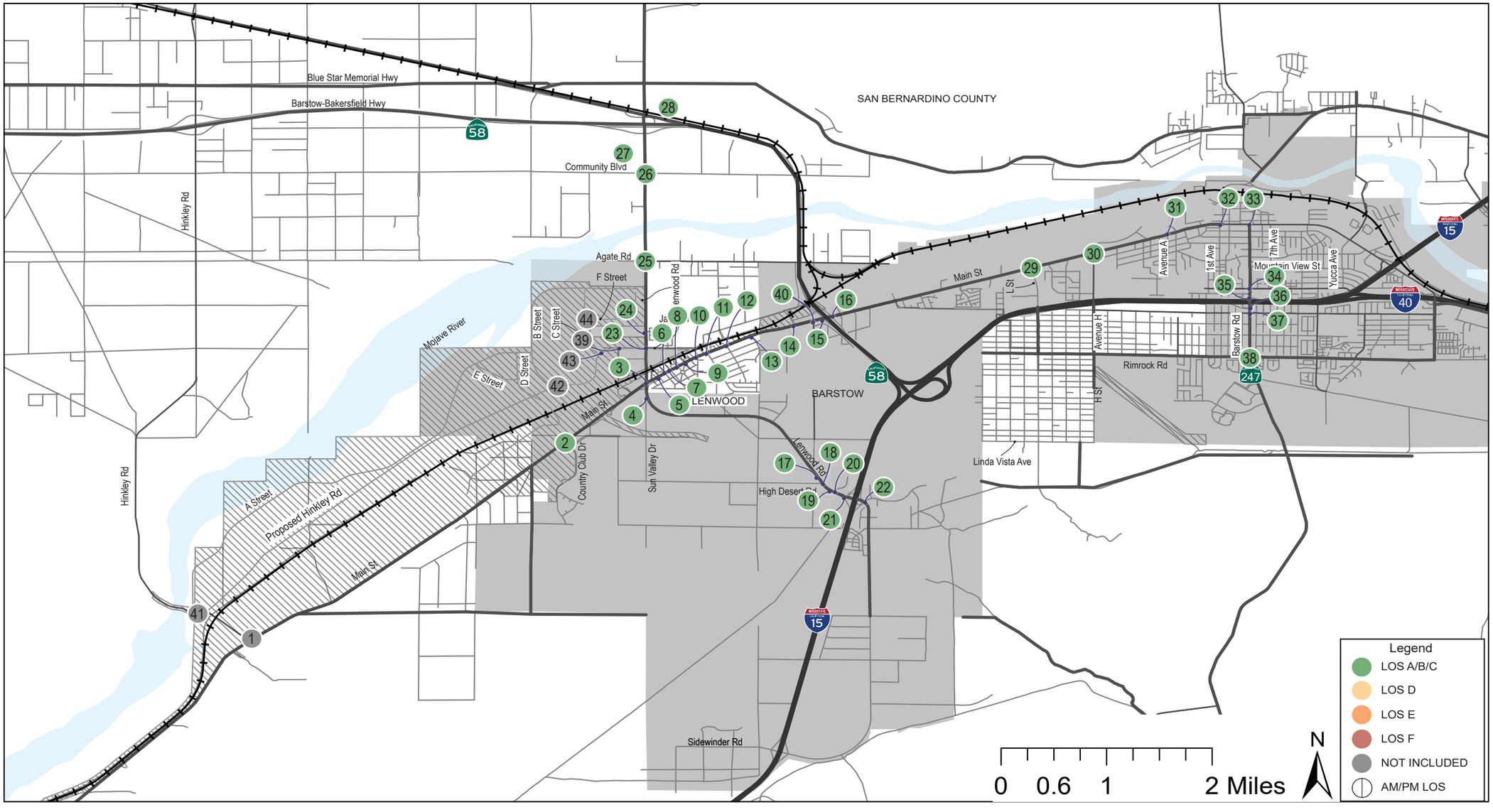


Figure 27: Study Area Intersection Level of Service – Interim Year 2033 No BIG Baseline

Source: Author Compilation, 2025

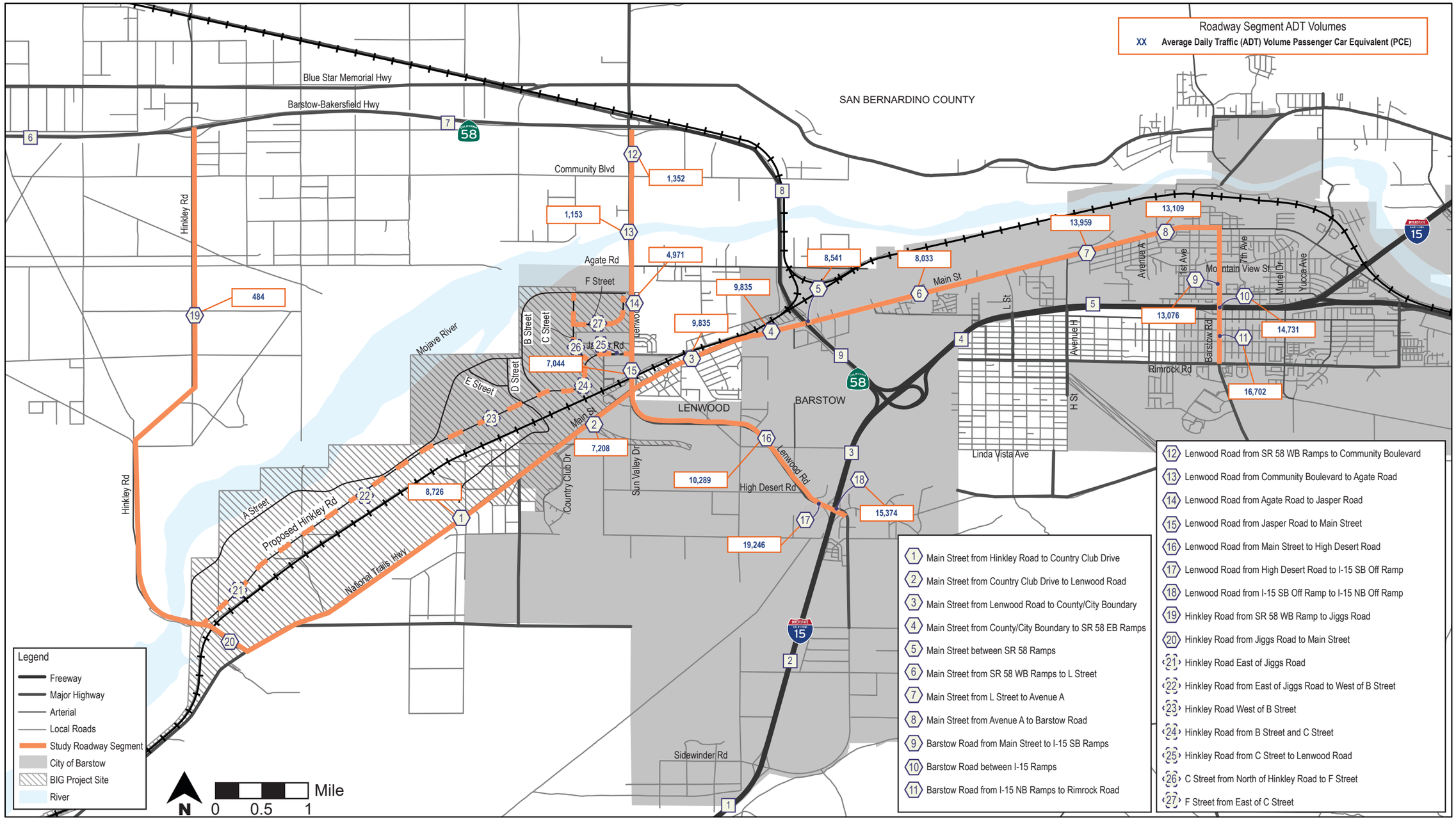


Figure 28: Study Area Roadway Segment Volumes – Interim Year 2033 No BIG Baseline

Source: Author Compilation, 2025

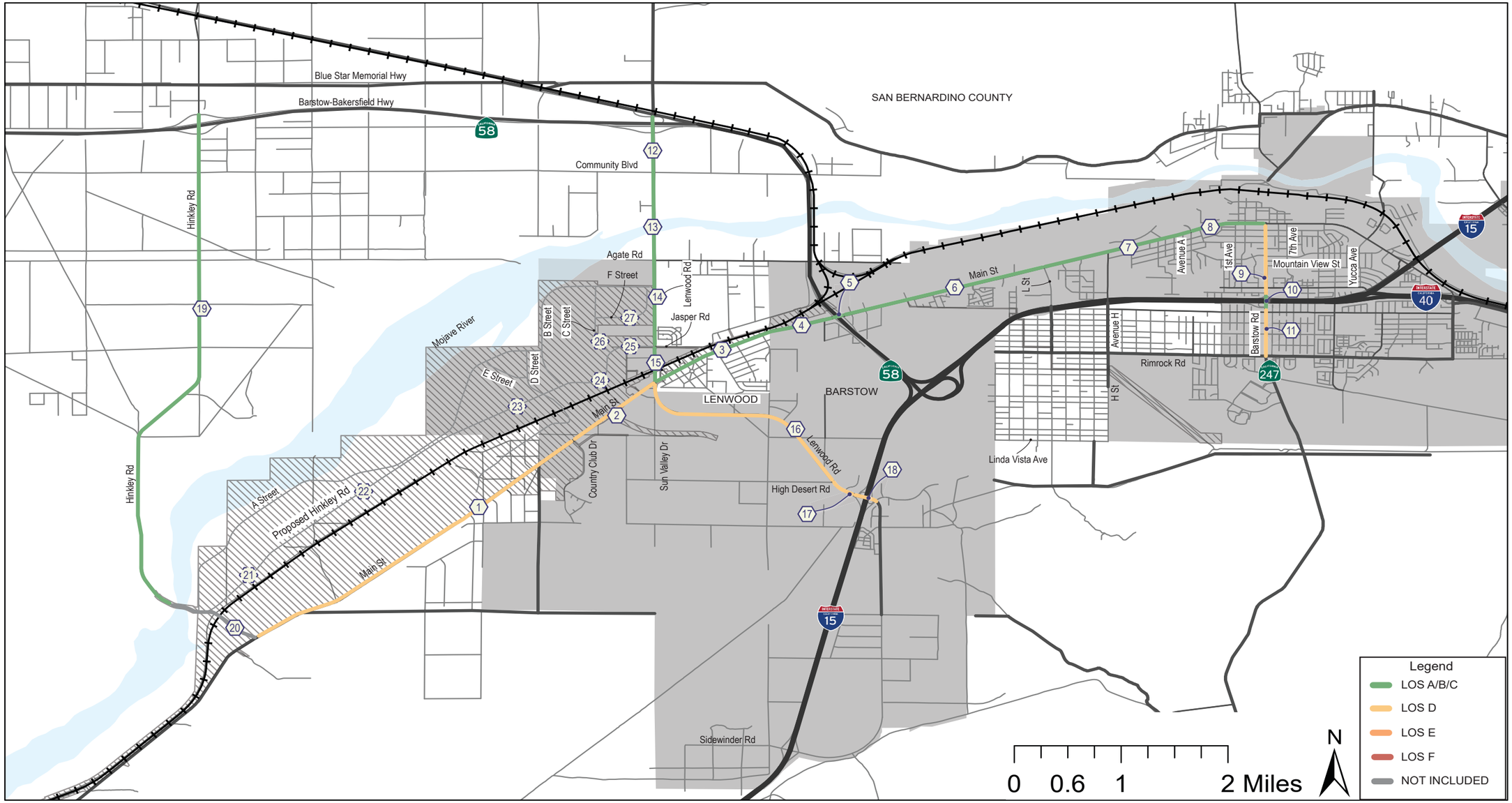


Figure 29: Study Area Roadway Segment Level of Service – Interim Year 2033 No BIG Baseline

Source: Author Compilation, 2025

Table 24: Study Area Intersection Operations – Interim Year 2033 No BIG Baseline							
Intersection		**Traffic Control**	**Peak Hour**	**Delay (a)**	**LOS (b)**	**LOS Threshold (c)**	**In CMP? (d)**
1	Main Street & Hinkley Road	Two-Way Stop	(e)			C	NO
						C	NO
2	Main Street & Country Club Drive	Two-Way Stop	AM	9.6	A	C	NO
			PM	9.3	A	C	NO
3	Main Street & Lenwood Road	Signal	AM	18.8	B	C	NO
			PM	19.8	B	C	NO
4	Lenwood Road & Sun Valley Drive	Two-Way Stop	AM	11.6	B	C	NO
			PM	9.7	A	C	NO
5	Main Street & Holland Street	Two-Way Stop	AM	12.6	B	C	NO
			PM	13.0	B	C	NO
6	Main Street & Hannan Street	Two-Way Stop	AM	12.6	B	C	NO
			PM	15.9	C	C	NO
7	Main Street & Townsend Street	Two-Way Stop	AM	12.6	B	C	NO
			PM	14.9	B	C	NO
8	Main Street & Woods Avenue	Two-Way Stop	AM	12.7	B	C	NO
			PM	15.9	C	C	NO
9	Main Street & Frank Street	Two-Way Stop	AM	12.6	B	C	NO
			PM	17.6	C	C	NO
10	Main Street & Paris Avenue	Two-Way Stop	AM	10.6	B	C	NO
			PM	11.0	B	C	NO
11	Main Street & Ash Road	Two-Way Stop	AM	11.2	B	C	NO
			PM	12.8	B	C	NO
12	Main Street & Birch Road	Two-Way Stop	AM	10.1	B	C	NO
			PM	12.6	B	C	NO
13	Main Street & Western Drive	Two-Way Stop	AM	9.9	A	C	NO
			PM	11.6	B	C	NO
14	Main Street & Pettit Road	Two-Way Stop	AM	13.1	B	C	NO
			PM	17.1	C	C	NO

Table 24: Study Area Intersection Operations – Interim Year 2033 No BIG Baseline							
Intersection		Traffic Control	Peak Hour	Delay (a)	LOS (b)	LOS Threshold (c)	In CMP? (d)
15	Main Street & SR 58 Eastbound Ramps	Signal	AM	7.9	A	D	NO
			PM	5.5	A	D	NO
16	Main Street & SR 58 Westbound Ramps	Signal	AM	11.6	B	D	NO
			PM	13.4	B	D	NO
17	Lenwood Road & Love's Travel Stop Driveway	Two-Way Stop	AM	12.4	B	C	NO
			PM	13.1	B	C	NO
18	Lenwood Road & High Desert Road	Two-Way Stop	AM	14.1	B	C	NO
			PM	16.9	C	C	NO
19	Lenwood Rd & Chevron Driveway	Two-Way Stop	AM	15.4	C	C	NO
			PM	17.0	C	C	NO
20	Lenwood Road & Commerce Parkway	Signal	AM	26.6	C	C	NO
			PM	28.5	C	C	NO
21	Lenwood Road & I-15 Southbound Ramp	Signal	AM	13.3	B	D	NO
			PM	16.4	B	D	NO
22	Lenwood Road & I-15 Northbound Ramp	Signal	AM	12.7	B	D	NO
			PM	14.0	B	D	NO
23	Lenwood Road & Jasper Road/Lenwood Road Driveway	Two-Way Stop	AM	13.9	B	C	NO
			PM	16.8	C	C	NO
24	Lenwood Road & Camino Del Sol	One-Way Stop	AM	13.1	B	C	NO
			PM	13.5	B	C	NO
25	Lenwood Road & Agate Road	Two-Way Stop	AM	9.2	A	C	NO
			PM	10.0	A	C	NO
26	Lenwood Road & Community Blvd	Two-Way Stop	AM	9.8	A	C	NO
			PM	10.5	B	C	NO
27	Lenwood Road & SR 58 Eastbound Ramps	All-Way Stop	AM	7.5	A	D	NO
			PM	7.8	A	D	NO
28	Lenwood Road & SR 58 Westbound Ramps	All-Way Stop	AM	7.2	A	D	NO
			PM	7.5	A	D	NO

Table 24: Study Area Intersection Operations – Interim Year 2033 No BIG Baseline							
Intersection		Traffic Control	Peak Hour	Delay (a)	LOS (b)	LOS Threshold (c)	In CMP? (d)
29	Main Street & L Street	Signal	AM	13.7	B	D	YES
			PM	17.1	B	D	YES
30	Main Street & Avenue H	Signal	AM	6.9	A	D	YES
			PM	6.8	A	D	YES
31	Main Street & Avenue A	Signal	AM	4.8	A	D	YES
			PM	5.6	A	D	YES
32	Main Street & 1st Avenue	Signal	AM	18.9	B	D	YES
			PM	21.8	C	D	YES
33	Main Street & Barstow Road	Signal	AM	8.3	A	D	YES
			PM	10.5	B	D	YES
34	Barstow Road & Virginia Way	Signal	AM	12.7	B	C	YES
			PM	17.9	B	C	YES
35	Barstow Road & I-15 Southbound Ramps	Signal	AM	13.3	B	D	YES
			PM	18.7	B	D	YES
36	Barstow Road & I-15 Northbound Ramps	Signal	AM	15.2	B	D	YES
			PM	17.8	B	D	YES
37	Barstow Road & Armory Road	Signal	AM	13.6	B	C	YES
			PM	25.9	C	C	YES
38	Barstow Road & Rimrock Road	Signal	AM	6.9	A	C	YES
			PM	8.6	A	C	YES
39	Proposed Hinkley Road & Jasper Road	DNE					
40	Main Street & Elks Lane	One-Way Stop	AM	9.8	A	C	NO
			PM	10.2	B	C	NO
41	Hinkley Road & Jiggs Road/A Street	DNE					
42	Hinkley Road & B Street	DNE					

Table 24: Study Area Intersection Operations – Interim Year 2033 No BIG Baseline							
Intersection		**Traffic Control**	**Peak Hour**	**Delay (a)**	**LOS (b)**	**LOS Threshold (c)**	**In CMP? (d)**
43	Hinkley Road & C Street	DNE					
44	Hinkley Road & Roadrunner Road	DNE					

Note:
Bold values indicate intersections operating below the LOS Threshold
ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.
DNE = Does Not Exist under this scenario and proposed as BIG Transportation Improvement.
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 7th Edition and performed using Synchro 12
(c) The LOS Threshold represents the acceptable LOS for the intersection. All City (non-downtown) and County intersections within the study area are considered to operate acceptably at LOS C or better, consistent with City LOS criteria and the County TIS Guidelines. All downtown City intersections are considered to operate acceptably at LOS D or better. All Caltrans intersections located at freeway interchanges are considered to operate acceptably at LOS D or better.
(d) Notes if the intersection is part of the San Bernardino Congestion Management Program (CMP) network, per the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority 2016). The CMP states that for the CMP roadway system, intersections are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP intersections located within the Downtown area of City and LOS C is considered acceptable for CMP intersections outside the Downtown area.
(e) Intersection removed by BIG due to Hinkley Road vacation.

Sources: *Author Compilation. (2025)*

Table 25: Study Area Roadway Segment Operations – Interim Year 2033 No BIG Baseline								
Roadway	**Segment**	**Acceptable LOS Capacity[3]**	**Interim Year 2033 No BIG Baseline**				**Jurisdiction**	**In CMP[1]?**
			ADT (PCE)	**V/C**	**LOS**	**Acceptable LOS Threshold**		
Main Street	1. Hinkley Road to Country Club Drive	14,300	8,726	0.610	D	D	City/County[2]	No
	2. Country Club Drive to Lenwood Road	14,300	7,208	0.504	D	D	City	No
	3. Lenwood Road to County/City Boundary	16,400	9,835	0.600	C or Better	C	County	No
	4. County/City Boundary to SR 58 Eastbound Ramps	30,200	9,835	0.326	C or Better	D	City	No
	5. SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	30,200	8,541	0.283	C or Better	D	Caltrans	No
	6. SR 58 Westbound Ramps to L Street	30,200	8,033	0.266	C or Better	D	City	No
	7. L Street to Avenue A	30,200	13,959	0.462	C or Better	D	City	Yes
	8. Avenue A to Barstow Road	30,200	13,109	0.434	C or Better	D	City	Yes
Barstow Road	9. Main Street to I-15 Southbound Ramps	22,300	13,076	0.586	D	D	City	Yes
	10. I-15 Southbound Ramps to I-15 Northbound Ramps	30,200	14,731	0.488	C or Better	D	Caltrans	Yes
	11. I-15 Northbound ramps to Rimrock Road	30,200	16,702	0.553	D	D	City	Yes
Lenwood Road	12. SR 58 Westbound Ramps to Community Boulevard	7,000	1,352	0.193	C or Better	C	County	No
	13. Community Boulevard to Agate Road	7,000	1,153	0.165	C or Better	C	County	No
	14. Agate Road to Jasper Road	7,000	4,971	0.710	C or Better	C	County	No
	15. Jasper Road to Main Street	30,200	7,044	0.233	C or Better	D	City	No
	16. Main Street to High Desert Road	14,300	10,289	0.720	D	D	City	No
	17. High Desert Road to I-15 Southbound Off Ramp	30,200	19,246	0.637	D	D	City	No
	18. I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	30,200	15,374	0.509	D	D	Caltrans	No
Hinkley Road	19. SR 58 Westbound Ramp to Jiggs Road	7,000	384	0.055	C or Better	C	County	No
	20. Jiggs Road to Main Street	7,000	DNE	DNE	DNE	D	City	No
	21. East of Jiggs Road	30,200	DNE	DNE	DNE	D	City	No
	22. East of Jiggs Road to West of B Street	30,200	DNE	DNE	DNE	D	City	No
	23. West of B Street	30,200	DNE	DNE	DNE	D	City	No
	24. Between B Street and C Street	30,200	DNE	DNE	DNE	D	City	No
	25. C Street to Lenwood Road	30,200	DNE	DNE	DNE	D	City	No

Table 25: Study Area Roadway Segment Operations – Interim Year 2033 No BIG Baseline								
Roadway	**Segment**	**Acceptable LOS Capacity[3]**	**Interim Year 2033 No BIG Baseline**				**Jurisdiction**	**In CMP[1]?**
			ADT (PCE)	**V/C**	**LOS**	**Acceptable LOS Threshold**		
C Street	26. North of Hinkley Road to F Street	30,200	DNE	DNE	DNE	D	City	No
F Street	27. East of C Street	30,200	DNE	DNE	DNE	D	City	No

[1]Notes if the roadway segment is part of the San Bernardino Congestion Management Program (CMP) network per the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority, 2016). The CMP states that for the CMP roadway system, roadway segments are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP roadways segments located within the City, consistent with non-CMP roadway segments located within the City.
[2]Roadway segment is currently under County jurisdiction but would be annexed into the City as part of the proposed General Plan, thus, is analyzed according to City standards.
[3]The Acceptable LOS Capacity represents the acceptable LOS for the roadway segment. All County roadway segments within the study area are considered to operate acceptably at LOS C or better, consistent with the County TIS Guidelines. All City roadway segments within the study area are considered to operate acceptably at LOS D or better, consistent with the recommendations in the City of Barstow proposed General Plan. All Caltrans roadway segments within the study area are considered to operate acceptably at LOS D or better.
[4]Roadway segment would be closed upon completion of BIG. Since BIG is incorporated into the proposed General Plan, the San Bernardino Transportation Analysis Model (SBTAM) does not include this roadway segment. Therefore, 2028 Opening Year No BIG Baseline volumes are unavailable for this roadway segment.
Bolded values indicate segment with LOS exceeding the acceptable LOS threshold.
ADT = average daily traffic
I = Interstate
LOS = level of service
SR = State Route
V/C = volume-to-capacity ratio
DNE = Does Not Exist under this scenario and proposed as BIG Transportation Improvement.

Sources:
Author Compilation. (2025)
- *National Data & Surveying Services*

Horizon Year 2048 No BIG Baseline

LOS analyses for the study area intersections, freeway off-ramps, and roadway segments were conducted for Horizon Year 2048 No BIG Baseline conditions to establish a baseline to evaluate BIG transportation deficiencies considering future traffic growth. Horizon Year 2048 No BIG Baseline conditions were derived using the methods detailed in **Section 3.4 Level of Service Assessment Methodology.**

Intersection Operations

Forecast peak hour turning movements at study area intersections are illustrated in **Figure 30: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Horizon Year 2048 No BIG Baseline** . **Table 26: Study Area Intersection Operations - Horizon Year 2048 No BIG Baseline** and **Figure 31: Study Area Intersection Level of Service – Horizon Year 2048 No BIG Baseline** summarize the study area intersection LOS analysis results and indicate all intersections are forecast to operate at acceptable LOS according to agency performance criteria under Horizon Year 2048 No BIG Baseline conditions except the following:

- Intersection 17, Lenwood Road & Love's Travel Stop Driveway (PM peak hour: LOS D)
- Intersection 18, Lenwood Road & High Desert Road (PM Peak Hour: LOS D)
- Intersection 19, Lenwood Road & Chevron Driveway (AM Peak Hour: LOS D, PM Peak Hour: LOS E)
- Intersection 37, Barstow Road & Armory Road (PM peak hour: LOS E)

Detailed Synchro reports for intersection analysis are in **Appendix G: Synchro Analysis Worksheets**.

Roadway Segment Operations

Forecast roadway segment ADT volumes are illustrated in **Figure 32: Study Area Roadway Segment Volumes – Horizon Year 2048 No BIG Baseline**. **Table 27: Study Area Roadway Segment Operations - Horizon Year 2048 No BIG Baseline** and **Figure 33: Study Area Roadway Segment Level of Service – Horizon Year 2048 No BIG Baseline** summarize the study area roadway segment LOS analysis results and indicate all roadway segments are forecast to operate at acceptable LOS according to agency performance criteria under Horizon Year 2048 No BIG Baseline conditions except the following:

- Roadway Segment 1, Main Street between Hinkley Road and Country Club Drive (LOS E)
- Roadway Segment 16, Lenwood Road between Main Street and High Desert Road (LOS F)
- Roadway Segment 17, Lenwood Road between High Desert Road and the I-15 southbound off-ramp (LOS E)

1 266 / 1200 ⇦ **Main St** 573 / 352 ⇦	**2** 340 / 1127 ⇦ 4 / 22 ⇨ **Main St** 414 / 302 ⇧ 0 / 34 ⇩ **Country Club Dr** 8 / 14 ⇧	**3** 16 /40 ⇖ 141 / 202 ⇧ 149 / 195 ⇗ **Lenwood Rd** 213 / 216 ⇦ 70 / 180 ⇧ 40 / 60 ⇨ **Main St** 31 / 18 ⇦ 130 / 90 ⇧ 363 / 366 ⇨ 253 /521 ⇦ 200 / 175 ⇧ 40 /80 ⇨	**4** 2 /0 ⇖ 400 /518 ⇩ **Lenwood Rd** **Sun Valley Dr** 5 / 0 ⇦ 0 / 3 ⇨ 0 / 4 ⇧ 456 /713 ⇧
5 0 /4 ⇦ 4 /4 ⇗ **Holland St** 290 / 468 ⇦ 4 / 5 ⇧ **Main St** 4 / 3 ⇦ 290 / 351 ⇧ 0 / 3 ⇨ 3 /4 ⇦ 7 /5 ⇧	**6** 3 /3 ⇗ **Hannan St** 290 / 470 ⇦ 3 / 4 ⇧ **Main St** 4 / 4 ⇦ 294 / 354 ⇧ 3 / 0 ⇨ **Hannan St** 3 /3 ⇧	**7** 0 /7 ⇖ 3 /3 ⇗ **Townsend St** 3 / 0 ⇦ 287 / 466 ⇧ 3 / 3 ⇨ **Main St** 3 / 4 ⇦ 291 / 353 ⇧ 4 / 3 ⇨ 3 /3 ⇧	**8** 3 /5 ⇗ **Woods Ave** 0 / 3 ⇦ 280 / 468 ⇧ 4 / 3 ⇨ **Main St** 4 / 3 ⇦ 306 / 353 ⇧ 0 / 3 ⇨ 3 /5 ⇧
9 0 /4 ⇦ 3 /2 ⇗ **Frank St** 276 / 448 ⇦ 8 / 30 ⇧ **Main St** 4 / 4 ⇦ 289 / 341 ⇧ 8 / 26 ⇨ **Frank St** 16 / 32 ⇦ 18 / 24 ⇧	**10** 269 / 465 ⇦ 21 / 23 ⇨ **Main St** 300 / 350 ⇧ 13 / 19 ⇩ **Paris Ave** 18 / 6 ⇦ 22 / 12 ⇨	**11** 269 / 448 ⇦ 27 / 35 ⇨ **Main St** 286 / 331 ⇧ 45 / 35 ⇩ **Ash Rd** 20 / 35 ⇦ 23 / 33 ⇨	**12** 298 / 464 ⇦ 13 / 74 ⇨ **Main St** 292 / 351 ⇧ 13 / 34 ⇩ **Birch Rd** 16 / 28 ⇧ 41 / 34 ⇩
13 327 / 533 ⇦ 11 / 34 ⇨ **Main St** 303 / 376 ⇧ 12 / 15 ⇩ **Western Dr** 10 / 16 ⇦ 30 / 21 ⇨	**14** 42 / 69 ⇖ 119 / 96 ⇗ **Pettit Rd** 47 / 146 ⇦ 314 / 548 ⇨ **Main St** 42 / 68 ⇧ 333 / 384 ⇩	**15** 19 / 20 ⇖ 9 / 23 ⇩ 36 / 41 ⇗ **SR 58 EB Ramp** 342 / 647 ⇦ 71 / 58 ⇨ **Main St** 244 / 281 ⇧ 222 / 198 ⇩	**16** **SR 58 WB Ramp** 52 / 79 ⇧ 223 / 427 ⇨ **Main St** 21 / 21 ⇧ 255 / 297 ⇩ 172 / 254 ⇧ 91 / 144 ⇩
17 35 /22 ⇖ 365 /502 ⇩ 9 /2 ⇗ **Lenwood Rd** 0 / 3 ⇦ 2 / 25 ⇨ **Love's Travel Stop Dwy** 16 / 26 ⇧ 1 / 0 ⇩ 42 / 36 ⇨ 51 /51 ⇦ 463 / 689 ⇧ 20 /10 ⇨	**18** 30 /35 ⇖ 385 /532 ⇩ **Lenwood Rd** **High Desert Rd** 20 / 19 ⇧ 119 / 90 ⇩ 79 /92 ⇦ 540 /643 ⇧	**19** 9 /10 ⇖ 25 /8 ⇗ **Truck Freightliner Service Point Dwy** 31 / 34 ⇦ 533 / 761 ⇧ 90 / 160 ⇨ **Lenwood Rd** 2 / 11 ⇧ 495 / 622 ⇩ 11 / 18 ⇨ 8 /10 ⇦ 139 /82 ⇧	**20** 16 /13 ⇖ 7 /4 ⇩ 207 /245 ⇗ **Commerce Pkwy** 153 / 180 ⇦ 668 / 858 ⇧ 90 / 108 ⇨ **Lenwood Rd** 15 / 13 ⇧ 676 / 775 ⇩ 11 / 15 ⇨ 8 /14 ⇧ 2 /1 ⇩ 79 /134 ⇧
21 415 /540 ⇖ 255 /588 ⇗ **I-15 SB Off Ramps** 542 / 645 ⇨ **Lenwood Rd** 529 / 692 ⇦	**22** 285 /416 ⇖ 7 /54 ⇗ **High Point Pkwy** 48 / 149 ⇦ 690 / 1212 ⇨ **Lenwood Rd** 116 / 274 ⇧ 392 / 815 ⇩ **I-15 NB Off Ramps** 356 /368 ⇧ 89 /124 ⇩ 308 /297 ⇨	**23** 232 /368 ⇖ 24 /47 ⇗ **Lenwood Rd** 71 / 72 ⇦ 28 / 27 ⇨ **Jasper Rd** **Transload Warehouse Center Dwy** 0 / 13 ⇧ 3 / 0 ⇧⇨ 3 / 5 ⇩ 6 /2 ⇦ 397 /330 ⇧ 11 /26 ⇨	**24** 218 /358 ⇖ 6 /9 ⇗ **Lenwood Rd** 8 / 8 ⇦ 28 / 24 ⇨ **Cam del Sol** 390 /311 ⇧ 23 /43 ⇩

Source: Author Compilation, 2025

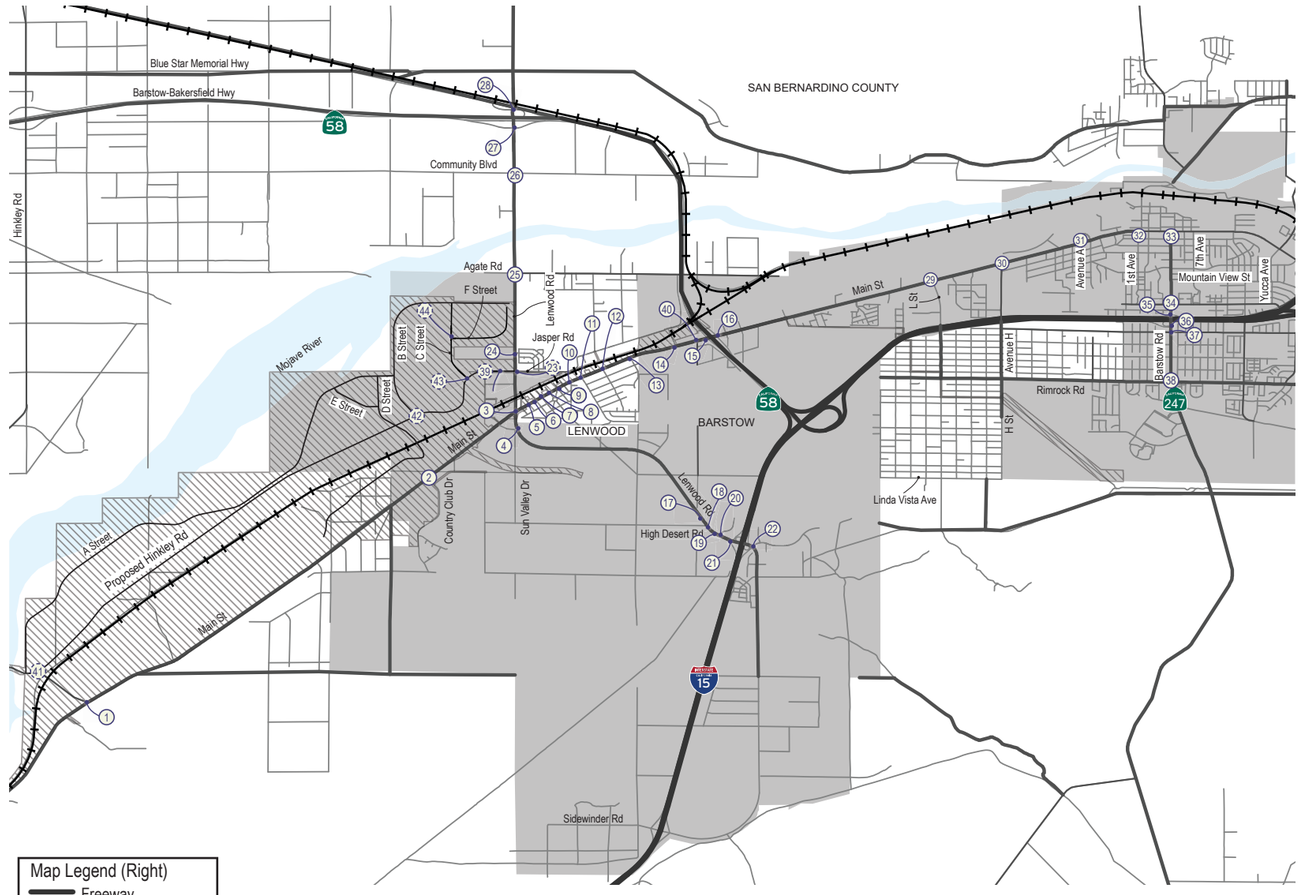


Figure 30: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Horizon Year 2048 No BIG Baseline
(Page 1/2)

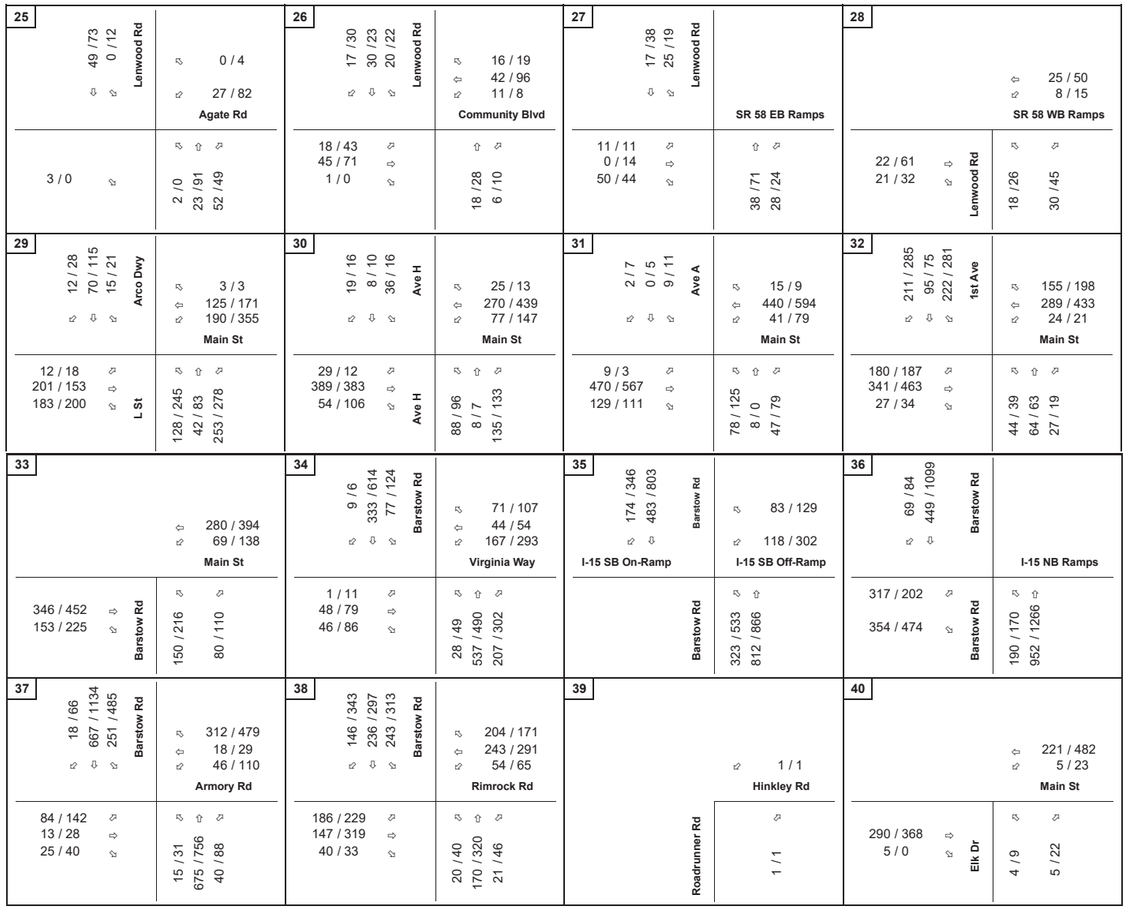


Figure 30: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Horizon Year 2048 No BIG Baseline
(Page 2/2)

Source: Author Compilation, 2025

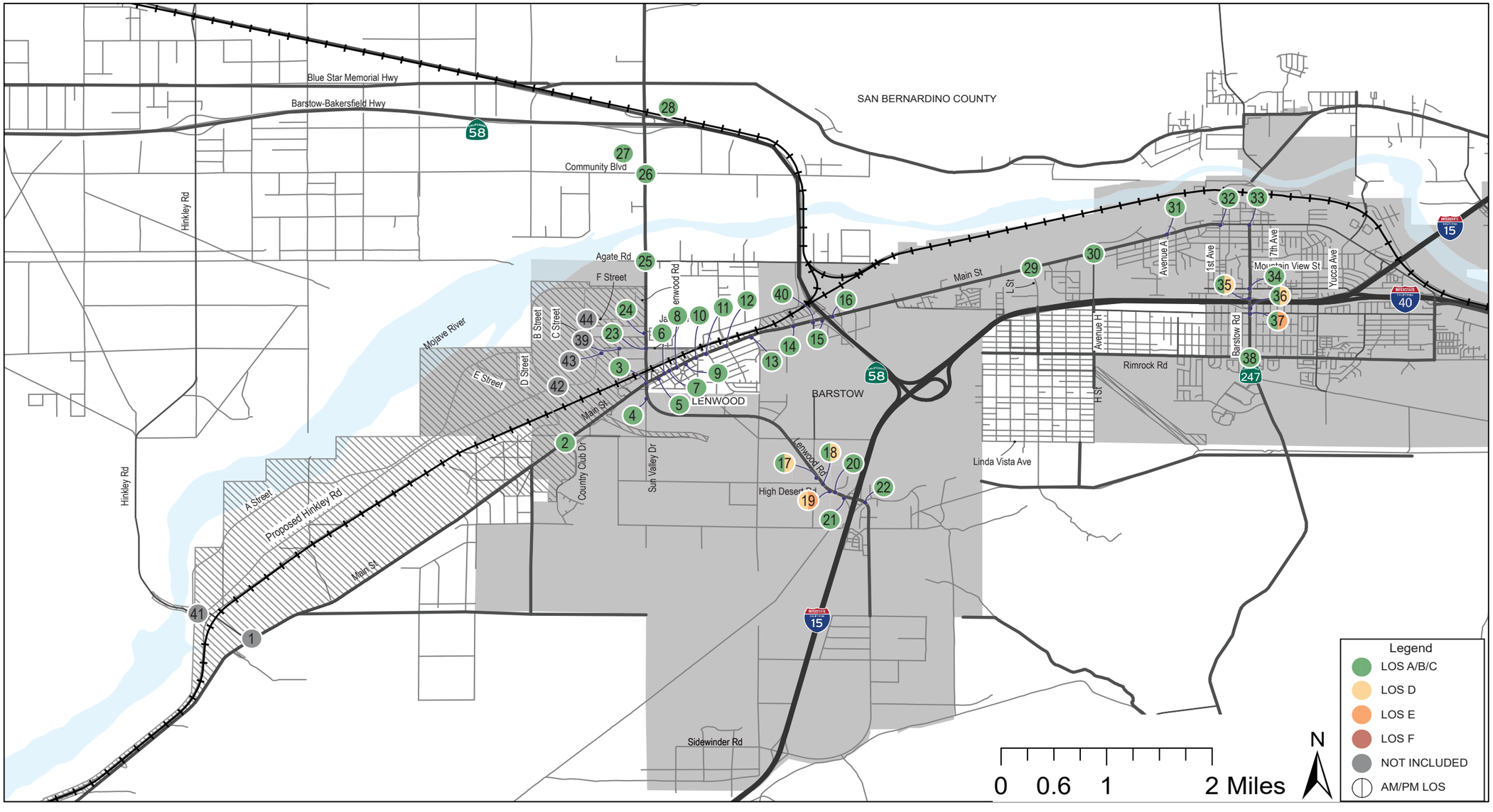


Figure 31: Study Area Intersection Level of Service – Horizon Year 2048 No BIG Baseline

Source: Author Compilation, 2025

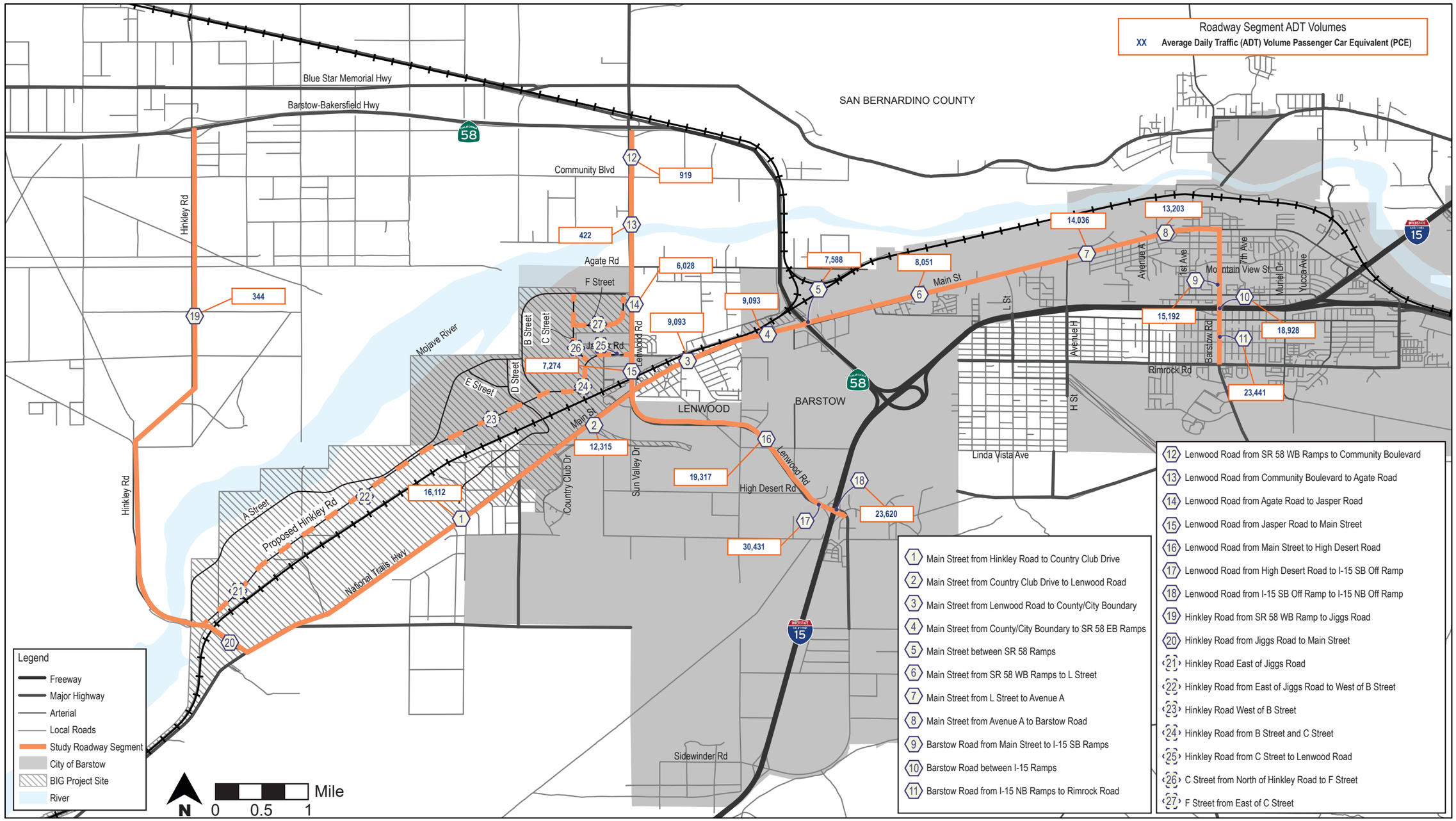


Figure 32: Study Area Roadway Segment Volumes – Horizon Year 2048 No BIG Baseline

Source: Author Compilation, 2025

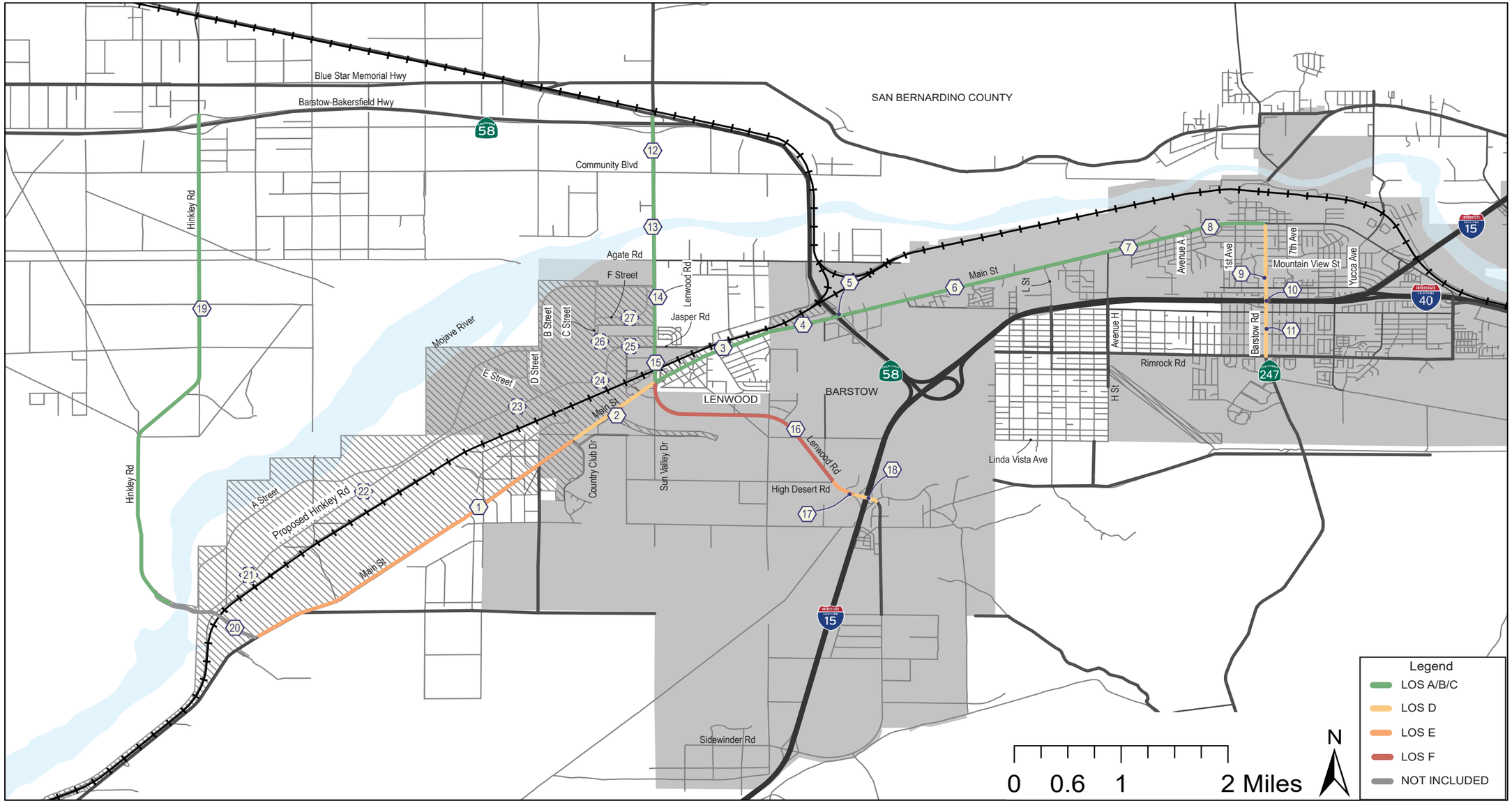


Figure 33: Study Area Roadway Segment Level of Service – Horizon Year 2048 No BIG Baseline

Source: Author Compilation, 2025

Table 26: Study Area Intersection Operations - Horizon Year 2048 No BIG Baseline							
Intersection		Traffic Control	Peak Hour	Delay (a)	LOS (b)	LOS Threshold (c)	In CMP? (d)
1	Main Street & Hinkley Road	One-Way Stop	(e)			C	NO
						C	NO
2	Main Street & Country Club Drive	One-Way Stop	AM	10.8	B	C	NO
			PM	10.2	B	C	NO
3	Main Street & Lenwood Road	Signal	AM	20.1	C	C	NO
			PM	25.5	C	C	NO
4	Lenwood Road & Sun Valley Drive	One-Way Stop	AM	16.8	C	C	NO
			PM	11.7	B	C	NO
5	Main Street & Holland Street	Two-Way Stop	AM	12.7	B	C	NO
			PM	13.0	B	C	NO
6	Main Street & Hannan Street	Two-Way Stop	AM	12.7	B	C	NO
			PM	16.1	C	C	NO
7	Main Street & Townsend Street	Two-Way Stop	AM	12.6	B	C	NO
			PM	15.0	C	C	NO
8	Main Street & Woods Avenue	Two-Way Stop	AM	12.8	B	C	NO
			PM	16.0	C	C	NO
9	Main Street & Frank Street	Two-Way Stop	AM	12.8	B	C	NO
			PM	18.6	C	C	NO
10	Main Street & Paris Avenue	One-Way Stop	AM	11.0	B	C	NO
			PM	11.2	B	C	NO
11	Main Street & Ash Road	One-Way Stop	AM	11.2	B	C	NO
			PM	13.2	B	C	NO
12	Main Street & Birch Road	One-Way Stop	AM	10.5	B	C	NO
			PM	14.0	B	C	NO
13	Main Street & Western Drive	One-Way Stop	AM	10.3	B	C	NO
			PM	12.8	B	C	NO
14	Main Street & Pettit Road	One-Way Stop	AM	14.1	B	C	NO
			PM	19.3	C	C	NO

Table 26: Study Area Intersection Operations - Horizon Year 2048 No BIG Baseline							
Intersection		Traffic Control	Peak Hour	Delay (a)	LOS (b)	LOS Threshold (c)	In CMP? (d)
15	Main Street & SR 58 Eastbound Ramps	Signal	AM	8.9	A	D	NO
			PM	6.0	A	D	NO
16	Main Street & SR 58 Westbound Ramps	Signal	AM	12.0	B	D	NO
			PM	13.2	B	D	NO
17	Lenwood Road & Love's Travel Stop Driveway	Two-Way Stop	AM	19.1	C	C	NO
			PM	30.1	**D**	C	NO
18	Lenwood Road & High Desert Road	Two-Way Stop	AM	22.2	C	C	NO
			PM	32.6	**D**	C	NO
19	Lenwood Rd & Chevron Driveway	Two-Way Stop	AM	30.7	**D**	C	NO
			PM	40.9	**E**	C	NO
20	Lenwood Road & Commerce Parkway	Signal	AM	26.4	C	C	NO
			PM	30.2	C	C	NO
21	Lenwood Road & I-15 Southbound Ramp	Signal	AM	16.4	B	D	NO
			PM	21.4	C	D	NO
22	Lenwood Road & I-15 Northbound Ramp	Signal	AM	13.8	B	D	NO
			PM	21.6	C	D	NO
23	Lenwood Road & Jasper Road/Lenwood Road Driveway	Two-Way Stop	AM	14.0	B	C	NO
			PM	17.9	C	C	NO
24	Lenwood Road & Camino Del Sol	One-Way Stop	AM	13.4	B	C	NO
			PM	13.8	B	C	NO
25	Lenwood Road & Agate Road	Two-Way Stop	AM	9.3	A	C	NO
			PM	10.6	B	C	NO
26	Lenwood Road & Community Blvd	Two-Way Stop	AM	10.0	B	C	NO
			PM	11.0	B	C	NO
27	Lenwood Road & SR 58 Eastbound Ramps	All-Way Stop	AM	7.6	A	D	NO
			PM	7.9	A	D	NO
28	Lenwood Road & SR 58 Westbound Ramps	All-Way Stop	AM	7.3	A	D	NO
			PM	7.7	A	D	NO

Table 26: Study Area Intersection Operations - Horizon Year 2048 No BIG Baseline							
Intersection		**Traffic Control**	**Peak Hour**	**Delay (a)**	**LOS (b)**	**LOS Threshold (c)**	**In CMP? (d)**
29	Main Street & L Street	Signal	AM	15.8	B	D	YES
			PM	27.9	C	D	YES
30	Main Street & Avenue H	Signal	AM	7.5	A	D	YES
			PM	7.5	A	D	YES
31	Main Street & Avenue A	Signal	AM	5.2	A	D	YES
			PM	6.0	A	D	YES
32	Main Street & 1st Avenue	Signal	AM	22.7	C	D	YES
			PM	27.0	C	D	YES
33	Main Street & Barstow Road	Signal	AM	9.0	A	D	YES
			PM	11.8	B	D	YES
34	Barstow Road & Virginia Way	Signal	AM	15.6	B	C	YES
			PM	25.1	C	C	YES
35	Barstow Road & I-15 Southbound Ramps	Signal	AM	12.7	B	D	YES
			PM	41.3	D	D	YES
36	Barstow Road & I-15 Northbound Ramps	Signal	AM	18.4	B	D	YES
			PM	38.0	D	D	YES
37	Barstow Road & Armory Road	Signal	AM	23.6	C	C	YES
			PM	74.2	**E**	C	YES
38	Barstow Road & Rimrock Road	Signal	AM	8.8	A	C	YES
			PM	12.9	B	C	YES
39	Hinkley Road & Roadrunner Road	DNE					
40	Main Street & Elks Lane	One-Way Stop	AM	10.0	A	C	NO
			PM	10.5	B	C	NO
41	Hinkley Road & Jiggs Road/A Street	DNE					
42	Hinkley Road & B Street	DNE					

Table 26: Study Area Intersection Operations - Horizon Year 2048 No BIG Baseline							
Intersection		**Traffic Control**	**Peak Hour**	**Delay (a)**	**LOS (b)**	**LOS Threshold (c)**	**In CMP? (d)**
43	Hinkley Road & C Street	DNE					
44	Hinkley Road & Roadrunner Road	DNE					

Note:
Bold values indicate intersections operating below the LOS Threshold
ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.
DNE = Does Not Exist under this scenario and proposed as BIG Transportation Improvement.
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 7th Edition and performed using Synchro 12
(c) The LOS Threshold represents the acceptable LOS for the intersection. All City (non-downtown) and County intersections within the study area are considered to operate acceptably at LOS C or better, consistent with City LOS criteria and the County TIS Guidelines. All downtown City intersections are considered to operate acceptably at LOS D or better. All Caltrans intersections located at freeway interchanges are considered to operate acceptably at LOS D or better.
(d) Notes if the intersection is part of the San Bernardino Congestion Management Program (CMP) network, per the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority 2016). The CMP states that for the CMP roadway system, intersections are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP intersections located within the Downtown area of City and LOS C is considered acceptable for CMP intersections outside the Downtown area.
(e) Intersection removed by BIG due to Hinkley Road vacation.

Sources: *Author Compilation.* (2025)

Table 27: Study Area Roadway Segment Operations - Horizon Year 2048 No BIG Baseline								
Roadway	**Segment**	**Acceptable LOS E Capacity[3]**	**Horizon Year 2048 No BIG Baseline**				**Jurisdiction**	**In CMP[1]?**
			ADT (PCE)	**V/C**	**LOS**	**Acceptable LOS Threshold**		
Main Street	1. Hinkley Road to Country Club Drive	14,300	16,112	1.127	**E**	D	City/County[2]	No
	2. Country Club Drive to Lenwood Road	14,300	12,315	0.861	D	D	City	No
	3. Lenwood Road to County/City Boundary	16,400	9,093	0.554	C or Better	C	County	No
	4. County/City Boundary to SR 58 Eastbound Ramps	30,200	9,093	0.301	C or Better	D	City	No
	5. SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	30,200	7,588	0.251	C or Better	D	Caltrans	No
	6. SR 58 Westbound Ramps to L Street	30,200	8,051	0.267	C or Better	D	City	No
	7. L Street to Avenue A	30,200	14,036	0.465	C or Better	D	City	Yes
	8. Avenue A to Barstow Road	30,200	13,203	0.437	C or Better	D	City	Yes
Barstow Road	9. Main Street to I-15 Southbound Ramps	22,300	15,192	0.681	D	D	City	Yes
	10. I-15 Southbound Ramps to I-15 Northbound Ramps	30,200	18,928	0.627	D	D	Caltrans	Yes
	11. I-15 Northbound ramps to Rimrock Road	30,200	23,441	0.776	D	D	City	Yes
Lenwood Road	12. SR 58 Westbound Ramps to Community Boulevard	7,000	919	0.131	C or Better	C	County	No
	13. Community Boulevard to Agate Road	7,000	422	0.060	C or Better	C	County	No
	14. Agate Road to Jasper Road	7,000	6,028	0.861	C or Better	C	County	No
	15. Jasper Road to Main Street	30,200	7,274	0.241	C or Better	D	City	No
	16. Main Street to High Desert Road	14,300	19,317	1.351	**F**	D	City	No
	17. High Desert Road to I-15 Southbound Off Ramp	30,200	30,431	1.008	**E**	D	City	No
	18. I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	30,200	23,620	0.782	D	D	Caltrans	No
Hinkley Road	19. SR 58 Westbound Ramp to Jiggs Road	7,000	344	0.049	C or Better	C	County	No
	20. Jiggs Road to Main Street	7,000	DNE	DNE	DNE	D	City	No
	21. East of Jiggs Road	30,200	DNE	DNE	DNE	D	City	No
	22. East of Jiggs Road to West of B Street	30,200	DNE	DNE	DNE	D	City	No
	23. West of B Street	30,200	DNE	DNE	DNE	D	City	No
	24. Between B Street and C Street	30,200	DNE	DNE	DNE	D	City	No
	25. C Street to Lenwood Road	30,200	DNE	DNE	DNE	D	City	No

Table 27: Study Area Roadway Segment Operations - Horizon Year 2048 No BIG Baseline								
Roadway	**Segment**	**Acceptable LOS E Capacity[3]**	**Horizon Year 2048 No BIG Baseline**				**Jurisdiction**	**In CMP[1]?**
			ADT (PCE)	**V/C**	**LOS**	**Acceptable LOS Threshold**		
C Street	26. North of Hinkley Road to F Street	30,200	DNE	DNE	DNE	D	City	No
F Street	27. East of C Street	30,200	DNE	DNE	DNE	D	City	No

[1]Notes if the roadway segment is part of the San Bernardino Congestion Management Program (CMP) network per the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority, 2016). The CMP states that for the CMP roadway system, roadway segments are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP roadways segments located within the City, consistent with non-CMP roadway segments located within the City.
[2]Roadway segment is currently under County jurisdiction but would be annexed into the City as part of the proposed General Plan, thus, is analyzed according to City standards.
[3]The Acceptable LOS Capacity represents the acceptable LOS for the roadway segment. All County roadway segments within the study area are considered to operate acceptably at LOS C or better, consistent with the County TIS Guidelines. All City roadway segments within the study area are considered to operate acceptably at LOS D or better, consistent with the recommendations in the City of Barstow proposed General Plan. All Caltrans roadway segments within the study area are considered to operate acceptably at LOS D or better.
[4]Roadway segment would be closed upon completion of BIG. Since BIG is incorporated into the proposed General Plan, the San Bernardino Transportation Analysis Model (SBTAM) does not include this roadway segment. Therefore, 2028 Opening Year No BIG Baseline volumes are unavailable for this roadway segment. **Bolded** values indicate segment with LOS exceeding the acceptable LOS threshold.
ADT = average daily traffic
I = Interstate
LOS = level of service
SR = State Route
V/C = volume-to-capacity ratio
DNE = Does Not Exist under this scenario and proposed as BIG Transportation Improvement.

Sources: Author Compilation. (2025)

5.0 PLUS BIG CONDITIONS

5.1 Introduction

Plus BIG transportation conditions were assessed using LOS based methodologies to determine consistency with applicable LOS standards. Where LOS analysis determined deficiencies, TMs were identified, if feasible, and recommended for consistency with applicable LOS criteria. **Section 6.0 Plus BIG Transportation Modifications** discusses the proposed TMs and the resulting LOS.

The following section includes a description of the proposed Plus BIG transportation network and operations analysis of the following transportation facilities:

- Intersections
- roadway segments

This section also includes a summary of BIG's proposed transportation improvements, access analysis, and circulation within the BIG Specific Plan area.

5.2 BIG Transportation Improvements

The improvements listed below and depicted on **Figure 4: BIG Transportation Modification Details** and **Figure 5: Main Street at Lenwood Channel Bridge Reconstruction - BIG** are BIG circulation improvements that BIG proposes and are included in the analysis of Plus BIG conditions:

- **Hinkley Road.** BIG would vacate Hinkley Road between the south side of the Mojave River bridge crossing and Main Street, closing the existing at-grade rail crossing. BIG proposes to realign Hinkley Road to run east-west through the transload warehouse center from Jiggs Road to the intersection of Lenwood Road with Jasper Road. BIG proposes to reconstruct the existing Hinkley Road bridge over the Mojave River to conform to current federal and State standards. BIG also proposes to construct a bridge for the proposed Hinkley Road to cross the Lenwood Channel.
- **Transload Warehouse Center Access (from Lenwood Road).** Transload warehouse center employees and heavy-duty trucks[23] would enter BIG from the proposed Hinkley Road/Jasper Road/Lenwood Road intersection. To facilitate access to the proposed transload warehouse center, BIG proposes to install a traffic signal, roadway widening, and restriping at the proposed Hinkley Road/Jasper Road/Lenwood Road intersection, as depicted in **Figure 4: BIG Transportation Modification Details**. Signalization is warranted under Opening Year (2028), Interim Year (2033), and Horizon Year (2048) conditions. It is recommended that the intersection be signalized under 2028 conditions. Traffic signal warrant analysis is included in **Appendix L: Traffic Signal Warrant Analysis**.
- **Rail Yard Access (from Main Street).** Rail yard employees and heavy-duty trucks would access the rail yard from a new driveway proposed on Main Street across from Country Club Drive. Rail yard employees would enter an employee parking lot near the proposed rail yard administration buildings. Heavy-duty trucks dropping off or picking up containers at the IMF would enter through a gate system into the IMF. To facilitate access to the proposed rail yard, BIG proposes to install a traffic signal,

[23] "Heavy-duty trucks" (also referred to as "trucks" in this document) are conventional highway trucks that travel on public roads and carry containers intra- and inter-state. As used in this document, the terms "heavy-duty trucks" and "trucks" do not include electric hostlers that are proposed to run on internal roads within the BIG Specific Plan area.

roadway widening, and restriping at the intersection, as depicted in **Figure 4: BIG Transportation Modification Details**. Signalization is not warranted under Opening Year (2028) conditions, but meets the criteria for signalization under Interim Year (2033) and Horizon Year (2048) conditions. It is recommended that the intersection be signalized under 2028 conditions. Traffic signal warrant analysis is included in **Appendix L: Traffic Signal Warrant Analysis.**

- **Main Street Roadway Widening/Lenwood Channel Bridge.** Main Street would be widened from two lanes to four lanes for approximately 0.5-mile east of Country Club Drive, resulting in a consistent four-lane roadway width through Barstow. Additionally, the existing two-lane Main Street over Lenwood Channel low water crossing would be replaced with a new four-lane bridge that accommodates the 100-year flood condition. Main Street would be raised over Lenwood channel, modifying the vertical alignment of Main Street for approximately 0.8-mile. A temporary bypass would be constructed to facilitate the Main Street at Lenwood Channel bridge reconstruction, as shown on **Figure 5: Main Street at Lenwood Channel Bridge Reconstruction - BIG**. The temporary bypass would include private driveways for nearby residences and would be open for the approximately 18-month bridge reconstruction period.
- **Country Club Drive**: Country Club Drive would be widened along the solar farm frontage for approximately 400 feet to the proposed realignment of Sweeten Lane. A new stop-controlled intersection is proposed at the Country Club Drive at Sweeten Lane intersection.
- **Jiggs Road.** BIG proposes to realign Jiggs Road north of its existing location from Hinkley Road to the western limit of the BIG footprint (between Holcomb Ranch Road and Indian Trail). The Jiggs Road realignment would maintain access to the adjacent land uses and emergency access. Consistent with existing conditions, traffic volumes on the realigned Jiggs Road are expected to be minimal.
- **Sweeten Lane**: Sweeten Lane would be vacated and realigned to eliminate the existing unimproved intersection with Main Street. A new paved access will extend from Country Club east approximately 1,000 and connect to the unimproved Sweeten Lane.

Public and private roadways within the BIG Specific Plan area are depicted in **Figure 1: On-Site Circulation Improvements** and discussed in detail within the BIG Specific Plan. The proposed off-site TMs are identified in **Figure 3: BIG Transportation Modifications**.

5.3 BIG Trip Generation and Distribution

BIG Trip Generation

BIG trip generation is summarized in **Table 28: BIG Trip Generation – Opening Year 2028 Total, Table 29: BIG Trip Generation – Interim Year 2033 Total**, and **Table 30: BIG Trip Generation – Horizon Year 2048 Total** for Opening Year 2028, Interim Year 2033, and Horizon Year 2048 conditions, respectively, and discussed in more detail in the following sections. As indicated in these tables, BIG is forecast to generate approximately 10,213 ADT (PCE) in Opening Year 2028, approximately 13,172 ADT (PCE) in Interim Year 2033, and approximately 15,268 ADT (PCE) in Horizon Year 2048. Additional discussion on BIG's forecast trip generation is included in the following sections. Detailed trip generation calculations are included in **Appendix H: Detailed Trip Generation**.

Table 28: BIG Trip Generation – Opening Year 2028 Total								
Land Use	**Trip Type**	**ADT[1]**	**AM Peak Hour[2] Trips**			**PM Peak Hour[3] Trips**		
			In	**Out**	**Total**	**In**	**Out**	**Total**
Transload Warehouse Center	Employee Trips	6,962	306	48	354	137	394	531
	Heavy-Duty Truck Trips	195	9	9	18	4	5	9
	Truck Trips (PCE[4])	*488*	*23*	*23*	*45*	*10*	*13*	*23*
Rail Yard (i.e., Intermodal Facility & Block Swap Yard)	Employee Trips	1,765	133	132	265	133	132	265
	Heavy-Duty Truck Trips	*399*	12	8	20	10	6	16
	Truck Trips (PCE)	*998*	*30*	*20*	*50*	*25*	*15*	*40*
2028 Total BIG Trips (PCE)		**10,213**	**492**	**223**	**714**	**305**	**554**	**859**

Notes:
[1]ADT = Average Daily Traffic
[2]AM Peak Hour = hour of highest traffic between 7am and 9am
[3]PM Peak Hour = hour of highest traffic between 4pm and 6pm
[4]PCE = passenger car equivalent

Sources:
- *ITE Land Use 154 (High Cube Transload and Short-Term Storage Warehouse)*
- *BNSF. (2025).*
- *Author Compilation.* (2025).

Table 29: BIG Trip Generation – Interim Year 2033 Total								
Land Use	**Trip Type**	**ADT[1]**	**AM Peak Hour[2] Trips**			**PM Peak Hour[3] Trips**		
			In	**Out**	**Total**	**In**	**Out**	**Total**
Transload Warehouse Center	Employee Trips	9,204	404	64	468	182	520	702
	Heavy-Duty Truck Trips	258	11	12	23	6	6	12
	Truck Trips (PCE[4])	645	28	30	58	15	15	30
Rail Yard (i.e., Intermodal Facility & Block Swap Yard)	Employee Trips	2,085	157	156	313	157	156	313
	Heavy-Duty Truck Trips	495	15	10	25	12	8	20
	Truck Trips (PCE)	1,238	38	25	63	30	20	50
2033 Total BIG Trips (PCE)		**13,172**	**627**	**275**	**902**	**384**	**711**	**1,095**

Notes:
[1]ADT = Average Daily Traffic
[2]AM Peak Hour = hour of highest traffic between 7am and 9am
[3]PM Peak Hour = hour of highest traffic between 4pm and 6pm
[4]PCE = passenger car equivalent

Sources:
- *ITE Land Use 154 (High Cube Transload and Short-Term Storage Warehouse)*
- *BNSF, 2025*
- *Author Compilation, 2025*

Table 30: BIG Trip Generation – Horizon Year 2048 Total								
Land Use	**Trip Type**	**ADT[1]**	**AM Peak Hour Trips**			**PM Peak Hour Trips**		
			In	**Out**	**Total**	**In**	**Out**	**Total**
Transload Warehouse Center	Employee Trips	10,620	466	74	540	210	600	810
	Heavy-Duty Truck Trips	299	13	14	27	7	7	14
	Truck Trips (PCE[2])	748	33	35	68	18	18	35
Rail Yard (Intermodal Facility & Block Swap Yard)	Employee Trips	2,325	175	174	349	175	174	349
	Heavy-Duty Truck Trips	630	19	13	32	15	10	25
	Truck Trips (PCE)	1,575	48	33	80	38	25	63
2048 Total BIG Trips (PCE)		**15,268**	**722**	**316**	**1,037**	**441**	**817**	**1,257**

Notes:
[1]ADT = Average Daily Traffic
[2]AM Peak Hour = hour of highest traffic between 7am and 9am
[3]PM Peak Hour = hour of highest traffic between 4pm and 6pm
[4]PCE = passenger car equivalent

Sources:
- *ITE Land Use 154 (High Cube Transload and Short-Term Storage Warehouse)*
- *BNSF. (2025).*
- *Author Compilation (2025).*

BIG IMF Cross-Dock Intermodal Operations

BIG's IMF would include two types of operations, "cross-dock intermodal" and "other." Most of the containers arriving at BIG's IMF would do so by train via its unique cross-dock intermodal operation, in which containers would be loaded directly onto trains on-dock at the Ports and transported by train (not by heavy-duty trucks) to BIG's IMF. From BIG's IMF, containers would be transported by electric hostlers on internal private roads, entirely within the BIG Specific Plan area, for transloading into new containers at the proposed transload warehouse center. Under the cross-dock intermodal operation, the transloaded containers would then be returned to the IMF via electric hostlers, again on private roads entirely within the BIG Specific Plan area, for placement on outbound trains. Because of this cross-dock intermodal operation and the use of internal electric hostlers, the IMF would generate very few heavy-duty trucks compared to a traditional IMF, as discussed in the following paragraphs. The "other" operations refer to a small percentage of other intermodal operations bringing containers from other BNSF facilities to BIG for processing to reduce travel distance/travel time due to traffic conditions that the container would otherwise experience coming to/from other destinations. These operations account for the small percentage of truck trips generated by the BIG IMF.

Electric Hostler Trips

The BIG IMF's primary purpose would be to transfer containers between railcars and electric hostlers for cross-dock movements at the adjacent proposed transload warehouse center, and vice versa. The electric hostlers would be used to transport containers within the rail yard, and between the rail yard and transload warehouse center. The electric hostlers would not use public roadways outside the BIG Specific Plan area; instead, they would drive on private roads between the IMF and the transload warehouse

center; see **Figure 1: On-Site Circulation Improvements**. BIG's proposed operations differ from the operations at a traditional IMF where the primary purpose is to transfer containers from heavy-duty trucks to railcars, and vice versa.

Since only public roadways are analyzed for consistency with applicable LOS criteria, electric hostler trips are not applicable to the LOS analysis discussed in this report. Therefore, electric hostler trips were excluded from trip generation and resulting analysis discussed in this LOS Assessment.

BIG IMF "Other" Operations

BIG is largely a rail project that would increase and improve goods movement by rail, with the vast majority of containers arriving at/departing from BIG's IMF via train, as described above. However, a small percentage of containers would arrive at BIG's IMF and transload warehouse center via heavy-duty truck due to container origins/destinations, time restrictions, or priority. BNSF provided data regarding the anticipated number of containers that would be transported to and from BIG via heavy-duty truck and rail. **Figure 34: BIG Heavy-Duty Truck and Rail Volumes** illustrates the estimated container volumes by heavy-duty truck and rail for Opening Year 2028, Interim Year 2033, and Horizon Year 2048.

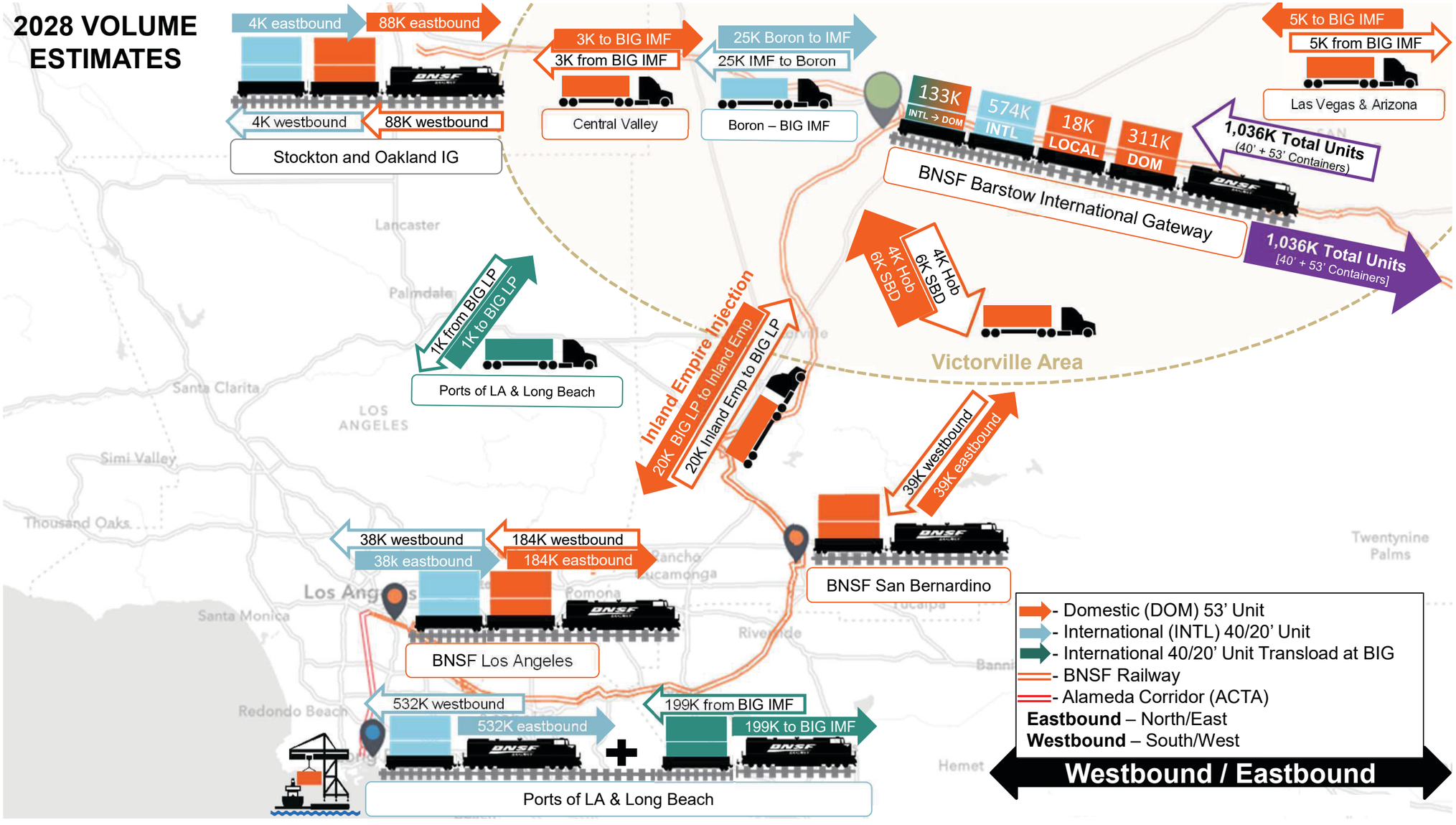


Figure 34: BIG Heavy-Duty Truck and Rail Volumes
Opening Year 2028

Source: BNSF

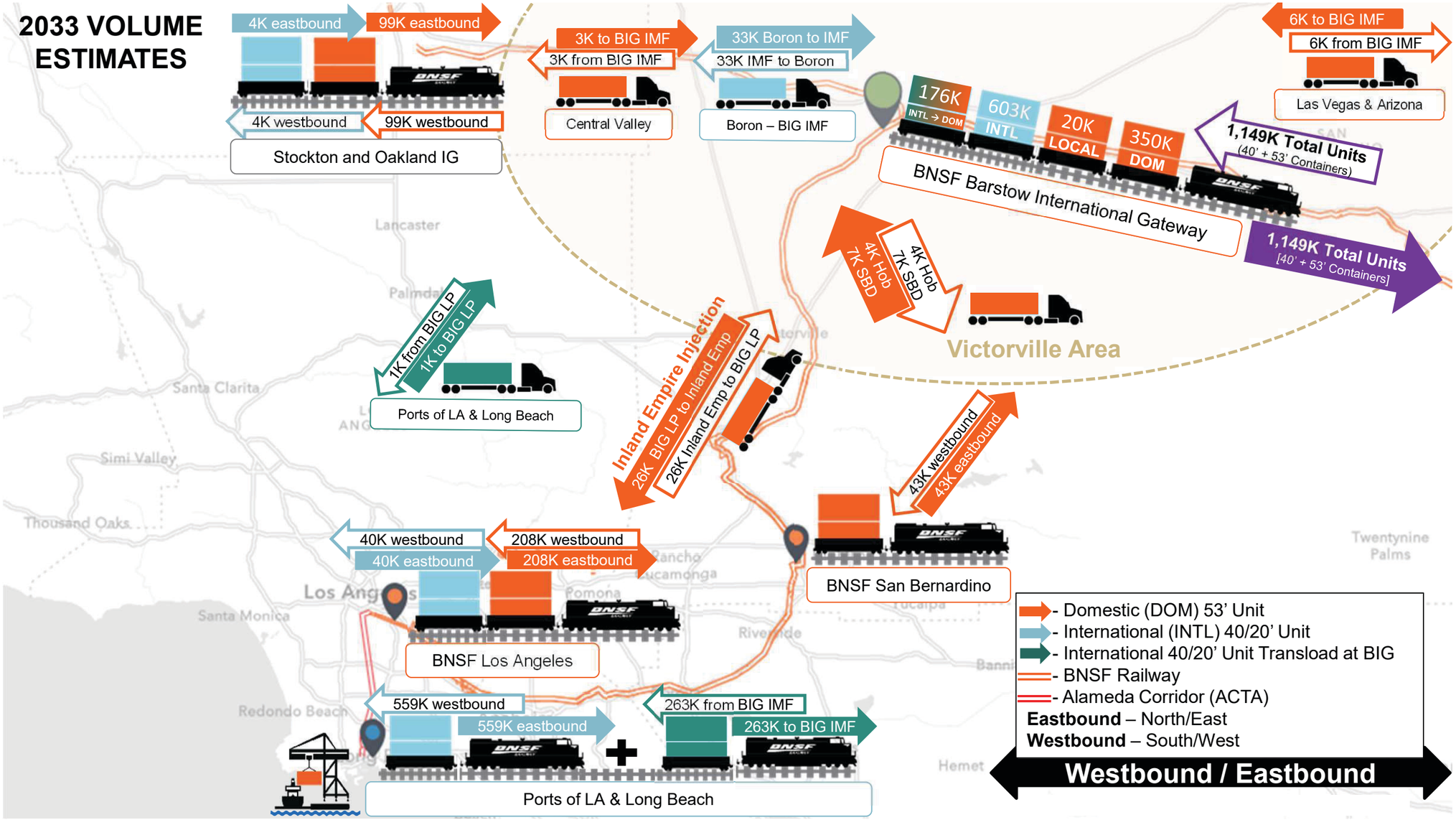


Figure 34: BIG Heavy-Duty Truck and Rail Volumes
Interim Year 2033

Source: BNSF

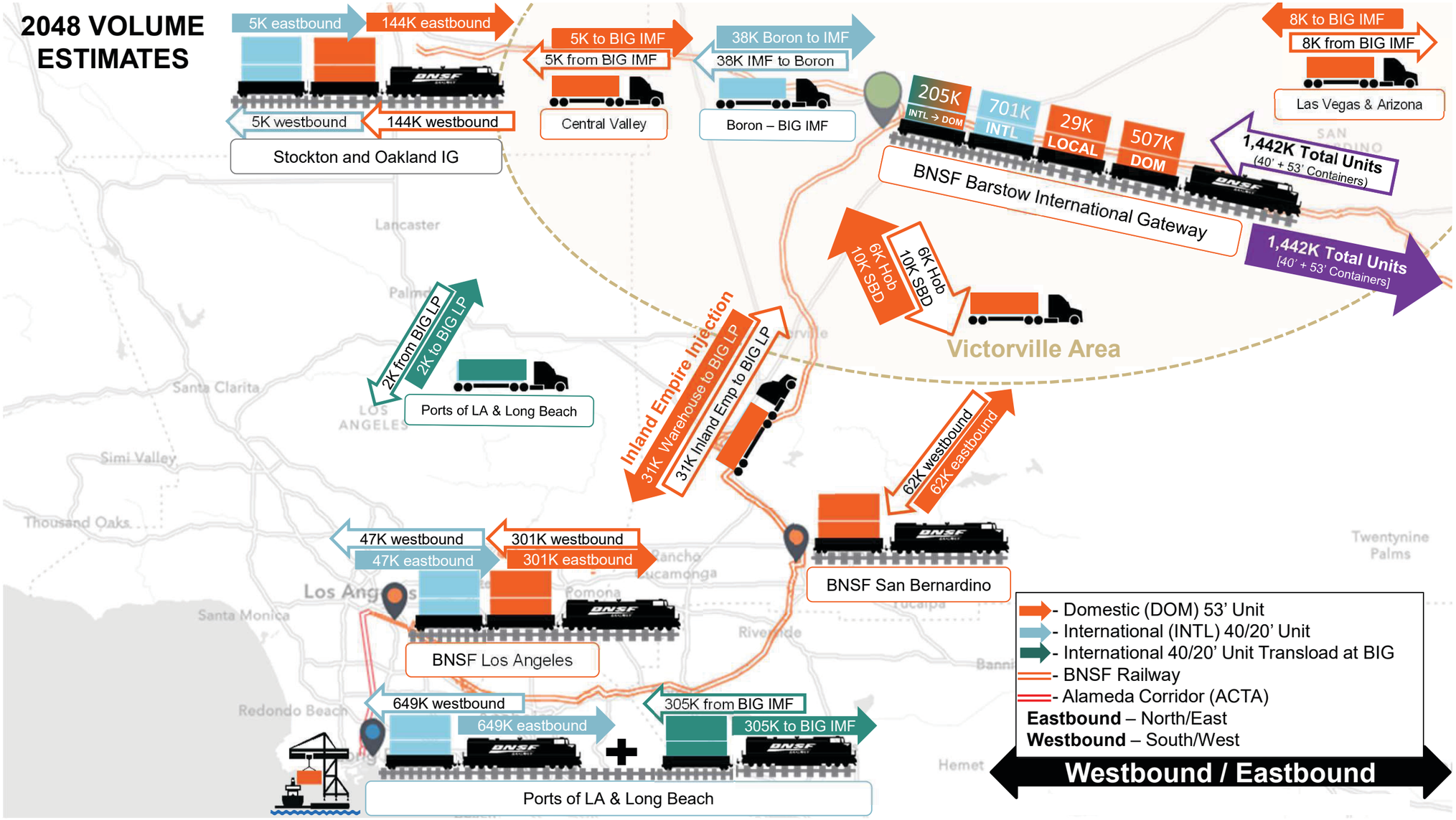


Figure 34: BIG Heavy-Duty Truck and Rail Volumes
Horizon Year 2048

Source: BNSF

In BIG's IMF operations, a small percentage of containers would arrive at the IMF via heavy-duty truck since this mode would reduce the travel distance and/or travel time for a small percentage of the potential service locations. For example, under current conditions, a container coming from Las Vegas would travel by heavy-duty truck through Barstow to BNSF's San Bernardino or Hobart/Commerce Yard IMFs and then be transferred to a train for transport by rail to its destination. With BIG, that container would stop short at the proposed IMF rather than continuing to the San Bernardino or Hobart/Commerce IMFs. Like operations at a traditional IMF, containers arriving at the BIG IMF via heavy-duty trucks would be transferred from a heavy-duty truck to a rail car and transported by rail to their final destinations (and vice versa).

BIG's IMF heavy-duty truck trip generation is based on data provided by BNSF that considers market conditions, market forecasts, and the BIG IMF's processing capacity. It is assumed that in its secondary/other function (i.e., non-cross-dock function), the BIG IMF would only process intermodal freight which under current conditions is being processed at BNSF's San Bernardino or Hobart/Commerce IMFs. These heavy-duty truck trips already exist within the broader Southern California roadway network, but they would be rerouted to BIG; therefore, they are included in BIG's trip generation. With BIG's implementation, these containers would be processed at BIG's IMF instead of at BNSF's San Bernardino or Hobart/Commerce IMFs (as under current conditions) because BIG is closer to the container origins/destinations, or because travel distances are about the same but traveling to BIG would be the fastest route to an IMF due to traffic conditions, compared to traveling through the greater LA area to the San Bernardino or Hobart/Commerce IMFs. Based on existing market data, it is assumed that most containers processed at BIG's IMF would originate at/be destined for the Central Valley, Las Vegas, and High Desert areas.

For IMF heavy-duty truck trips, the analysis assumes three truck trips per container, equivalent to approximately 50 percent of trucks leaving with a container after a drop-off, to account for empty container balancing. Additionally, a conservative 13 percent monthly variation surcharge (increase in truck trips) was added to consider potential monthly variation in goods movement, based on BNSF's observed data regarding other southern California IMFs. IMF heavy-duty truck trips were converted to PCE per the County TIS Guidelines (County of San Bernardino, 2019) and the PCE values noted in the San Bernardino County Congestion Management Program 2016 Update (San Bernardino County Transportation Authority, 2016). The IMF heavy-duty truck activity is anticipated to be approximately 50 percent 3-axel trucks and 50 percent 4-axel trucks, based on data collected at the Hobart IMF, included in **Appendix I: Hobart Yard Data**. The San Bernardino County CMP lists PCE factors of 2.0 for 3-axel trucks and 3.0 for 4-axel trucks, which generates a 2.5 PCE factor for the IMF truck activity. **Table 31: Heavy-Duty Truck Assumptions for Intermodal Facility Trip Generation** summarizes the assumptions for BIG's IMF heavy-duty truck trip generation.

Table 31: Heavy-Duty Truck Assumptions for Intermodal Facility Trip Generation

Variable	Value	Unit	Notes
Working days per year	365	days / year	Provided by BNSF.
Monthly variation surcharge (increase in IMF heavy-duty truck trips)	13.0%	Increase in heavy-duty truck trips	Analysis assumes containers processed are spread evenly throughout the year, then apply a 13% surcharge to the daily units to account for potential seasonal

Table 31: Heavy-Duty Truck Assumptions for Intermodal Facility Trip Generation			
Variable	**Value**	**Unit**	**Notes**
			surges. This is the most conservative assumption based on BNSF data from four southern California hubs.
Domestic revenue containers delivered by heavy-duty truck originating from/destined to all destinations (2028)	43,000	containers / year	Provided by BNSF.
• *Domestic revenue containers originating from/destined to regional destinations (2028)*	*25,000*	containers / year	
• *Domestic revenue containers originating from/destined to the Victorville area (2028)*	*10,000*	containers / year	
• *Domestic revenue containers originating from/destined to the Central Valley (2028)*	*3,000*	containers / year	
• *Domestic revenue containers originating from/destined to Las Vegas and Arizona (2028)*	*5,000*	containers / year	
Domestic revenue containers delivered by heavy-duty truck originating from/destined to all destinations (2048)	53,400	containers / year	Provided by BNSF.
• *Domestic revenue containers originating from/destined to regional destinations (2033)*	*33,100*	containers / year	
• *Domestic revenue containers originating from/destined to the Victorville area (2033)*	*11,300*	containers / year	
• *Domestic revenue containers originating from/destined to the Central Valley (2033)*	*3,400*	containers / year	
• *Domestic revenue containers originating from/destined to Las Vegas and Arizona (2033)*	*5,600*	containers / year	
Domestic revenue containers delivered by heavy-duty truck originating from/destined to all destinations (2048)	67,900	containers / year	
• *Domestic revenue containers originating from/destined to regional destinations (2048)*	*38,400*	containers / year	
• *Domestic revenue containers originating from/destined to the Victorville area (2048)*	*16,400*	containers / year	
• *Domestic revenue containers*	*4,900*	containers /	

Table 31: Heavy-Duty Truck Assumptions for Intermodal Facility Trip Generation			
Variable	**Value**	**Unit**	**Notes**
originating from/destined to the Central Valley (2048)		year	
• *Domestic revenue containers originating from/destined to Las Vegas and Arizona (2048)*	*8,200*	containers / year	
Heavy-Duty truck trips per revenue container	3	trips / container	Analysis assumes 3 heavy-duty truck trips per unit to account for balancing empties – about 50% of trucks would leave with a container after they drop off a container
Percent of heavy-duty truck trips in AM peak hour	5.0%	peak trips / daily trips	Values were determined based on data provided by BNSF, observed Hobart/Commerce Yard IMF heavy-duty truck activity, and ITE Land Use Code 150 (Warehousing) trip generation data. It is assumed that more heavy-duty trucks would access the BIG site during peak hours than currently access the Hobart/Commerce Yard IMF (approximately 2-3%) due to the rural location and Los Angeles basin traffic conditions. Therefore, a higher percentage of trips is assumed in the peak hours than is observed at the Hobart/Commerce Yard IMFs. Additionally, 60% in and 40% out is assumed during both peak hours based on ITE Land Use Code 150 (Warehousing) trip generation data.
Percent of heavy-duty truck trips in PM peak hour	4.0%	peak trips / daily trips	
Passenger car equivalent	2.5	PCE	Intermodal facility heavy-duty truck trips are converted to passenger car equivalents (PCE) per County TIS Guidelines and the PCE values noted in the San Bernardino County Congestion Management Program 2016 Update (CMP) (San Bernardino County Transportation Authority, 2016). Analysis assumes an equal mix of three-axle (PCE=2.0) and four-axle (PCE=3.0) trucks based on observed Hobart Yard IMF data. See **Appendix I: Hobart Yard Data**.

Transload Warehouse Center Heavy-Duty Truck Trips[24]

The transload warehouse center heavy-duty truck trip generation is similar to the IMF's heavy-duty truck trip generation in that the center's heavy-duty truck trips are far less than those of a traditional transload warehouse, and it is also based on data provided by BNSF and considers market conditions and forecasts. Most of the containers processed at BIG's transload warehouse center would arrive/depart via rail and be transported to/from the transload warehouse center by electric hostlers on private roadways, never utilizing a heavy-duty truck or public roadway. As such, the trips associated with the electric hostlers are not included in the trip generation for the transload warehouse center. Because of BIG's cross-dock intermodal operation, the transload warehouse center would generate very few heavy-duty trucks compared to traditional warehouses.

However, a small percentage of heavy-duty trucks would access the transload warehouse center to deliver containers to/from the Ports. These trips are the source of the transload warehouse center's heavy-duty truck trip generation. The primary reason a container would arrive at the transload warehouse center from the Ports via heavy-duty truck instead of by rail/electric hostler would be due to time restrictions/priority of that container. A conservative monthly variation surcharge (increase in truck trips) was added to the transload warehouse center heavy-duty truck trips to consider monthly variation in goods movement. It is also assumed that approximately one-half of the heavy-duty trucks dropping off full 20- or 40-foot containers at the transload warehouse center would leave with no container, while the other half would leave with an empty 20- or 40-foot container, for an average of three heavy-duty truck trips per trucked transload warehouse center revenue container. All international 20-foot and 40-foot transload warehouse center heavy-duty trucks are expected to originate at or be destined for the Ports.

Table 32: Heavy-Duty Truck Assumptions for Transload Warehouse Center Trip Generation summarizes the assumptions for the transload warehouse center heavy-duty truck trip generation.

Table 32: Heavy-Duty Truck Assumptions for Transload Warehouse Center Trip Generation

Variable	Value	Unit	Notes
Working days per year	365	days / year	Provided by BNSF.
Transload 20-foot and 40-foot international containers delivered by truck (2028)	1,000	containers / year	Provided by BNSF.
Transload 20-foot and 40-foot international containers delivered by truck (2033)	1,300	containers / year	Provided by BNSF.
Transload 20-foot and 40-foot international containers delivered by truck (2048)	1,500	containers / year	Provided by BNSF.
Transload 53-foot domestic containers delivered by truck (2028)	20,000	containers / year	Provided by BNSF.
Transload 53-foot domestic containers delivered by truck (2033)	26,500	containers / year	Provided by BNSF.
Transload 53-foot domestic containers delivered by truck (2048)	30,700	containers / year	Provided by BNSF.

[24] The term "transload warehouse center truck trips," as used in this report, refers exclusively to truck trips between the transload warehouse center and off-site points and does not include any internal electric hostler trips.

Table 32: Heavy-Duty Truck Assumptions for Transload Warehouse Center Trip Generation			
Variable	**Value**	**Unit**	**Notes**
Truck trips per revenue container	3.0	trips / container	Analysis assumes 3 truck trips per container – approximately 50% of trucks would leave with a container after they drop off a container.
Percent of truck trips in AM peak hour	9.1%	peak trips / daily trips	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse). 49% in and 51% out in AM peak hour.
Percent of truck trips in PM peak hour	4.5%	peak trips / daily trips	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse). 47% in and 53% out in PM peak hour.
Truck Seasonal Volume Surcharge	13.0%	N/A	Analysis assumes containers processed are spread evenly throughout the year, then apply a 13% surcharge to the daily units to account for potential seasonal surges. This is the most conservative assumption based on BNSF data from four southern California hubs.
Passenger car equivalent	2.5	PCE	Analysis assumes an equal mix of three-axle (PCE=2.0) and four-axle (PCE=3.0) trucks based on observed Hobart/Commerce Yard IMF data. See **Appendix I: Hobart Yard Data.**

Employee Trip Generation

Rail Yard Employee Trips

The rail yard employee trip generation was calculated based on estimated employee counts provided by BNSF. BIG's rail yard employee count includes IMF, block swap, and general rail yard function employees. The rail yard employee trip generation assumes 2.5 trips per day per employee, which includes one trip in, one trip out, and a few additional trips for appointments, lunch out, etc. that could occur over the course of a week. This is conservative given most rail yard employees are expected to stay on-site for their full shift, based on BNSF-provided employee trip data collected at the Hobart Yard IMF; see **Appendix I: Hobart Yard Data.** Additionally, the rail yard employee count and associated trip generation includes a buffer to account for additional miscellaneous trips to and from the rail yard, such as minor trips for locomotive refueling and other maintenance activities.

Based on shift data provided by BNSF from the Hobart Yard IMF, the yard would operate 24 hours daily and would require continuous staffing with three equal 8-hour employee shifts per day. While exact start times are subject to local and system craft agreements, production demand, and employee availability, employee shifts are forecast to have staggered start and end times spread out over a 2-hour period, such as the following pattern: first shift starts between 06:00-08:00, second shift starts between 14:00-16:00, and third shift starts between 22:00-23:59.

Since exact shift times may vary, the analysis conservatively assumes that shift changes would occur during both AM and PM peak hours. To calculate the number of employee trips that would occur during a peak hour, the analysis assumes one-third of employees would arrive and one-third of employees would depart during the shift change. Because the shift change would occur over two hours, it is assumed that half of these trips would occur during the peak hour. This value is divided by the average number of trips per employee per day, 2.5, to calculate the percentage of total rail yard employee trips would occur during the peak hour. To account for potential shift timing variations and other trips that may occur in the peak hours outside of typical operations, such as vendors or appointments, the percentage of total rail yard employee trips would occur during the peak hour is rounded up to 15 percent of the daily employee trips. Equation **1** provides an example calculation for the AM peak hour. A similar equation applies to the PM peak hour.

Equation 1: Equation for Percentage of Rail Yard Daily Employee Trips Occurring in AM Peak Hour

$$\%\ \boldsymbol{employee\ trips\ in\ AM\ peak\ hour} = \frac{(\%\ employees\ arriving\ for\ first\ shift + \%\ employees\ departing\ at\ first\ shift) * \frac{peak\ hour\ duration}{shift\ change\ duration}}{average\ number\ of\ trips\ per\ employee\ per\ day}$$

$$\mathbf{13.3\%} = \frac{(33.3\% + 33.3\%) * \frac{1\ hour}{2\ hours}}{2.5} \rightarrow \boldsymbol{Round\ up\ to}\ \mathbf{15\%}$$

Although general employee trip generation rates for the Hobart Yard IMF and the BIG rail yard would be similar, each site would have specific operations requiring different shifts. The shift data provided by BNSF to account for multiple shifts overlapping during the AM and PM peak hours was evaluated.

Table 33: Employee Assumptions for Rail Yard Trip Generation summarizes BIG rail yard employee trip generation assumptions.

Table 33: Employee Assumptions for Rail Yard Trip Generation

Variable	Value	Unit	Notes
Working days per year	365	days / year	Provided by BNSF.
Total 7-day employee count (2028)	857	employees / week	Provided by BNSF. Includes employees for the IMF, block swap, and other rail yard activities (train crews, maintenance employees, electric hostler drivers, shuttles etc.) required over a 7-day working week.
Total 7-day employee count (2033)	1,010	employees / week	
Total 7-day employee count (2048)	1,125	employees / week	
Daily employee count (2028)	706	employees / day	Provided by BNSF. Includes employees for the IMF, block swap, and other rail yard activities (train crews, maintenance employees, electric hostler drivers, shuttles etc.) required for a typical workday. This number of employees is used for purposes of estimating employee trip generation and analysis of the project's transportation effects. An additional 24, 27 and
Daily employee count (2033)	834	employees / day	

Table 33: Employee Assumptions for Rail Yard Trip Generation			
Variable	**Value**	**Unit**	**Notes**
Daily employee count (2048)	930	employees / day	30 employees are added to daily counts for 2028, 2033 and 2048 to account for instances when increased maintenance operations at the yard are necessary.
Trips per employee per day	2.5	trips / day	Includes one trip in, one trip out, and a small number of additional trips for appointments, lunch out, etc. Most employees are expected to stay on-site for their full shift.
Percent of employee trips in AM and PM peak hours	15%	peak trips / daily trips	Provided by BNSF. Analysis assumes three equal shifts per day, with each of the shift's start/end times staggered over a 2-hour period, as discussed above.

Transload Warehouse Center Employee Trips

Transload warehouse center employee trip generation is calculated using *ITE Trip Generation Manual 11th Edition* (ITE) (ITE, 2021) Land Use Code 154: High Cube Transload and Short-Term Storage Warehouse. **Appendix J: ITE Trip Generation** contains the ITE land use description and accompanying memo High-Cube Warehouse Vehicle Trip Generation Analysis (ITE, October 2016), which were referenced to confirm the land use code selection. The average trip rate was used for analysis, which provides daily trips per thousand square feet (KSF) of transload facility. ITE also provides an estimate of the number of heavy-duty truck trips per KSF of transload facility. These truck trips were subtracted from the average trip generation rate to determine the passenger car employee trip generation rate.

Table 34: Employee Assumptions for Transload Warehouse Center Trip Generation summarizes BIG transload warehouse center employee trip generation assumptions.

Table 34: Employee Assumptions for Transload Warehouse Center Trip Generation			
Variable	**Value**	**Unit**	**Notes**
Working days per year	365	days / year	Provided by BNSF.
Transload Warehouse Center occupied size (2028)	5,900	KSF	Provided by BNSF. Assumes that all 9,000 KSF would be built in 2028, but only a portion of that floor space would be operational. The operational warehouse size is adjusted proportionally based on the number of containers served in 2028 compared to 2048.
Transload Warehouse Center occupied size (2033)	7,800	KSF	Provided by BNSF. Assumes that all 9,000 KSF would be built in 2028, but only a portion of that floor space would be operational. The operational warehouse size is adjusted proportionally based on the number of containers served in 2033 compared to 2048.
Transload Warehouse Center occupied size (2048)	9,000	KSF	Provided by BNSF. Assumes all 9,000 KSF would be operational in 2048.
ITE Transload Warehouse Center vehicle trip generation rate	1.40	daily trips / KSF	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse) average trip

Table 34: Employee Assumptions for Transload Warehouse Center Trip Generation			
Variable	**Value**	**Unit**	**Notes**
			generation rate.
ITE Transload Warehouse Center heavy-duty truck trip generation rate (average)	0.22	daily trips / KSF	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse) average heavy-duty truck trip generation rate.
Estimated Transload Warehouse Center employee trip generation rate	1.18	daily trips / KSF	Analysis assumes ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse) average trip generation rate less heavy-duty truck trip generation rate.
Approximate number of employees (2028)	2,785	employees / day	Based on 2.5 trips per employee per day.
Approximate number of employees (2033)	3,682	employees / day	Based on 2.5 trips per employee per day.
Approximate number of employees (2048)	4,248	employees / day	Based on 2.5 trips per employee per day.
Percent of employee trips in AM peak hour	5.1%	peak trips / daily trips	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse). 86% in and 14% out in AM peak hour. Peak percentage and inbound / outbound splits calculated based on average trip generation rates less heavy-duty truck trip generation rate.
Percent of employee trips in PM peak hour	7.6%	peak trips / daily trips	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse). 26% in and 74% out in PM peak hour. Peak percentage and inbound / outbound splits calculated based on average trip generation rates less heavy-duty truck trip generation rate.
Notes: KSF = thousand square feet			

BIG Trip Distribution

Figure 35: BIG Overall Heavy-Duty Truck Traffic Distribution illustrates the overall heavy-duty truck trip distribution for all analysis scenarios. **Figure 36: BIG Overall Employee Traffic Distribution** illustrates the overall employee trip distributions for the Opening Year 2028 Plus BIG, Interim Year 2033 Plus BIG, and Horizon Year 2048 Plus BIG scenarios. Trip distribution methodology for rail yard employees, transload warehouse center employees, IMF heavy-duty trucks, and transload warehouse center heavy-duty trucks is described in more detail in the following sections.

Heavy-Duty Truck Trip Distribution

As discussed above, a small portion of the BIG IMF would operate similar to a traditional IMF in that it would process domestic intermodal containers arriving by heavy-duty truck, which without BIG, would be processed at BNSF's San Bernardino or Hobart/Commerce Yard IMFs or would be trucked to the Ports without being processed by an IMF at all. Origin/destination data from the Hobart/Commerce Yard IMFs was analyzed, and a trip distribution pattern was developed for the portion of the BIG IMF that would receive containers by truck, accounting for the roadway system serving the study area. Transload

warehouse center heavy-duty truck trip distribution was determined based on data provided by BNSF. All containers arriving at the BIG transload warehouse center via heavy-duty truck (i.e., those not arriving by rail/electric hostlers) are anticipated to originate at or be destined for the Ports.

Table 35: Truck Trip Distribution (All Scenarios) summarizes the heavy-duty truck trip distribution for all Plus BIG scenarios.

Table 35: Truck Trip Distribution (All Scenarios)		
Major Roadway/Freeway	**Rail Yard Distribution**	**Transload Distribution**
From I-15 South of BIG	23%	100%
From I-40/I-15 East of BIG	11%	0%
From SR 58 West of BIG	66%	0%
Total	**100%**	**100%**

Figure 37: BIG Heavy-Duty Truck Traffic Distribution illustrates the anticipated IMF and transload warehouse center heavy-duty truck trip distribution for all analysis scenarios. All IMF heavy-duty truck trips would access the IMF from Main Street at Country Club Drive, and all transload warehouse center heavy-duty truck trips would access the transload warehouse center from Lenwood Road at proposed Hinkley Road/Jasper Road.

Employee Trip Distribution

Employee trip distribution is expected to be similar for both the rail yard and transload warehouse center and was developed using the San Bernardino Transportation Analysis Model Plus (SBTAM+). SBTAM+ includes two analysis years: a base year condition of 2023 and a planning horizon year of 2050. The base year 2023 runs of SBTAM+ are referred to as "2023 SBTAM+," while the horizon year 2050 runs of SBTAM+ are referred to as "2050 SBTAM+." 2023 SBTAM+ reflects existing roadway and land use conditions. City roadway condition updates in the 2050 scenario include the BIG circulation improvements, which are described in further detail in **Section 5.2 BIG Transportation Improvements**. The first page of **Appendix D: SBTAM+ Data and Plots** depicts the City's sphere of influence traffic analysis zones (TAZs), which include the City limits, Lenwood, and adjacent areas.

To assess employee traffic patterns to and from the BIG Specific Plan area, SBTAM+ "select zone model runs" were conducted that included only passenger car traffic traveling to the TAZs that BIG would occupy. This process effectively filtered out all non-BIG traffic and isolated only traffic related to BIG employees. These select zone model runs were used to develop BIG employee traffic distributions. The 2023 SBTAM+ scenario does not include BIG, so the land uses in the parcels occupied by BIG in the "select zone model runs" were modified to match BIG's proposed conditions in the model runs that were used to develop Opening Year 2028 BIG employee trip distributions. The 2050 SBTAM+ was used to develop Horizon Year 2048 BIG employee trip distributions. Interim Year 2033 BIG employee trip distributions were estimated by averaging the Opening Year 2028 and Horizon Year 2048 BIG employee trip distributions. These model-based distributions were refined based on freeway access, roadway configurations, travel-time estimates, and expected travel patterns from the most populated surrounding areas. Plots of the SBTAM+ distributions, calculations, and notes related to trip distribution refinements are included in **Appendix D: SBTAM+ Data and Plots**. More substantial trip distribution changes were made near the BIG Specific Plan

area as a result of the following site access patterns, which are not reflected in SBTAM+: rail yard employees would access the rail yard from the proposed Main Street driveway; and transload warehouse center employees would access the warehousing from the proposed Hinkley Road extension.

The forecast Opening Year 2028 employee trip distribution, forecast Interim Year 2033 employee trip distribution, and the forecast Horizon Year 2048 employee trip distribution are presented in **Table 36: Employee Trip Distribution Directions**.

Table 36: Employee Trip Distribution Directions

Major Roadway/Freeway	Opening Year (2028) Distributions	Interim Year (2033) Distributions	Horizon Year (2048) Distributions
State Route 58	2%	1.5%	1%
Interstate 15 South of Barstow	21%	19%	17%
State Route 247	1%	1%	1%
Interstate 40	3%	3%	3%
Interstate 15 East of Barstow	4%	3.5%	3%
Main St West of Site	4%	4%	4%
Lenwood Road North of Barstow	5%	4.5%	4%
Barstow/Local Roadway Network	60%	63.5%	67%
TOTALS	***100%***	***100%***	***100%***

Sources: *San Bernardino Transportation Analysis Model Plus (SBTAM+), Author Compilation*

Figure 38: BIG Employee Traffic Distribution – Opening Year 2028 illustrates the assumed rail yard and transload warehouse center employee passenger car trip distribution for Opening Year 2028, **Figure 39: BIG Employee Traffic Distribution – Interim Year 2033** illustrates the assumed rail yard and transload warehouse center employee passenger car trip distribution for Interim Year 2033, and **Figure 40: BIG Employee Traffic Distribution – Horizon Year 2048** illustrates the assumed rail yard and transload warehouse center employee passenger car trip distribution for Horizon Year 2048.

5.4 Trip Assignment

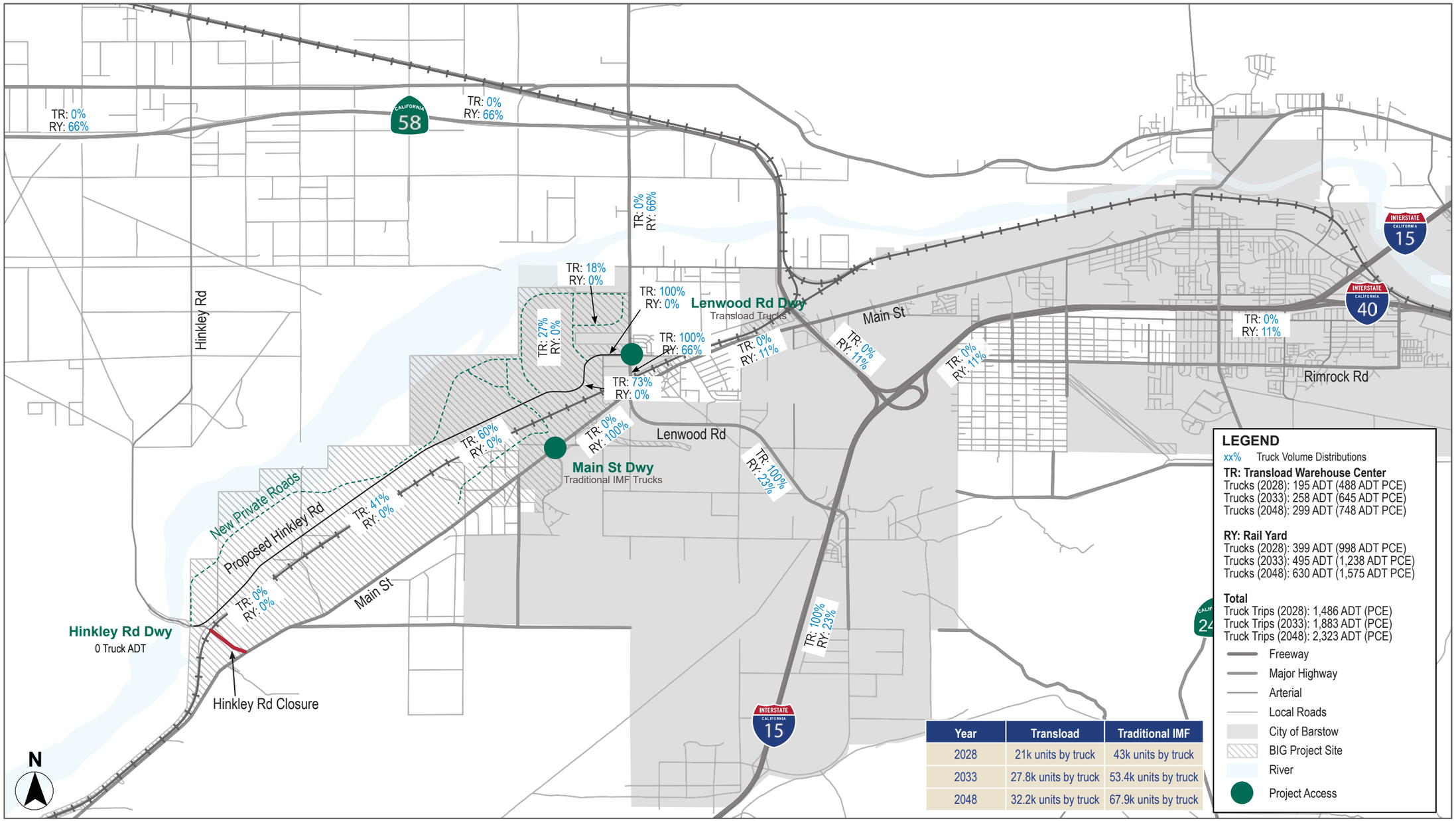
Trip distribution percentages were applied to BIG trip generation to determine BIG trip assignments through each study area intersection, roadway segment, freeway mainline segment, and freeway ramp.

Figure 41: BIG Traffic Trip Assignment – Opening Year 2028 illustrates the intersection trip assignment in Opening Year 2028 for rail yard employees, transload warehouse center employees, traditional IMF heavy-duty trucks, and transload warehouse center heavy-duty trucks, as well as the total BIG related peak hour intersection volumes for Opening Year 2028. **Figure 42: BIG Opening Year 2028 Roadway and Freeway Traffic Trip Assignment (PCE**) illustrates the total BIG related daily roadway and freeway mainline segment traffic volumes for Opening Year 2028.

Figure 43: BIG Traffic Trip Assignment – Interim Year 2033 illustrates the intersection trip assignment in Interim Year 2033 for rail yard employees, transload warehouse center employees, traditional IMF heavy-duty trucks, and transload warehouse center heavy-duty trucks, as well as the total BIG related peak hour intersection volumes for Interim Year 2033. **Figure 44: BIG Interim Year 2033 Roadway and Freeway**

Mainline Segment Traffic Trip Assignment (PCE) illustrates the total BIG related daily roadway and freeway mainline segment traffic volumes for Interim Year 2033.

Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048 illustrates the intersection trip assignment in Horizon Year 2048 for rail yard employees, transload warehouse center employees, traditional IMF heavy-duty trucks, and transload warehouse center heavy-duty trucks, as well as the total BIG related peak hour intersection volumes for Horizon Year 2048. **Figure 46: BIG Horizon Year 2048 Roadway and Freeway Mainline Segment Traffic Trip Assignment (PCE**) illustrates the total BIG related daily roadway and freeway mainline segment traffic volumes for Horizon Year 2048.



Year	Transload	Traditional IMF
2028	21k units by truck	43k units by truck
2033	27.8k units by truck	53.4k units by truck
2048	32.2k units by truck	67.9k units by truck

Figure 35: BIG Overall Heavy-Duty Truck Traffic Distribution

Source: Author Compilation, 2025

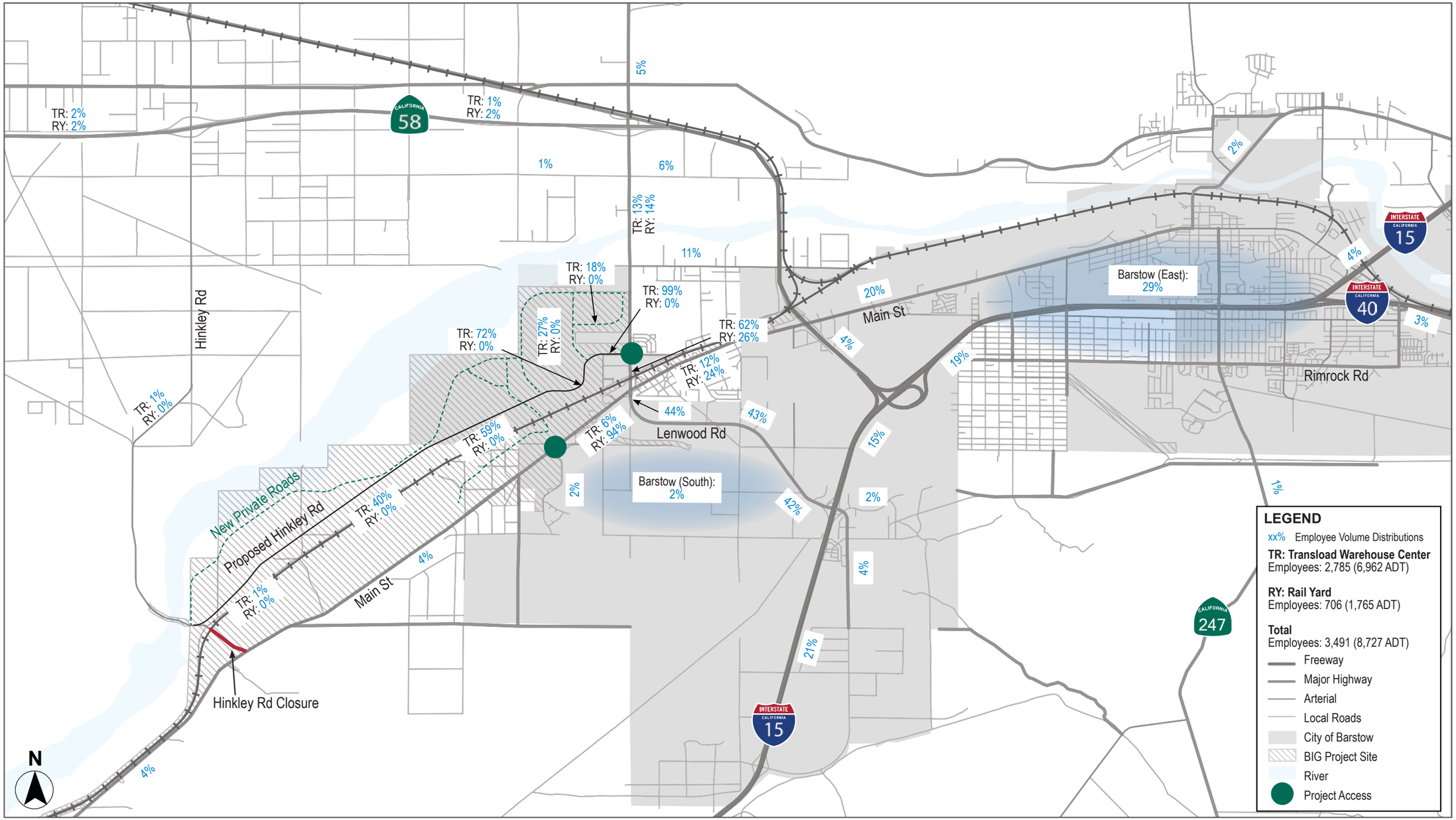


Figure 36: BIG Overall Employee Traffic Distribution
Opening Year 2028

Source: Author Compilation, 2025

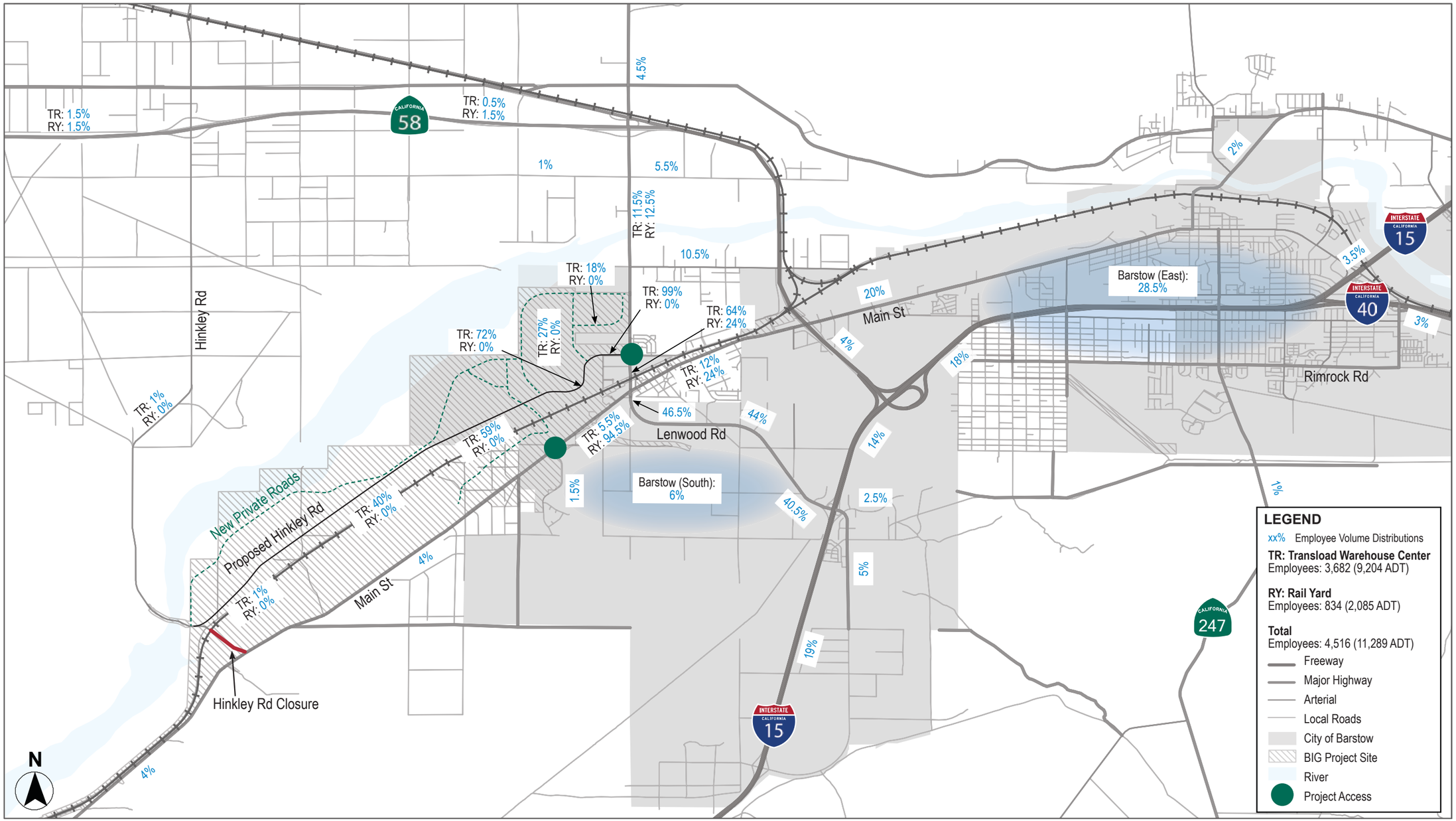


Figure 36: BIG Overall Employee Traffic Distribution
Interim Year 2033

Source: Author Compilation, 2025

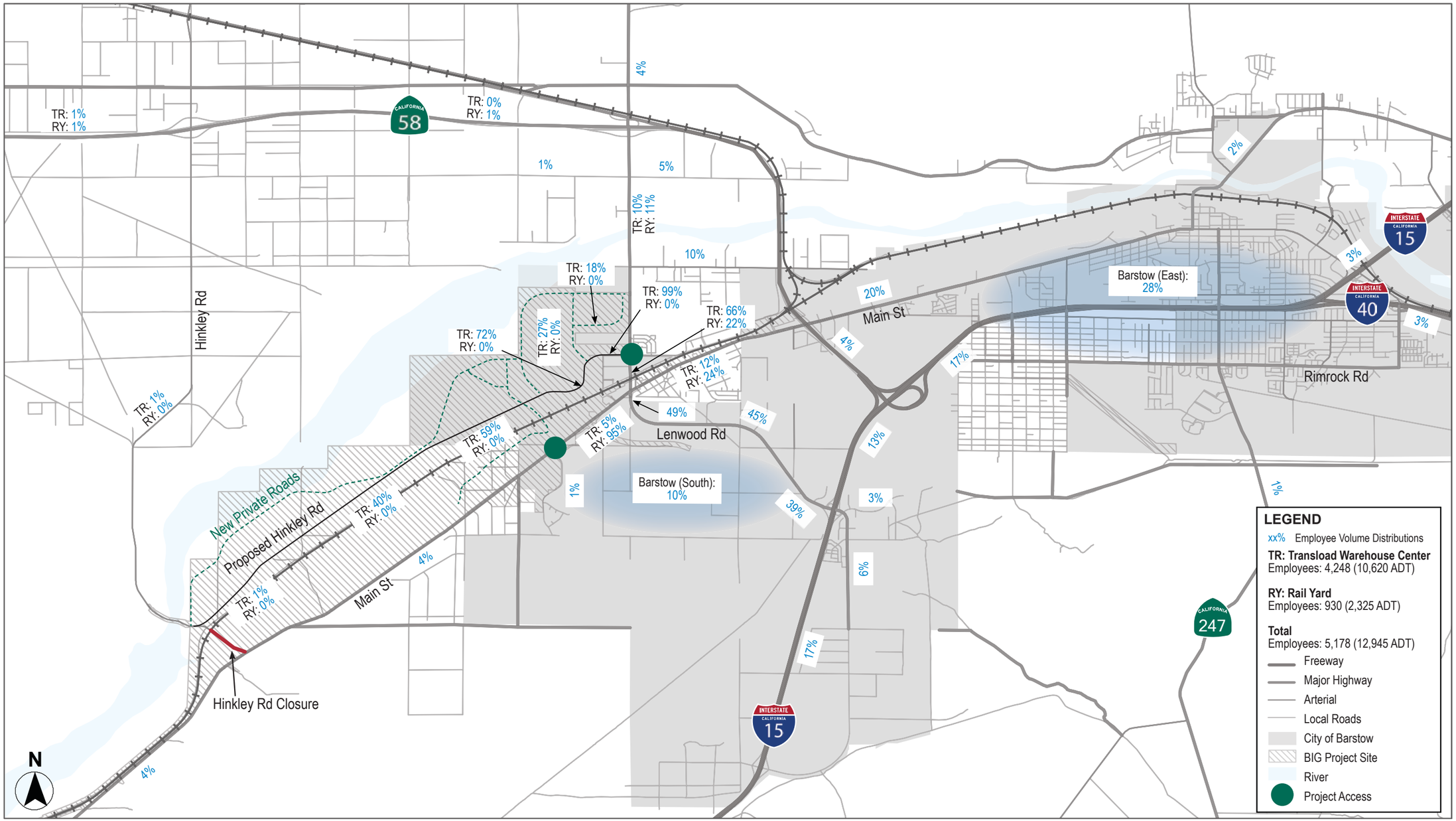


Figure 36: BIG Overall Employee Traffic Distribution
Horizon Year 2048

Source: Author Compilation, 2025

1 Main St	**2** (100%) Rail Yard Dwy 100% Main St Country Club Dr	**3** 66% Lenwood Rd 11% Main St (66%) (11%) (23%) 23%	**4** (23%) Lenwood Rd Sun Valley Dr 23%
5 Holland St 11% Main St (11%)	**6** Hannan St 11% Main St (11%) Hannan St	**7** Townsend St 11% Main St (11%)	**8** Woods Ave 11% Main St (11%)
9 Frank St 11% Main St (11%) Frank St	**10** 11% Main St (11%) Paris Ave	**11** 11% Main St (11%) Ash Rd	**12** 11% Main St (11%) Birch Rd
13 11% Main St (11%) Western Dr	**14** Pettit Rd 11% Main St (11%)	**15** SR 58 EB Ramp 11% Main St (11%)	**16** SR 58 WB Ramp Main St 11%
17 (23%) Lenwood Rd Love's Travel Stop Dwy 23%	**18** (23%) Lenwood Rd High Desert Rd 23%	**19** Truck Freightliner Service Point Dwy 23% Lenwood Rd (23%)	**20** Commerce Pkwy 23% Lenwood Rd (23%)
21 I-15 SB Off Ramps 23% Lenwood Rd	**22** High Point Pkwy Lenwood Rd I-15 NB Off Ramps 23%	**23** 66% Lenwood Rd Transload Warehouse Center Dwy Jasper Rd (66%)	**24** 66% Lenwood Rd Cam del Sol (66%)

Source: Author Compilation, 2025

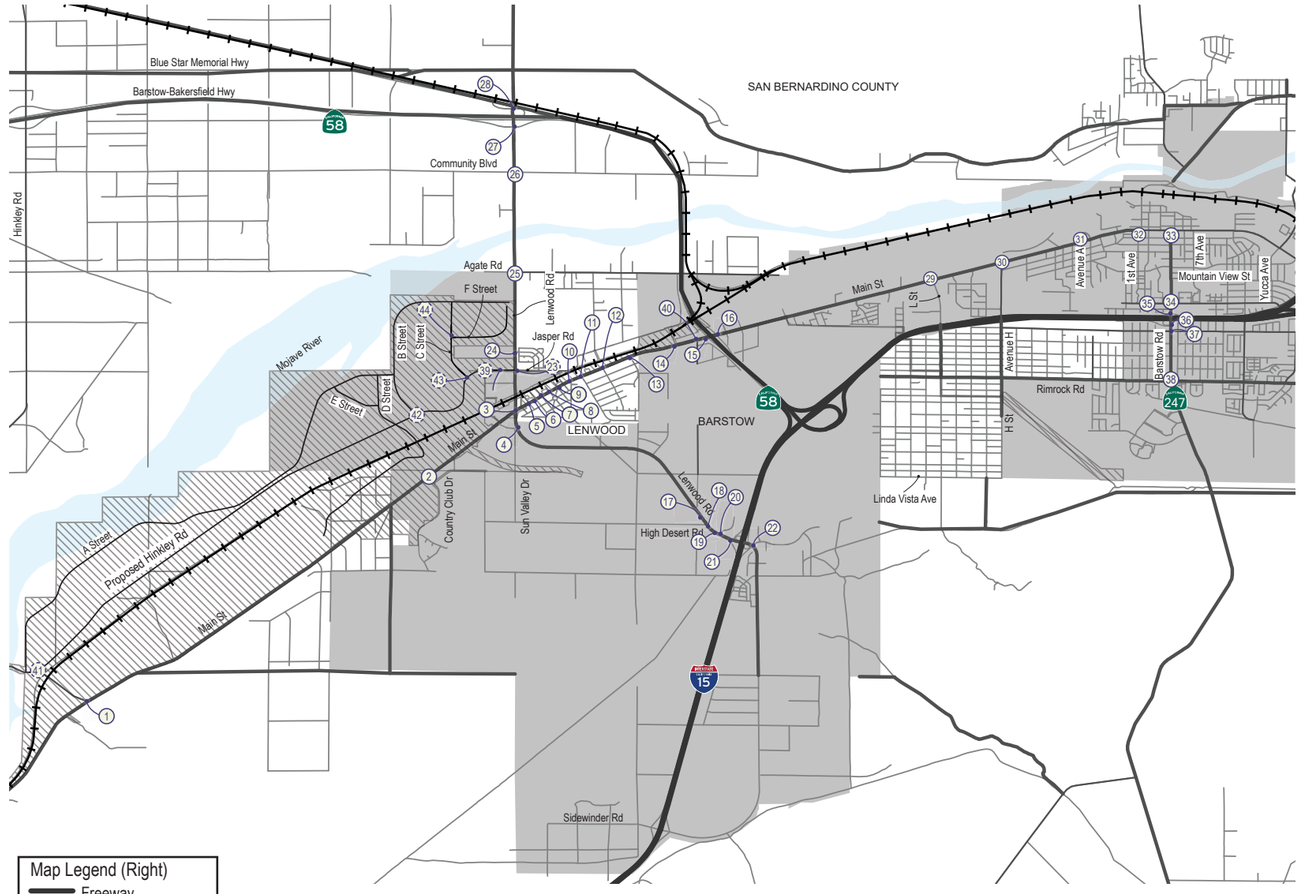


Figure 37: BIG Heavy-Duty Truck Traffic Distribution
Intermodal Facility (Page 1/2)

25 Lenwood Rd ⇦ 66% Agate Rd ⇧ (66%)	**26** Lenwood Rd ⇦ 66% Community Blvd ⇧ (66%)	**27** Lenwood Rd SR 58 EB Ramps 66% ⇩ ⇧ (66%)	**28** SR 58 WB Ramps ⇩ (66%)
29 Arco Dwy Main St L St	**30** Ave H Main St	**31** Ave A Main St	**32** 1st Ave Main St
33 Main St Barstow Rd	**34** Barstow Rd Virginia Way	**35** I-15 SB On-Ramp I-15 SB Off-Ramp Barstow Rd	**36** Barstow Rd I-15 NB Ramps Barstow Rd
37 Barstow Rd Armory Rd	**38** Barstow Rd Rimrock Rd	**39** Hinkley Rd Roadrunner Rd	**40** Main St Elk Dr
41 A St Hinkley Rd Jiggs Rd	**42** B St Hinkley Rd	**43** C St Hinkley Rd	**44** C St F St

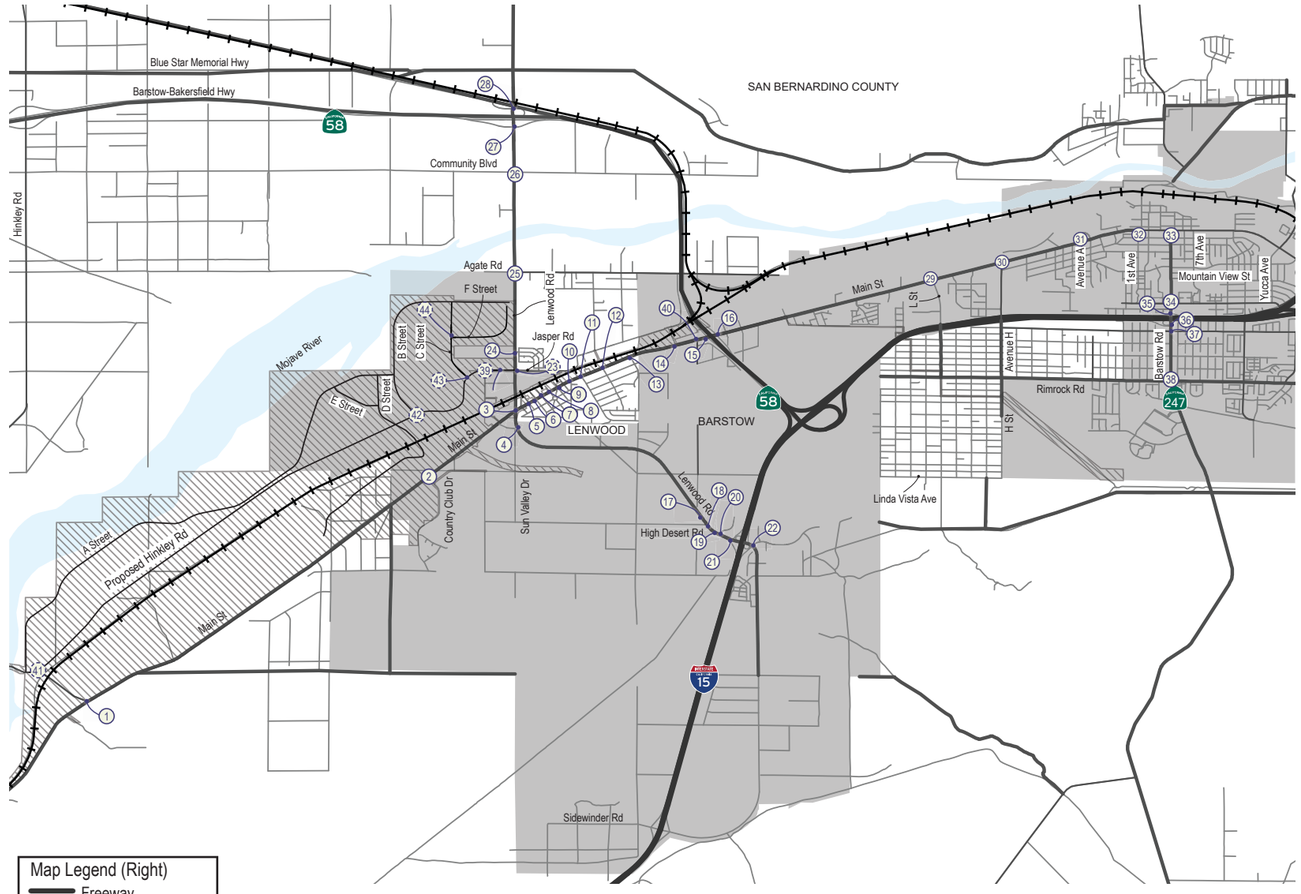


Figure 37: BIG Heavy-Duty Truck Traffic Distribution
Intermodal Facility (Page 2/2)

Source: Author Compilation, 2025

1 Main St	2 Rail Yard Dwy Main St Country Club Dr	3 (100%) ⇦ Lenwood Rd Main St 100% ⇨	4 (100%) ⇦ Lenwood Rd Sun Valley Dr 100% ⇨
5 Holland St Main St	6 Hannan St Main St Hannan St	7 Townsend St Main St	8 Woods Ave Main St
9 Frank St Main St Frank St	10 Main St Paris Ave	11 Main St Ash Rd	12 Main St Birch Rd
13 Main St Western Dr	14 Petitt Rd Main St	15 SR 58 EB Ramp Main St	16 SR 58 WB Ramp Main St
17 (100%) ⇦ Lenwood Rd Love's Travel Stop Dwy 100% ⇨	18 (100%) ⇦ Lenwood Rd High Desert Rd 100% ⇨	19 Truck Freightliner Service Point Dwy 100% ⇨ Lenwood Rd (100%) ⇦	20 Commerce Pkwy 100% ⇨ Lenwood Rd (100%) ⇦
21 I-15 SB Off Ramps 100% ⇦ Lenwood Rd	22 High Point Pkwy Lenwood Rd I-15 NB Off Ramps 100% ⇦	23 Lenwood Rd Transload Warehouse Center Dwy Jasper Rd (100%) ⇦ 100% ⇦	24 Lenwood Rd Cam del Sol

Source: Author Compilation, 2025

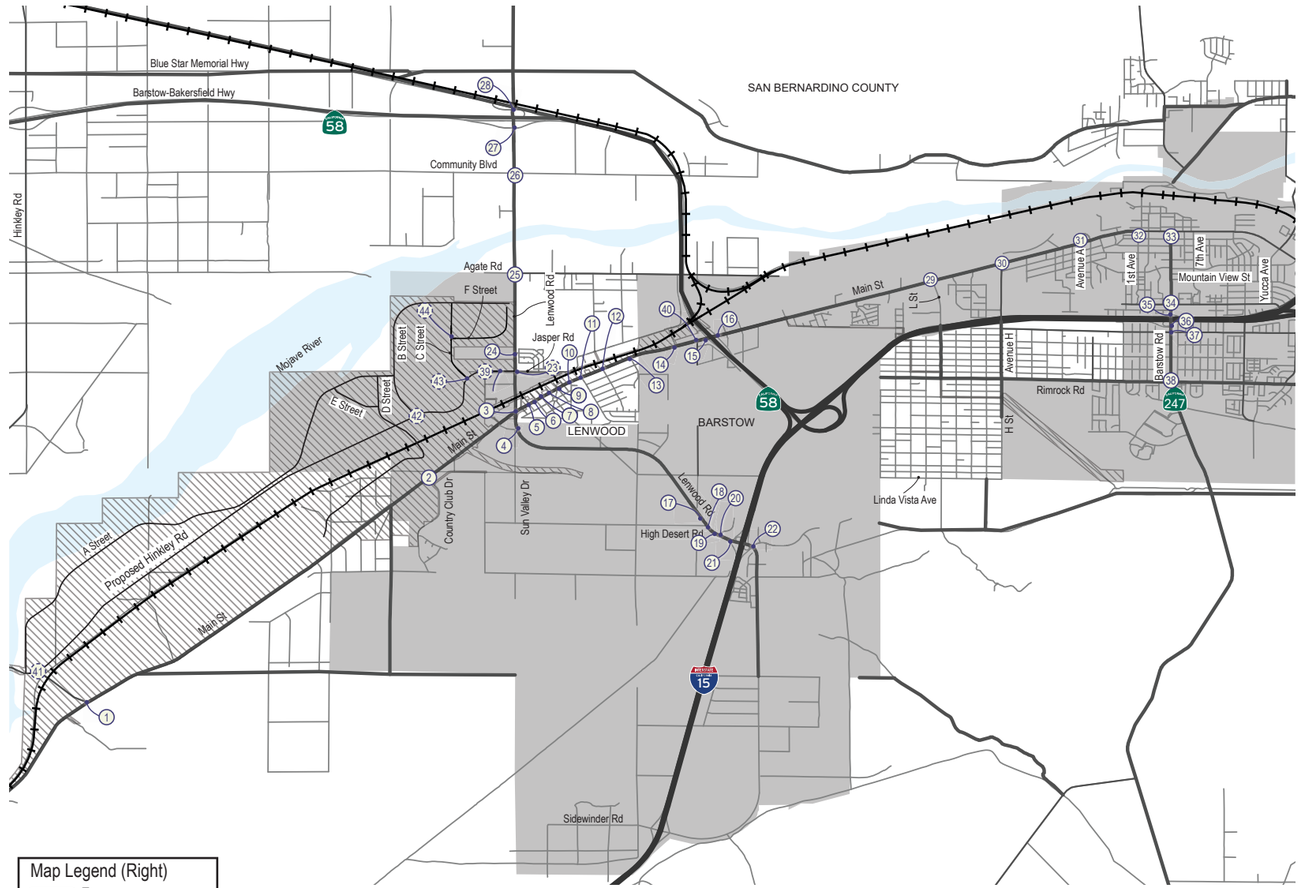


Figure 37: BIG Heavy-Duty Truck Traffic Distribution
Transload Warehouse Center (Page 1/2)

25 Lenwood Rd Agate Rd	26 Lenwood Rd Community Blvd	27 Lenwood Rd SR 58 EB Ramps	28 SR 58 WB Ramps Lenwood Rd
29 Arco Dwy Main St L St	30 Ave H Main St	31 Ave A Main St	32 1st Ave Main St
33 Main St Barstow Rd	34 Barstow Rd Virginia Way	35 I-15 SB On-Ramp I-15 SB Off-Ramp Barstow Rd	36 Barstow Rd I-15 NB Ramps Barstow Rd
37 Barstow Rd Armory Rd	38 Barstow Rd Rimrock Rd	39 99% Hinkley Rd (99%) Roadrunner Rd	40 Main St Elk Dr
41 A St (1%) Hinkley Rd 1% Jiggs Rd	42 B St 59% Hinkley Rd (59%)	43 (27%) C St 27% 72% Hinkley Rd (72%)	44 C St (18%) F St 18%

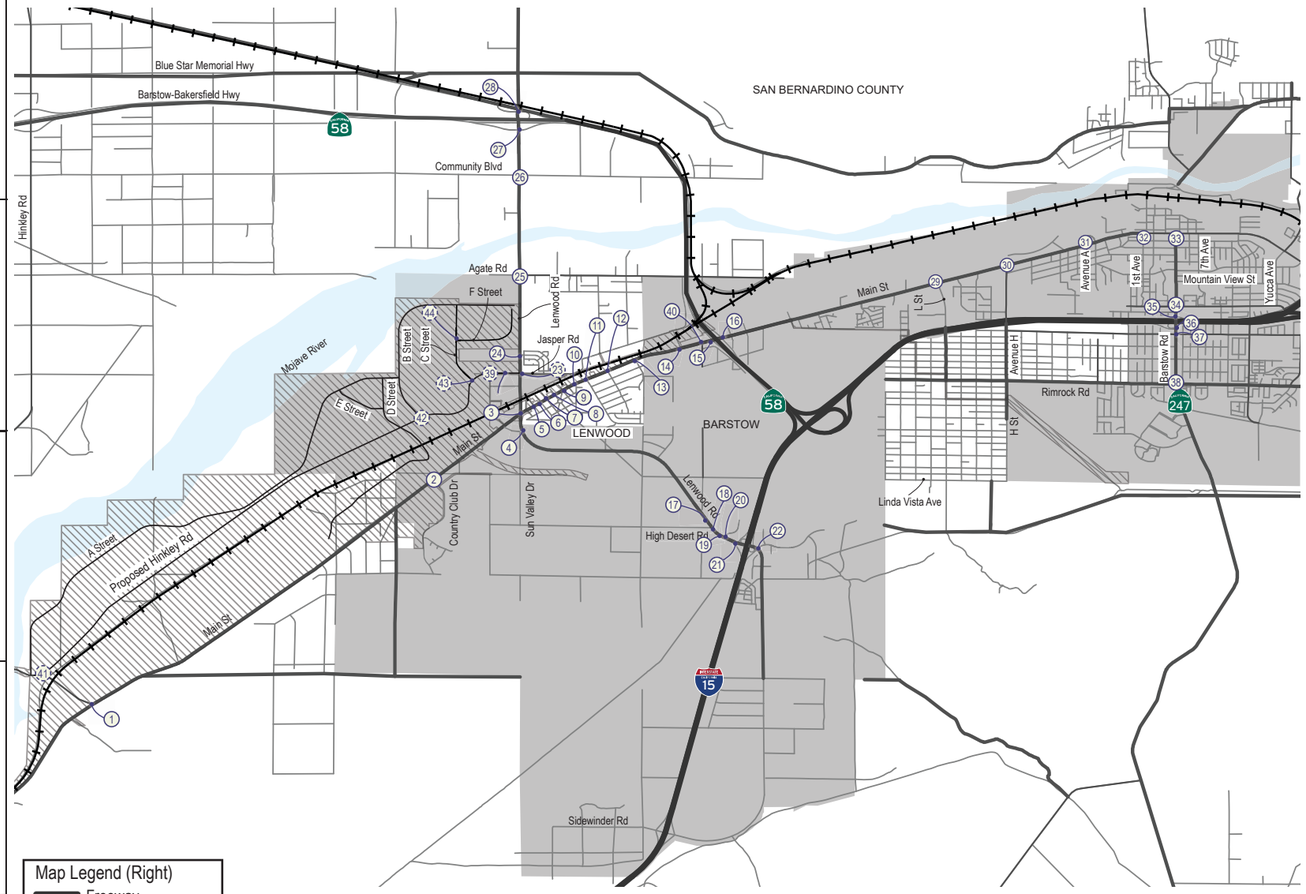


Figure 37: BIG Heavy-Duty Truck Traffic Distribution
Transload Warehouse Center (Page 2/2)

Source: Author Compilation, 2025

1 (4%) ⇦ Main St 4% ⇨	**2** (4%) ⇨ (2%) ⇦ (94%) ⇖ Rail Yard Dwy 94% ⇗ Main St 4% ⇨ Country Club Dr 2% ⇧	**3** 26% ⇖ Lenwood Rd 24% ⇦ Main St (26%) ⇨ (24%) ⇨ (44%) ⇖ 44% ⇗	**4** (1%) ⇖ (43%) ⇦ Lenwood Rd Sun Valley Dr 1% ⇗ 43% ⇧
5 Holland St 24% ⇦ Main St (24%) ⇨	**6** Hannan St 24% ⇦ Main St (24%) ⇨ Hannan St	**7** Townsend St 24% ⇦ Main St (24%) ⇨	**8** Woods Ave 24% ⇦ Main St (24%) ⇨
9 Frank St 24% ⇦ Main St (24%) ⇨ Frank St	**10** 24% ⇦ Main St (24%) ⇨ Paris Ave	**11** 24% ⇦ Main St (24%) ⇨ Ash Rd	**12** 24% ⇦ Main St (24%) ⇨ Birch Rd
13 24% ⇦ Main St (24%) ⇨ Western Dr	**14** Pettit Rd 24% ⇦ Main St (24%) ⇨	**15** SR 58 EB Ramp 24% ⇦ Main St (20%) ⇨ (4%) ⇦	**16** SR 58 WB Ramp 20% ⇦ Main St (20%) ⇨ 4% ⇗
17 (43%) ⇦ Lenwood Rd Love's Travel Stop Dwy 43% ⇧	**18** (1%) ⇖ (42%) ⇦ Lenwood Rd High Desert Rd 1% ⇗ 42% ⇧	**19** Truck Freightliner Service Point Dwy 42% ⇦ Lenwood Rd (42%) ⇨	**20** Commerce Pkwy 42% ⇦ Lenwood Rd (42%) ⇨
21 15% ⇖ I-15 SB Off Ramps 27% ⇦ Lenwood Rd (21%) ⇨	**22** 2% ⇖ High Point Pkwy 4% ⇦ Lenwood Rd (2%) ⇨ (4%) ⇨ I-15 NB Off Ramps 21% ⇗	**23** 25% ⇩ Lenwood Rd Transload Warehouse Center Dwy 1% ⇖ Jasper Rd (25%) ⇨ (1%) ⇦	**24** 25% ⇦ Lenwood Rd Cam del Sol (25%) ⇨

Source: Author Compilation, 2025

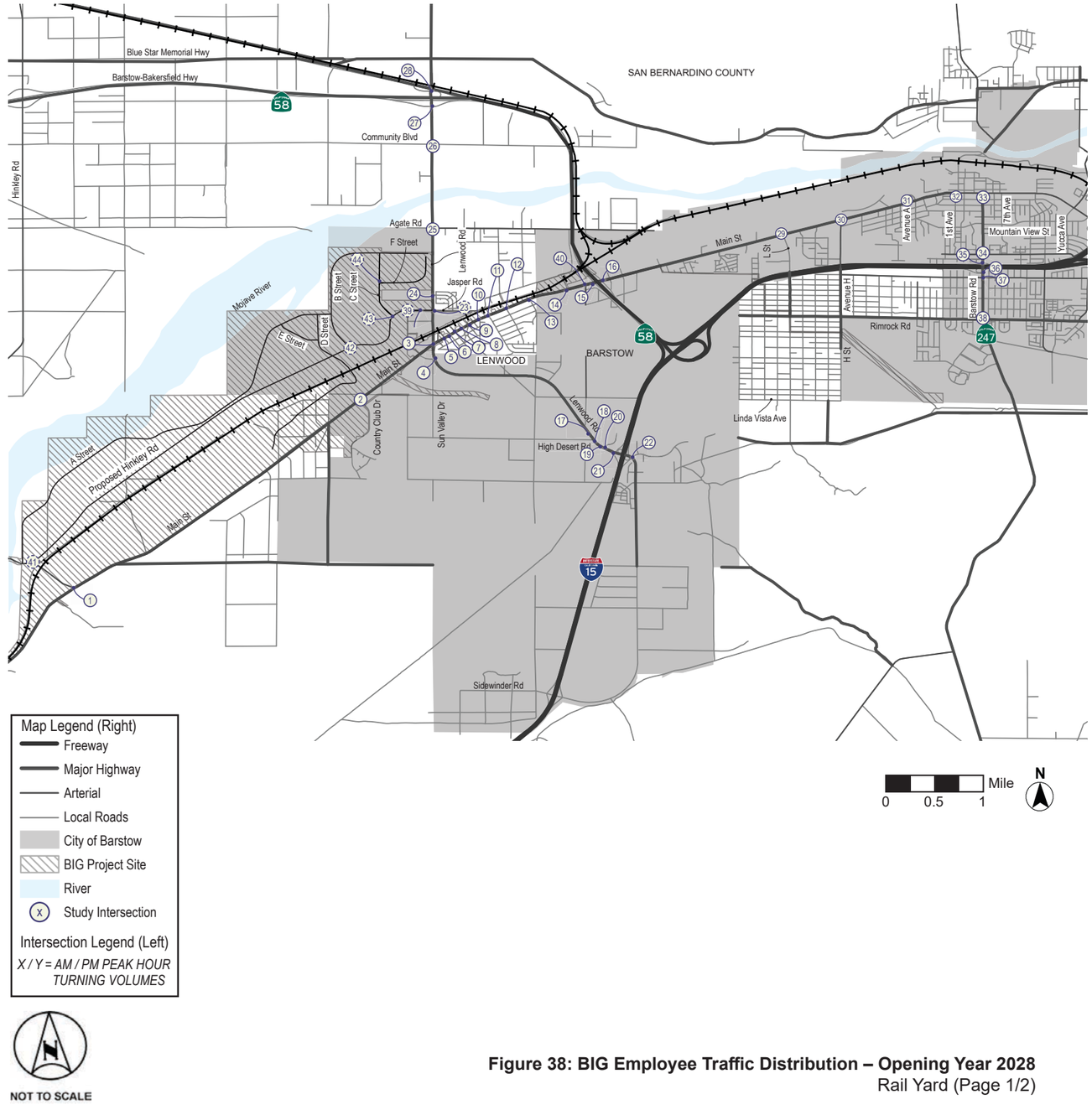


Figure 38: BIG Employee Traffic Distribution – Opening Year 2028
Rail Yard (Page 1/2)

25 Lenwood Rd ⇦ 14% Lenwood Rd ⇨ 11% Agate Rd (14%) (11%)	**26** Lenwood Rd ⇦ 7% Lenwood Rd ⇨ 1% Community Blvd ⇦ 6% (1%) (7%) (6%)	**27** Lenwood Rd ⇦ 5% Lenwood Rd ⇨ 2% SR 58 EB Ramps ⇧ (7%)	**28** SR 58 WB Ramps Lenwood Rd ⇨ 5% SR 58 WB Ramps ⇦ (5%) SR 58 WB Ramps ⇧ (2%)
29 Arco Dwy ⇧ 12% Main St (12%) (5%) L St ⇦ 5%	**30** Ave H ⇧ 10% Main St (10%) (2%) 2%	**31** Ave A ⇧ 8% Main St (8%) (2%) 2%	**32** 1st Ave ⇦ 2% 1st Ave ⇧ 3% Main St (2%) (3%) (3%) 3%
33 Main St ⇧ 2% Barstow Rd ⇦ 1% (2%) (1%)	**34** Barstow Rd ⇦ 1% Barstow Rd ⇧ 3% Virginia Way 1% (1%) (1%) (3%)	**35** Barstow Rd ⇦ 5% I-15 SB On-Ramp I-15 SB Off-Ramp ⇧ 7% (5%)	**36** Barstow Rd I-15 NB Ramps ⇧ (5%) (7%) 7%
37 Barstow Rd ⇦ (1%) (6%) Barstow Rd ⇨ 6% Armory Rd 1%	**38** Barstow Rd ⇦ (1%) Barstow Rd ⇧ 1% 1% Rimrock Rd (1%) (1%) 1%	**39** Hinkley Rd Roadrunner Rd	**40** Main St ⇦ 24% Elk Dr (24%)
41 A St Hinkley Rd Jiggs Rd	**42** B St Hinkley Rd	**43** C St Hinkley Rd	**44** C St F St

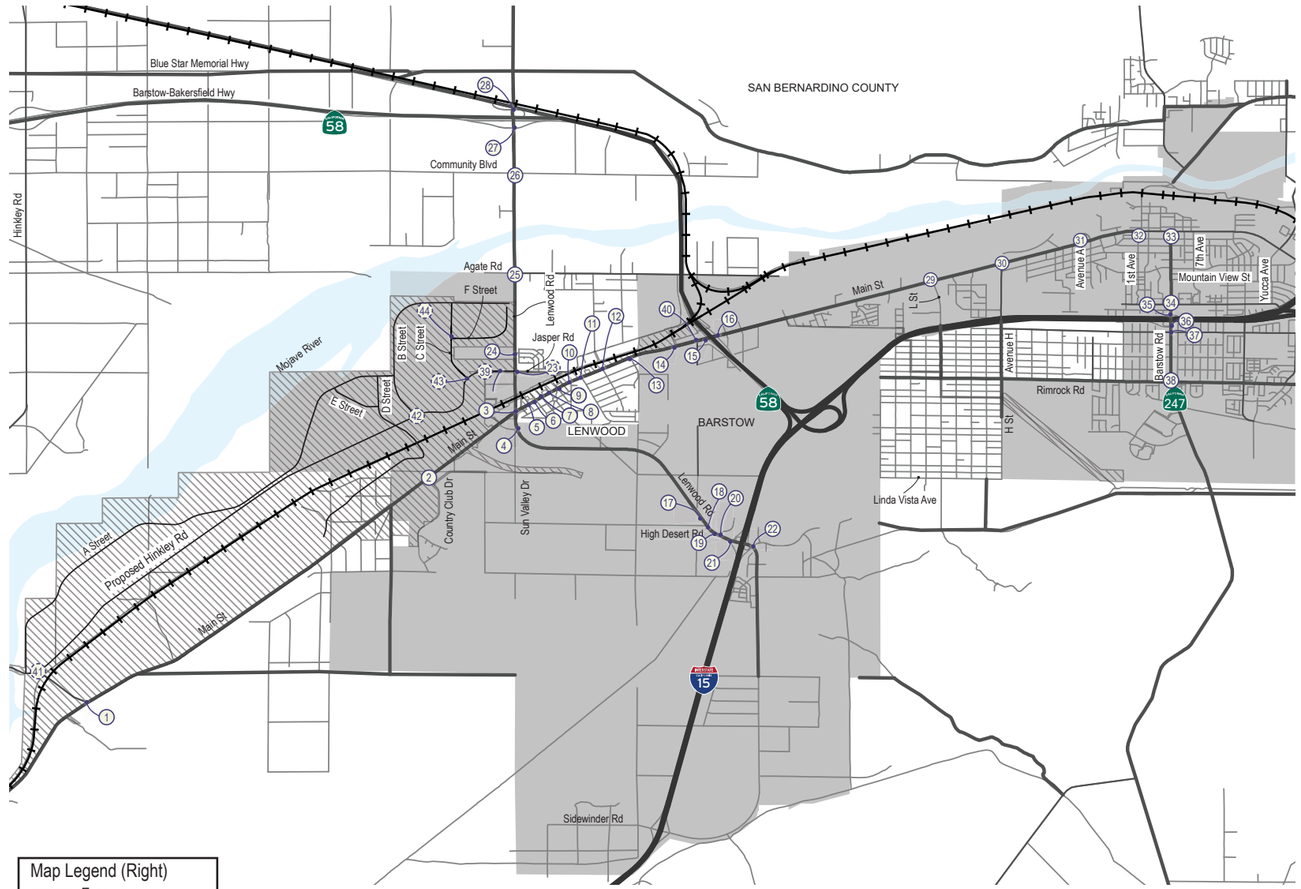


Figure 38: BIG Employee Traffic Distribution – Opening Year 2028
Rail Yard (Page 2/2)

Source: Author Compilation, 2025

1 (4%) ⇦ Main St 4% ⇨	**2** Rail Yard Dwy: (4%) ⇦ (2%) ⇦ Main St 4% ⇨ Country Club Dr 2% ⇨	**3** Lenwood Rd: (6%) ⇨ (44%) ⇦ (12%) ⇖ 12% ⇗ Main St 6% ⇨ 44% ⇧	**4** Lenwood Rd: (1%) ⇖ (43%) ⇩ Sun Valley Dr 1% ⇙ 43% ⇧
5 Holland St (12%) ⇨ 12% ⇦ Main St	**6** Hannan St (12%) ⇨ Hannan St 12% ⇦ Main St	**7** Townsend St (12%) ⇨ 12% ⇦ Main St	**8** Woods Ave (12%) ⇨ 12% ⇦ Main St
9 Frank St (12%) ⇨ Frank St 12% ⇦ Main St	**10** (12%) ⇨ Paris Ave 12% ⇦ Main St	**11** (12%) ⇨ Ash Rd 12% ⇦ Main St	**12** (12%) ⇨ Birch Rd 12% ⇦ Main St
13 (12%) ⇨ Western Dr 12% ⇦ Main St	**14** (12%) ⇙ Pettit Rd (12%) ⇨ 12% ⇗ 12% ⇦ Main St	**15** SR 58 EB Ramp (20%) ⇨ (4%) ⇖ 24% ⇦ Main St	**16** SR 58 WB Ramp (20%) ⇨ 4% ⇗ 20% ⇦ Main St
17 (43%) ⇦ Lenwood Rd (42%) ⇨ 43% ⇧ Love's Travel Stop Dwy	**18** (1%) ⇙ (42%) ⇩ Lenwood Rd High Desert Rd 1% ⇗ 42% ⇧	**19** Truck Freightliner Service Point Dwy (42%) ⇨ 42% ⇦ Lenwood Rd	**20** Commerce Pkwy (42%) ⇨ 42% ⇦ Lenwood Rd
21 15% ⇙ I-15 SB Off Ramps (21%) ⇨ 27% ⇦ Lenwood Rd	**22** 2% ⇙ High Point Pkwy (2%) ⇨ (4%) ⇨ I-15 NB Off Ramps 21% ⇗ 4% ⇦ Lenwood Rd	**23** 24% ⇙ Transload Warehouse Center Dwy (24%) ⇨ (13%) ⇨ (62%) ⇗ 13% ⇦ Lenwood Rd 62% ⇧ Jasper Rd	**24** 24% ⇙ Lenwood Rd (24%) ⇨ Cam del Sol

Source: Author Compilation, 2025

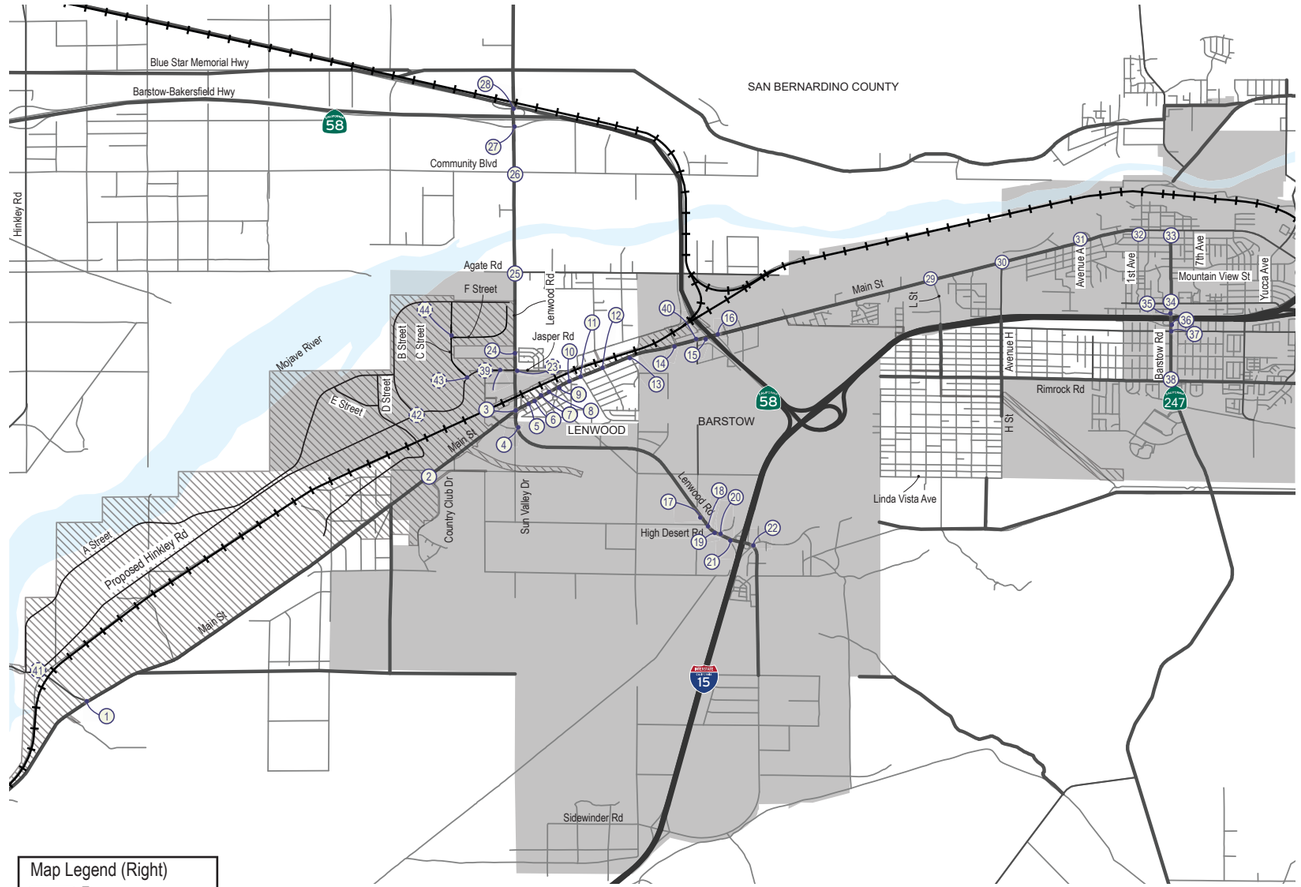


Figure 38: BIG Employee Traffic Distribution – Opening Year 2028
Transload Warehouse Center (Page 1/2)

25	**26**	**27**	**28**
Lenwood Rd: ⇦ 13% / ⇦ 1%	Lenwood Rd: ⇦ 6% / ⇦ 1%	Lenwood Rd: ⇦ 5% / ⇦ 1%	SR 58 WB Ramps: ⇦ (5%) ⇦ (1%) / Lenwood Rd: ⇦ 5%
Agate Rd: ⇨ 11% / ⇨ (13%) ⇨ (11%)	Community Blvd: ⇨ 6% / ⇨ (1%) ⇨ (6%) ⇨ (6%)	SR 58 EB Ramps: ⇨ (6%)	
29	**30**	**31**	**32**
Arco Dwy: ⇦ (12%) ⇦ (5%) / L St: ⇨ 5%	Ave H: ⇦ (10%) ⇦ (2%)	Ave A: ⇦ (8%) ⇦ (2%)	1st Ave: ⇦ 2% / ⇨ (2%) ⇨ (3%) ⇨ (3%)
Main St: ⇨ 12% / ⇨ 2%	Main St: ⇨ 10% / ⇨ 2%	Main St: ⇨ 8% / ⇨ 2%	Main St: ⇨ 3% / ⇨ 3%
33	**34**	**35**	**36**
Barstow Rd: ⇦ (2%) ⇦ (1%) / ⇨ 1%	Barstow Rd: ⇦ 1% / ⇦ 1%	Barstow Rd: ⇨ 5%	Barstow Rd: ⇦ (5%) ⇦ (7%)
Main St: ⇦ 2%	Virginia Way: ⇨ 3% / ⇨ (1%) ⇨ (1%) ⇨ (3%)	I-15 SB On-Ramp: ⇨ 7% / I-15 SB Off-Ramp: ⇦ (5%)	I-15 NB Ramps: ⇨ 7%
37	**38**	**39**	**40**
Barstow Rd: ⇦ (1%) ⇦ (6%) / ⇨ 6%	Barstow Rd: ⇦ (1%) / ⇨ 1% ⇨ 1%	⇦ 99%	⇦ 24%
Armory Rd: ⇨ 1% / ⇨ (1%) ⇨ (1%)	Rimrock Rd: ⇨ 1% / ⇨ 1%	Hinkley Rd: ⇦ (99%) / Roadrunner Rd	Main St: ⇦ (24%) / Elk Dr
41	**42**	**43**	**44**
A St: ⇦ (1%) / Jiggs Rd: ⇦ 1%	B St: ⇦ 59% / ⇦ (59%)	C St: ⇨ (27%) / ⇦ 27% ⇦ 72% / ⇦ (72%)	C St: ⇨ (18%) / F St: ⇨ 18%
Hinkley Rd	Hinkley Rd	Hinkley Rd	

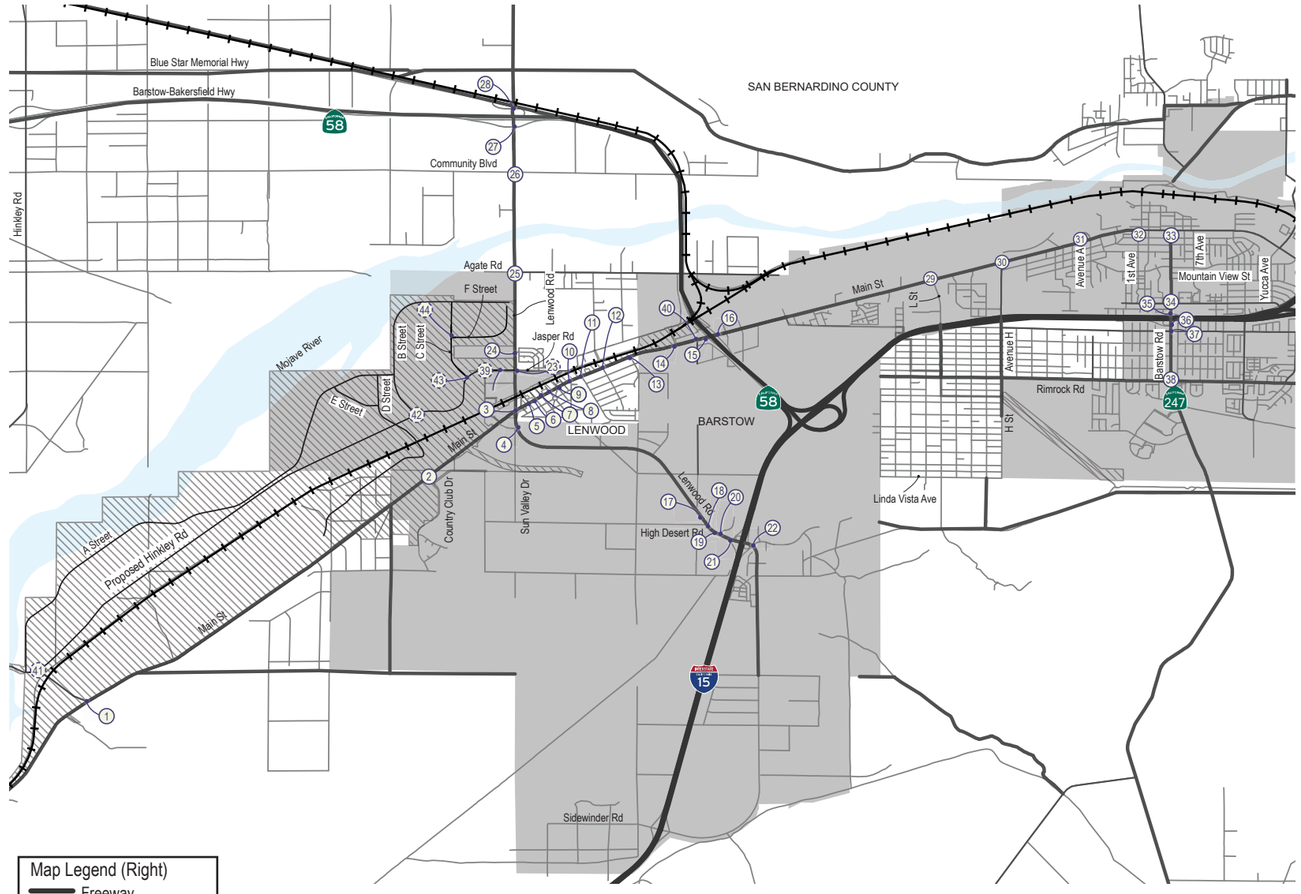


Figure 38: BIG Employee Traffic Distribution – Opening Year 2028
Transload Warehouse Center (Page 2/2)

Source: Author Compilation, 2025

1 (4.0%) ⇦ Main St 4.0% ⇨	**2** (4.0%) ⇦ (1.5%) ⇦ Rail Yard Dwy (94.5%) ⇗ 4.0% ⇨ Country Club Dr 94.5% ⇗ Main St 1.5% ⇧	**3** 24.0% ⇖ Lenwood Rd (24.0%) ⇨ (24.0%) ⇨ (46.5%) ⇘ 24.0% ⇦ Main St 46.5% ⇗	**4** (2.5%) ⇦ (44.0%) ⇦ Lenwood Rd 2.5% ⇦ Sun Valley Dr 44.0% ⇨
5 Holland St ⇧ 24.0% ⇦ Main St (24.0%) ⇨	**6** Hannan St ⇧ 24.0% ⇦ Main St (24.0%) ⇨ Hannan St	**7** Townsend St ⇧ 24.0% ⇦ Main St (24.0%) ⇨	**8** Woods Ave ⇧ 24.0% ⇦ Main St (24.0%) ⇨
9 Frank St ⇧ 24.0% ⇦ Main St (24.0%) ⇨ Frank St	**10** 24.0% ⇦ Main St (24.0%) ⇨ Paris Ave	**11** 24.0% ⇦ Main St (24.0%) ⇨ Ash Rd	**12** 24.0% ⇦ Main St (24.0%) ⇨ Birch Rd
13 24.0% ⇦ Main St (24.0%) ⇨ Western Dr	**14** Pettit Rd ⇧ 24.0% ⇦ Main St (24.0%) ⇨	**15** SR 58 EB Ramp ⇧ 24.0% ⇦ Main St (20.0%) ⇨ (4.0%) ⇘	**16** SR 58 WB Ramp ⇧ 20.0% ⇦ Main St (20.0%) ⇨ 4.0% ⇗
17 (44.0%) ⇦ Lenwood Rd Love's Travel Stop Dwy 44.0% ⇨	**18** (3.5%) ⇖ (40.5%) ⇦ Lenwood Rd High Desert Rd 3.5% ⇦ 40.5% ⇨	**19** Truck Freightliner Service Point Dwy ⇧ 40.5% ⇦ Lenwood Rd (40.5%) ⇨	**20** Commerce Pkwy ⇧ 40.5% ⇦ Lenwood Rd (40.5%) ⇨
21 14.0% ⇖ I-15 SB Off Ramps 26.5% ⇦ Lenwood Rd (21.5%) ⇨	**22** 2.5% ⇖ High Point Pkwy 5.0% ⇦ Lenwood Rd (2.5%) ⇦ (5.0%) ⇦ I-15 NB Off Ramps 19.0% ⇗	**23** 23.0% ⇦ Lenwood Rd Transload Warehouse Center Dwy 1% ⇨ Jasper Rd (23.0%) ⇨ (1.0%) ⇦	**24** 23.0% ⇦ Lenwood Rd Cam del Sol (23.0%) ⇨

Source: Author Compilation, 2025

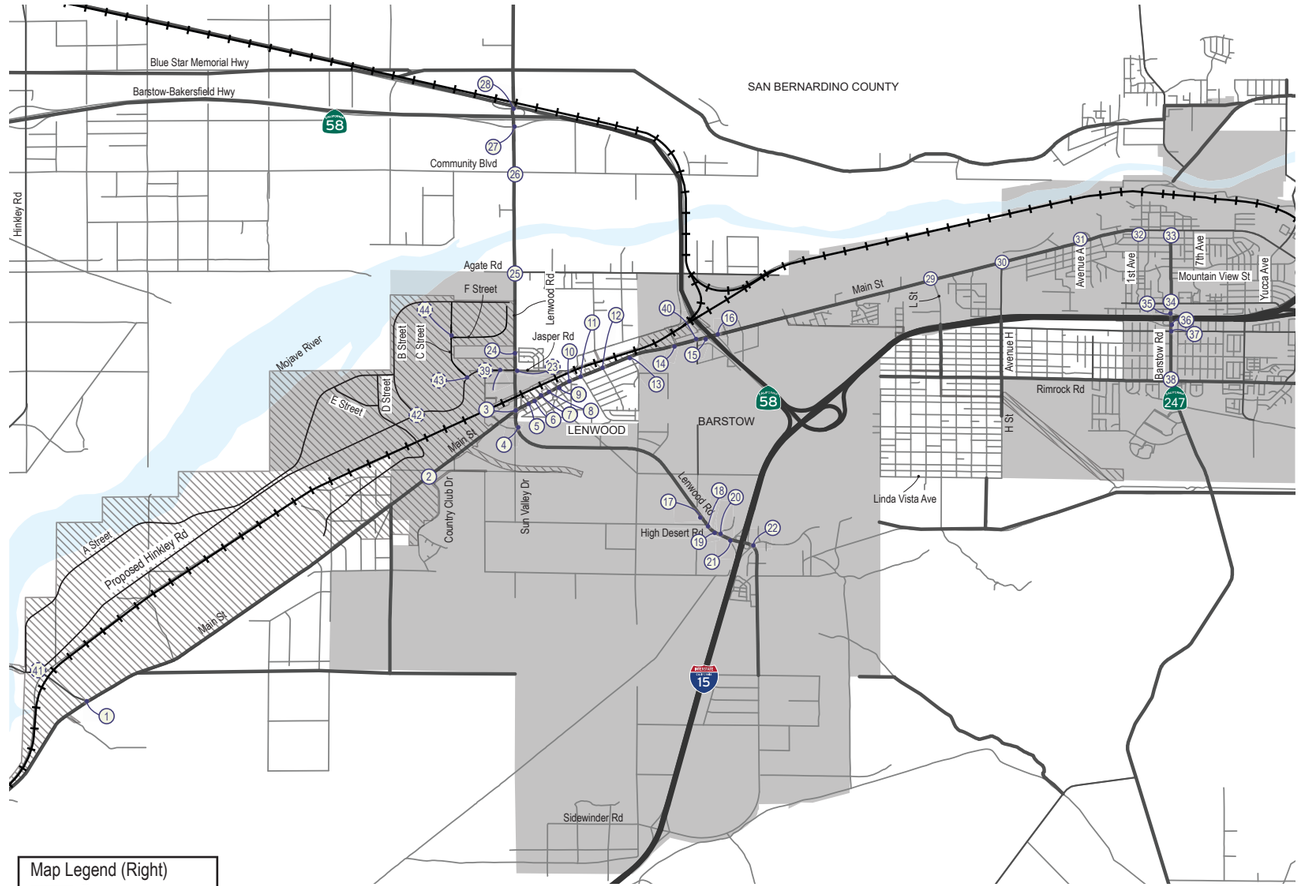


Figure 39: BIG Employee Traffic Distribution – Interim Year 2033
Rail Yard (Page 1/2)

25 Lenwood Rd: ⇦ 12.5% Agate Rd: ⇦ 10.5% (12.5%) ⇨ (10.5%) ⇘	**26** Lenwood Rd: ⇦ 6.0% Community Blvd: ⇦ 5.5% 1.0% ⇨ (1.0%) ⇨ (6.0%) ⇨ (5.5%) ⇘	**27** Lenwood Rd: ⇦ 4.5% SR 58 EB Ramps: ⇨ (6.0%) 1.5% ⇨	**28** SR 58 WB Ramps Lenwood Rd: 4.5% ⇨ (4.5%) ⇦ (1.5%) ⇙
29 Arco Dwy Main St: ⇦ 11.5% (11.5%) ⇨ (5.5%) ⇦ L St: ⇩ 5.5%	**30** Ave H Main St: ⇦ 9.0% (9.0%) ⇨ (2.5%) ⇦ 2.5% ⇩	**31** Ave A Main St: ⇦ 7.0% (7.0%) ⇨ (2.0%) ⇦ 2.0% ⇩	**32** 1st Ave Main St: ⇧ 2.5% ⇦ 2.0% (2.0%) ⇨ (2.5%) ⇨ (2.5%) ⇙ 2.5% ⇩
33 Main St: ⇦ 1.5% (1.5%) ⇨ (1.0%) ⇙ Barstow Rd: ⇩ 1.0%	**34** Barstow Rd ⇦ 1.0% Virginia Way: ⇨ 2.5% 1.0% ⇨ (1.0%) ⇨ (1.0%) ⇨ (2.5%) ⇘	**35** Barstow Rd ⇦ 4.5% I-15 SB On-Ramp I-15 SB Off-Ramp: ⇨ 7.0% ⇨ (4.5%)	**36** Barstow Rd I-15 NB Ramps: ⇨ 7.0% (4.5%) ⇨ (7.0%) ⇙
37 Barstow Rd ⇦ (1.5%) ⇙ (5.5%) Armory Rd: ⇨ 6% ⇧ 2%	**38** Barstow Rd ⇙ (1.5%) Rimrock Rd: ⇧ 2% ⇩ 2% (2.0%) ⇦ (1.0%) ⇙ 1% ⇩	**39** Hinkley Rd Roadrunner Rd	**40** Main St Elk Dr
41 A St Hinkley Rd Jiggs Rd	**42** B St Hinkley Rd	**43** C St Hinkley Rd	**44** C St F St

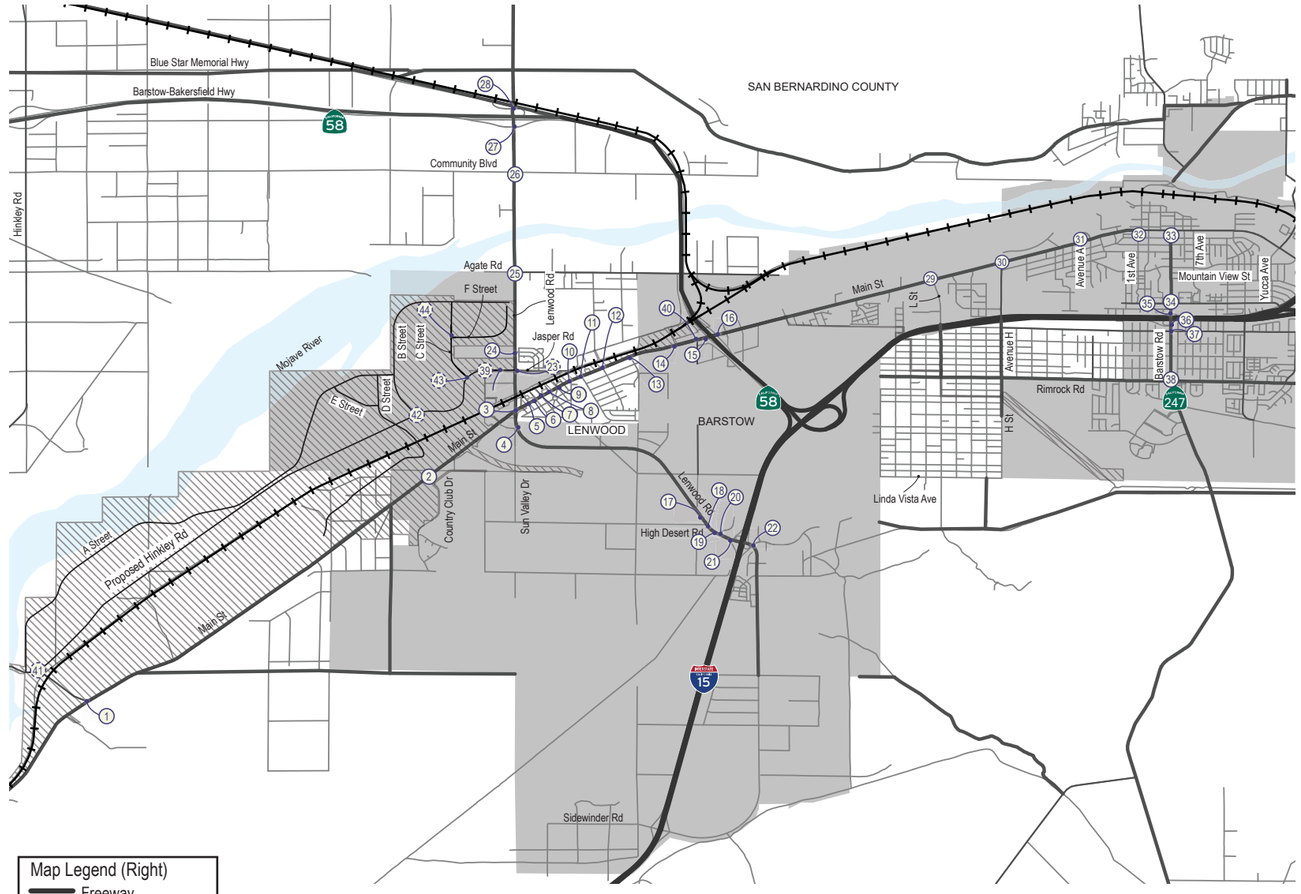


Figure 39: BIG Employee Traffic Distribution – Interim Year 2033
Rail Yard (Page 2/2)

Source: Author Compilation, 2025

1 (4.0%) ⇦ Main St 4.0% ⇨	**2** Rail Yard Dwy ⇦ (4.0%) ⇨ (1.5%) Main St 4.0% ⇨ Country Club Dr ⇦ 1.5%	**3** (5.5%) ⇨ (46.5%) ⇦ (12.0%) ⇨ Lenwood Rd ⇗ 12.0% Main St 5.5% ⇨ 46.5% ⇦	**4** (2.5%) ⇨ (44.0%) ⇦ Lenwood Rd ⇦ Sun Valley Dr 2.5% ⇨ 44.0% ⇦
5 Holland St ⇦ 12.0% Main St (12.0%) ⇨	**6** Hannan St ⇦ 12.0% Main St (12.0%) ⇨ Hannan St	**7** Townsend St ⇦ 12.0% Main St (12.0%) ⇨	**8** Woods Ave ⇦ 12.0% Main St (12.0%) ⇨
9 Frank St ⇦ 12.0% Main St (12.0%) ⇨ Frank St	**10** ⇦ 12.0% Main St (12.0%) ⇨ Paris Ave	**11** ⇦ 12.0% Main St (12.0%) ⇨ Ash Rd	**12** ⇦ 12.0% Main St (12.0%) ⇨ Birch Rd
13 ⇦ 12.0% Main St (12.0%) ⇨ Western Dr	**14** (12.0%) ⇗ Pettit Rd ⇦ 12.0% ⇦ 12.0% Main St (12.0%) ⇨	**15** SR 58 EB Ramp ⇦ 24.0% Main St (20.0%) ⇨ (4.0%) ⇦	**16** SR 58 WB Ramp ⇦ 20.0% Main St (20.0%) ⇨ 4.0% ⇦
17 (44.0%) ⇦ Lenwood Rd ⇦ Love's Travel Stop Dwy 44.0% ⇦	**18** (3.5%) ⇨ (40.5%) ⇦ Lenwood Rd High Desert Rd 3.5% ⇨ 40.5% ⇦	**19** Truck Freightliner Service Point Dwy ⇦ 40.5% Lenwood Rd (40.5%) ⇨	**20** Commerce Pkwy ⇦ 40.5% Lenwood Rd (40.5%) ⇨
21 14.0% ⇨ I-15 SB Off Ramps ⇦ 26.5% Lenwood Rd (21.5%) ⇨	**22** 2.5% ⇨ High Point Pkwy ⇦ 5.0% Lenwood Rd (2.5%) ⇦ (5.0%) ⇨ I-15 NB Off Ramps ⇗ 19.0%	**23** 22.0% ⇨ Lenwood Rd ⇦ 13.0% Transload Warehouse Center Dwy Jasper Rd (22.0%) ⇦ (13.0%) ⇨ (64.0%) ⇦ 64.0%	**24** 22.0% ⇦ Lenwood Rd Cam del Sol (22.0%) ⇨

Source: Author Compilation, 2025

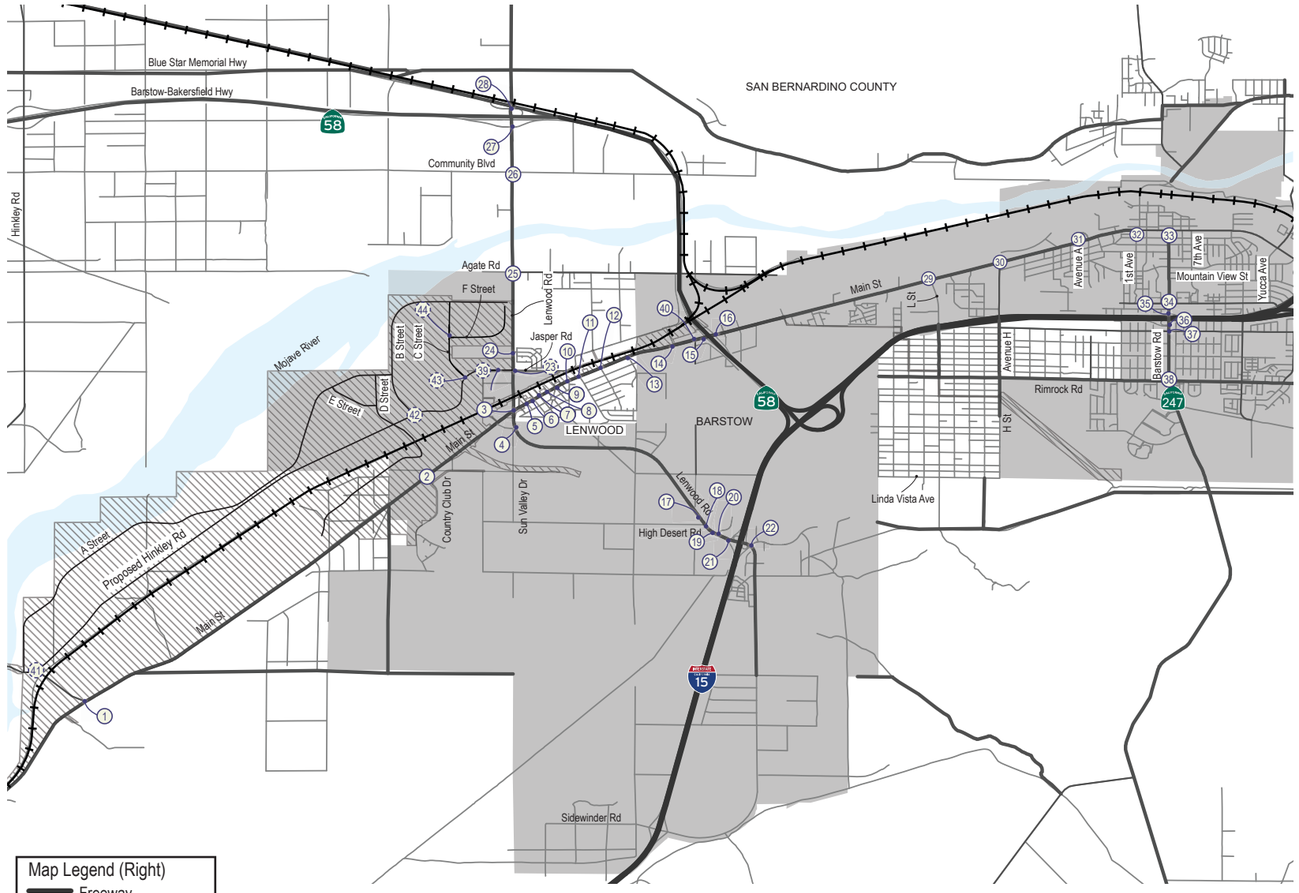


Figure 39: BIG Employee Traffic Distribution – Interim Year 2033
Transload Warehouse Center (Page 1/2)

25 Lenwood Rd: ⇦ 11.5% Agate Rd: ⇦ 10.5% ⇧ (11.5%) ⇧ (10.5%)	**26** Lenwood Rd: ⇦ 5.0% Community Blvd: ⇦ 5.5% ⇧ 1.0% ⇧ (1.0%) ⇧ (5.0%) ⇧ (5.5%)	**27** Lenwood Rd: ⇦ 4.5% SR 58 EB Ramps ⇧ 0.5% ⇧ (5.0%)	**28** SR 58 WB Ramps Lenwood Rd: ⇦ 4.5% ⇧ (4.7%) ⇧ (0.5%)
29 Arco Dwy: ⇦ 11.5% Main St ⇧ (11.5%) ⇧ (5.5%) L St: ⇨ 5.5%	**30** Ave H: ⇦ 9.0% Main St ⇧ (9.0%) ⇧ (2.5%) ⇨ 2.5%	**31** Ave A ⇦ 7.0% Main St ⇧ (7.0%) ⇧ (2.0%) ⇨ 2.0%	**32** 1st Ave: ⇨ 2.0% ⇦ 2.5% Main St ⇧ (2.0%) ⇧ (2.5%) ⇧ (2.5%) ⇨ 2.5%
33 ⇦ 1.5% Main St ⇧ (1.5%) ⇧ (1.0%) Barstow Rd: ⇨ 1.0%	**34** Barstow Rd: ⇦ 1.0% Virginia Way: ⇨ 2.5% ⇧ 1.0% ⇧ (1.0%) ⇧ (1.0%) ⇧ (2.5%)	**35** Barstow Rd: ⇨ 4.5% I-15 SB On-Ramp I-15 SB Off-Ramp ⇧ 7.0% ⇧ (4.5%)	**36** Barstow Rd I-15 NB Ramps ⇧ (4.5%) ⇧ (7.0%) ⇨ 7.0%
37 Barstow Rd: ⇦ (1.5%) ⇨ (5.5%) ⇦ 6% Armory Rd ⇧ 2%	**38** Barstow Rd: ⇦ (1.5%) Rimrock Rd ⇧ 2% ⇧ 2% ⇧ (2.0%) ⇧ (1.0%) ⇧ 1%	**39** ⇦ 99% Hinkley Rd Roadrunner Rd: ⇦ (99.0%)	**40** Main St Elk Dr
41 A St ⇦ (1%) Hinkley Rd Jiggs Rd: ⇦ 1%	**42** B St ⇦ 59% Hinkley Rd ⇦ (59%)	**43** C St: ⇨ (27%) ⇦ 27% ⇦ 72% Hinkley Rd ⇦ (72%)	**44** C St ⇨ (18%) F St ⇨ 18%

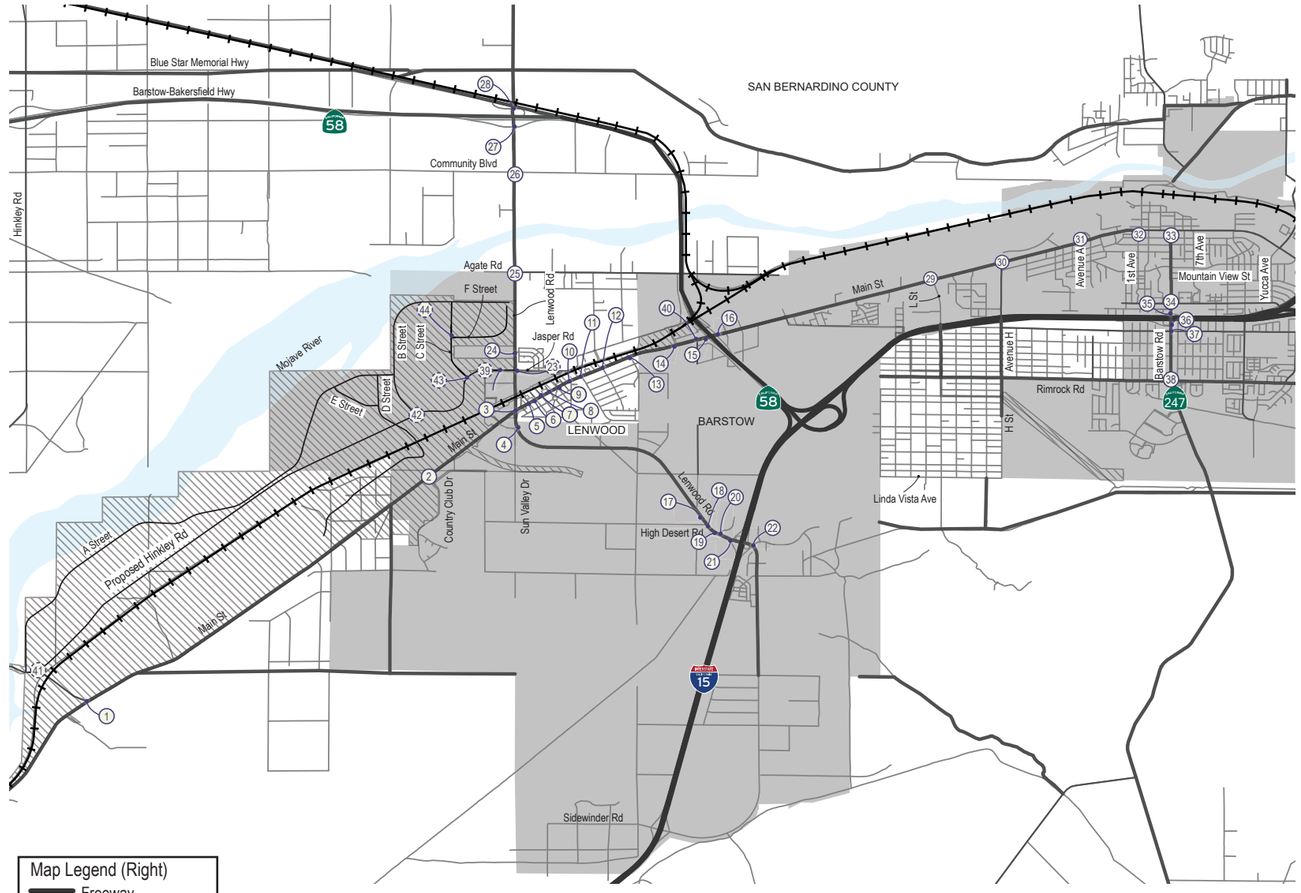


Figure 39: BIG Employee Traffic Distribution – Interim Year 2033
Transload Warehouse Center (Page 2/2)

Source: Author Compilation, 2025

1 (4%) ⇦ Main St 4% ⇨	**2** (4%) ⇨ (1%) ⇦ (95%) ⇙ Rail Yard Dwy 95% ⇙ Main St 4% ⇨ Country Club Dr ⇧ 1%	**3** 22% ⇘ Lenwood Rd ⇦ 24% Main St (22%) ⇨ (24%) ⇨ (49%) ⇙ 49% ⇦ 45% ⇧	**4** (4%) ⇘ (45%) ⇩ Lenwood Rd Sun Valley Dr 4% ⇙
5 Holland St ⇦ 24% Main St (24%) ⇨	**6** Hanan St ⇦ 24% Main St (24%) ⇨ Hanan St	**7** Townsend St ⇦ 24% Main St (24%) ⇨	**8** Woods Ave ⇦ 24% Main St (24%) ⇨
9 Frank St ⇦ 24% Main St (24%) ⇨ Frank St	**10** ⇦ 24% Main St (24%) ⇨ Paris Ave	**11** ⇦ 24% Main St (24%) ⇨ Ash Rd	**12** ⇦ 24% Main St (24%) ⇨ Birch Rd
13 ⇦ 24% Main St (24%) ⇨ Western Dr	**14** Pettit Rd ⇦ 24% Main St (24%) ⇨	**15** SR 58 EB Ramp ⇦ 24% Main St (20%) ⇨ (4%) ⇙	**16** SR 58 WB Ramp ⇦ 20% Main St (20%) ⇨ 4% ⇙
17 (45%) ⇦ Lenwood Rd Love's Travel Stop Dwy 45% ⇧	**18** (6%) ⇘ (39%) ⇙ Lenwood Rd High Desert Rd 6% ⇘ 39% ⇧	**19** Truck Freightliner Service Point Dwy ⇦ 39% Lenwood Rd (39%) ⇨	**20** Commerce Pkwy ⇦ 39% Lenwood Rd (39%) ⇨
21 13% ⇘ I-15 SB Off Ramps ⇦ 26% Lenwood Rd (22%) ⇨	**22** 3% ⇘ High Point Pkwy ⇦ 6% Lenwood Rd (3%) ⇨ (6%) ⇨ I-15 NB Off Ramps ⇦ 17%	**23** 21% ⇘ Lenwood Rd ⇦ 1% Jasper Rd Transload Warehouse Center Dwy (21%) ⇨ (1%) ⇦	**24** 21% ⇘ Lenwood Rd Cam del Sol (21%) ⇨

Source: Author Compilation, 2025

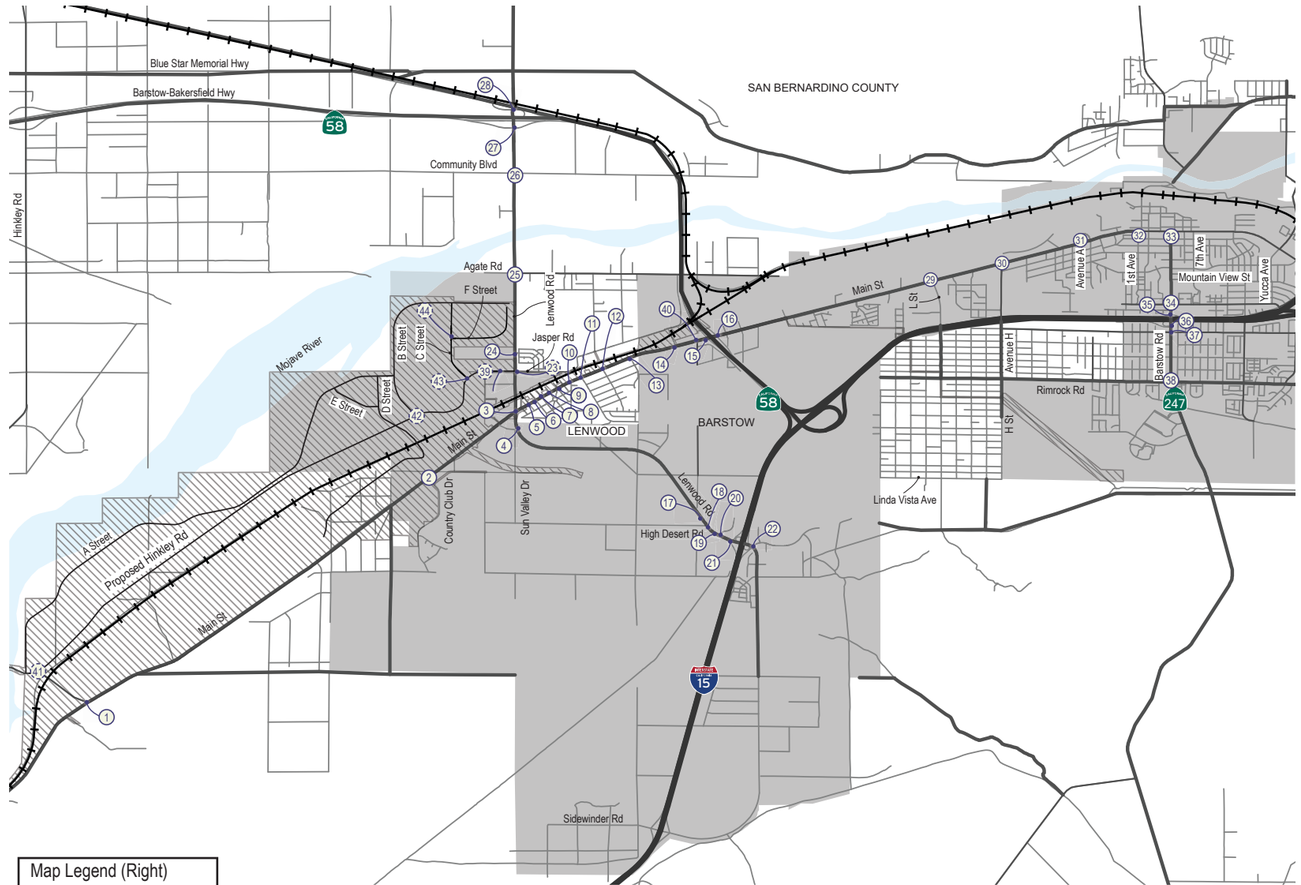


Figure 40: BIG Employee Traffic Distribution – Horizon Year 2048
Rail Yard (Page 1/2)

25 Lenwood Rd: ⇦ 11% Agate Rd: ⇦ 10% Agate Rd: ⇧ (11%) ⇧ (10%)	**26** Lenwood Rd: ⇦ 5% Community Blvd: ⇦ 5% ⇦ 1% Community Blvd: ⇧ (1%) ⇧ (5%) ⇧ (5%)	**27** Lenwood Rd: ⇦ 4% SR 58 EB Ramps: ⇧ (5%) ⇦ 1%	**28** SR 58 WB Ramps Lenwood Rd: ⇦ 4% ⇧ (4%) ⇧ (1%)
29 Arco Dwy: ⇧ 11% Main St L St: (11%) (6%) ⇦ ⇨ ⇩ 6%	**30** Ave H: ⇧ 8% Main St (8%) (3%) ⇦ ⇨ ⇩ 3%	**31** Ave A: ⇧ 6% Main St (6%) (2%) ⇦ ⇨ ⇩ 2%	**32** 1st Ave: ⇦ 2% Main St: ⇧ 2% (2%) (2%) (2%) ⇦ ⇨ ⇩ ⇩ 2%
33 Main St: ⇧ 1% Barstow Rd: (1%) (1%) ⇦ ⇨ ⇩ 1%	**34** Barstow Rd: ⇦ 1% Virginia Way: ⇩ 2% ⇦ 1% ⇩ (1%) ⇩ (1%) ⇩ (2%)	**35** Barstow Rd: ⇦ 4% I-15 SB On-Ramp I-15 SB Off-Ramp: ⇩ 7% ⇧ (4%)	**36** Barstow Rd I-15 NB Ramps: ⇧ 7% ⇩ (4%) ⇩ (7%)
37 Barstow Rd: ⇦ (2%) ⇧ (5%) ⇩ 5% Armory Rd ⇧ 2%	**38** Barstow Rd: ⇦ (2%) ⇩ 2% ⇧ 3% Rimrock Rd (3%) (1%) ⇦ ⇨ ⇩ 1%	**39** Hinkley Rd Roadrunner Rd	**40** ⇦ 24% Main St (24%) ⇨ Elk Dr
41 A St Hinkley Rd Jiggs Rd	**42** B St Hinkley Rd	**43** C St Hinkley Rd	**44** C St F St

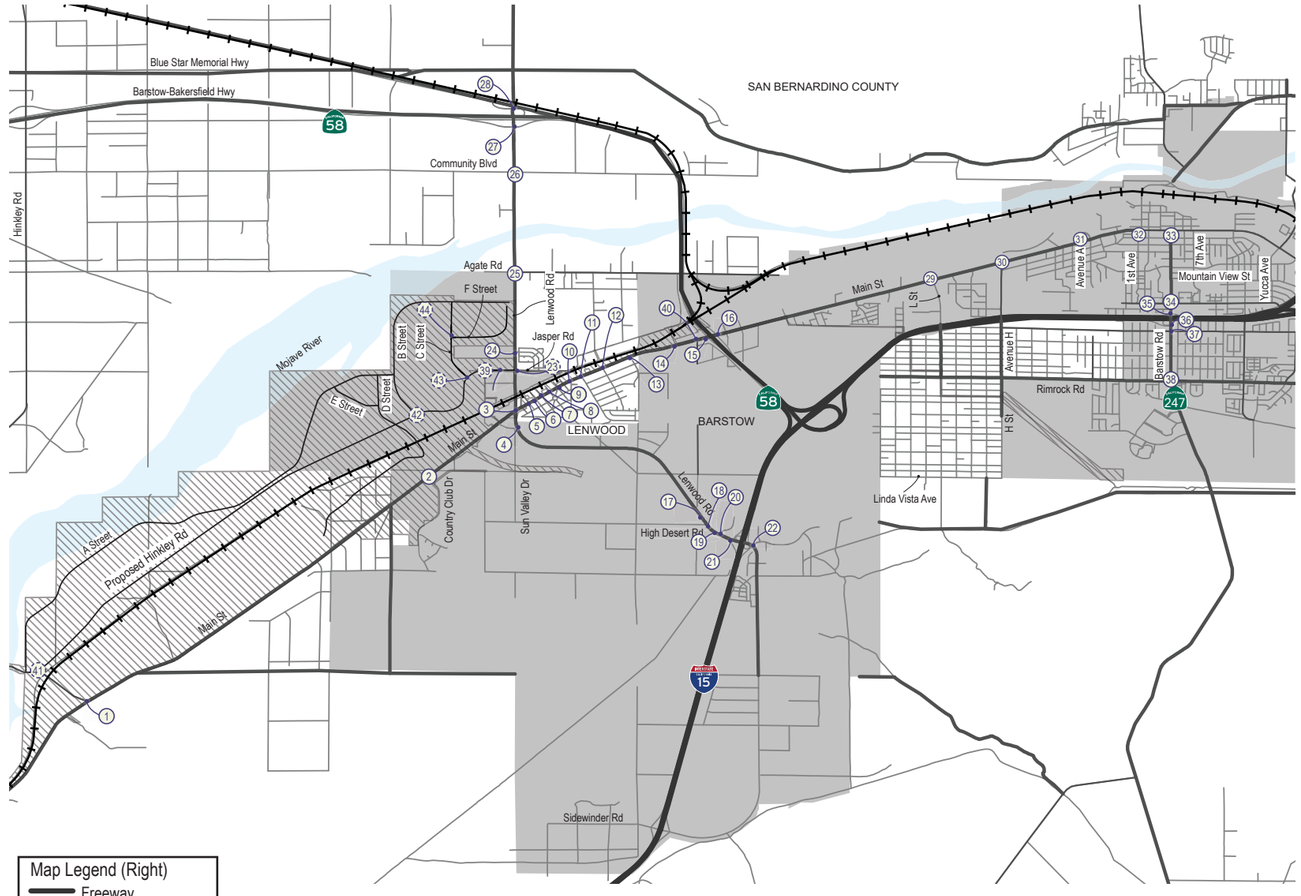
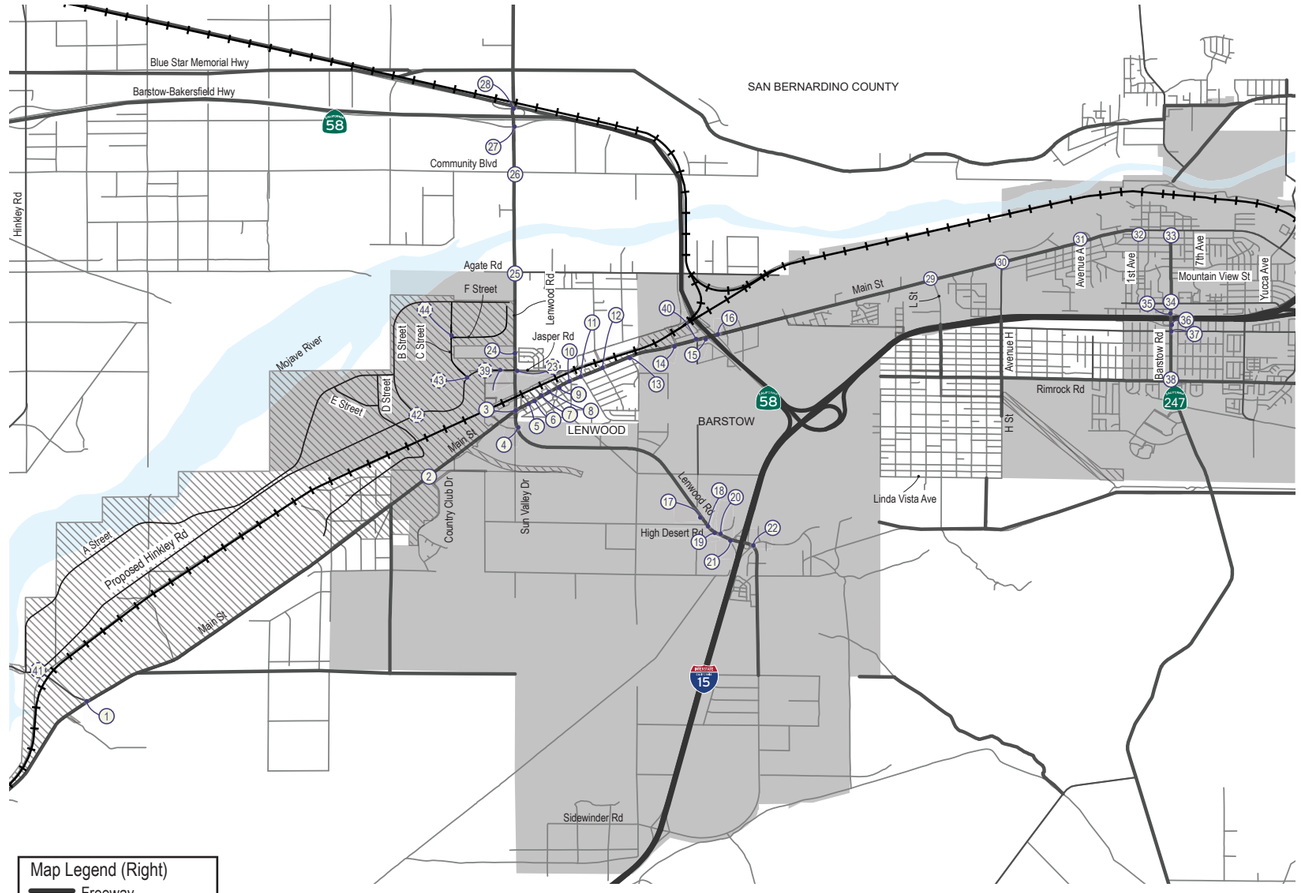


Figure 40: BIG Employee Traffic Distribution – Horizon Year 2048
Rail Yard (Page 2/2)

Source: Author Compilation, 2025

1 (4%) ⇦ Main St 4% ⇨	**2** Rail Yard Dwy: (4%) ⇦ (4%) ⇖ (1%) Main St 4% ⇨ Country Club Dr 1% ⇧	**3** Lenwood Rd: (5%) ⇖ (49%) ⇦ (12%) ⇙ 12% ⇩ Main St 5% ⇖ 49% ⇧	**4** Lenwood Rd: (4%) ⇖ (45%) ⇦ Sun Valley Dr 4% ⇧ 45% ⇧
5 Holland St 12% ⇦ Main St (12%) ⇨	**6** Hannan St 12% ⇦ Main St (12%) ⇨ Hannan St	**7** Townsend St 12% ⇦ Main St (12%) ⇨	**8** Woods Ave 12% ⇦ Main St (12%) ⇨
9 Frank St 12% ⇦ Main St (12%) ⇨ Frank St	**10** 12% ⇦ Main St (12%) ⇨ Paris Ave	**11** 12% ⇦ Main St (12%) ⇨ Ash Rd	**12** 12% ⇦ Main St (12%) ⇨ Birch Rd
13 12% ⇦ Main St (12%) ⇨ Western Dr	**14** Pettit Rd: (12%) ⇙ 12% ⇗ 12% ⇦ Main St (12%) ⇨	**15** SR 58 EB Ramp 24% ⇦ Main St (20%) ⇨ (4%) ⇖	**16** SR 58 WB Ramp 20% ⇦ Main St (20%) ⇨ 4% ⇗
17 Lenwood Rd: (45%) ⇦ Love's Travel Stop Dwy 45% ⇧	**18** Lenwood Rd: (6%) ⇖ (39%) ⇦ High Desert Rd 6% ⇦ 39% ⇧	**19** Truck Freightliner Service Point Dwy 39% ⇦ Lenwood Rd (39%) ⇨	**20** Commerce Pkwy 39% ⇦ Lenwood Rd (39%) ⇨
21 I-15 SB Off Ramps: 13% ⇖ 26% ⇦ Lenwood Rd (22%) ⇨	**22** High Point Pkwy: 3% ⇖ 6% ⇦ Lenwood Rd (3%) ⇘ (6%) ⇦ I-15 NB Off Ramps 17% ⇗	**23** Lenwood Rd: 20% ⇖ 13% ⇦ Jasper Rd Transload Warehouse Center Dwy (20%) ⇨ (13%) ⇨ (66%) ⇗ 66% ⇗	**24** Lenwood Rd: 20% ⇦ Cam del Sol (20%) ⇨

Source: Author Compilation, 2025



Map Legend (Right)
- Freeway
- Major Highway
- Arterial
- Local Roads
- City of Barstow
- BIG Project Site
- River
- Study Intersection (X)

Intersection Legend (Left)
X / Y = AM / PM PEAK HOUR TURNING VOLUMES

NOT TO SCALE

Figure 40: BIG Employee Traffic Distribution – Horizon Year 2048
Transload Warehouse Center (Page 1/2)

25 Lenwood Rd: ⇦ 10% Agate Rd: ⇦ 10% Agate Rd: ⇨ (10%) ⇦ (10%)	**26** Lenwood Rd: ⇦ 4% Community Blvd: ⇦ 5% Lenwood Rd: ⇨ 1% Community Blvd: ⇨ (1%) ⇦ (4%) ⇦ (5%)	**27** Lenwood Rd: ⇦ 4% SR 58 EB Ramps: ⇦ (4%) SR 58 EB Ramps: ⇨	**28** SR 58 WB Ramps: ⇦ (4%) Lenwood Rd: ⇨ 4% SR 58 WB Ramps: ⇨
29 Arco Dwy: ⇦ 11% Main St: ⇦ L St: ⇨ (11%) ⇨ (6%) L St: ⇦ 6%	**30** Ave H: ⇦ 8% Main St: ⇦ Ave H: ⇨ (8%) ⇨ (3%) Main St: ⇦ 3%	**31** Ave A: ⇦ 6% Main St: ⇦ Ave A: ⇨ (6%) ⇨ (2%) Main St: ⇦ 2%	**32** 1st Ave: ⇦ 2% Main St: ⇦ 2% 1st Ave: ⇨ (2%) ⇨ (2%) ⇨ (2%) Main St: ⇨ 2%
33 Main St: ⇦ 1% Barstow Rd: ⇦ 1% Barstow Rd: ⇨ (1%) ⇨ (1%)	**34** Barstow Rd: ⇦ 1% Virginia Way: ⇦ 2% Barstow Rd: ⇨ 1% Virginia Way: ⇨ (1%) ⇦ (1%) ⇦ (2%)	**35** Barstow Rd: ⇦ 4% I-15 SB Off-Ramp: ⇦ 7% ⇦ (4%) I-15 SB On-Ramp: ⇨ 7% Barstow Rd: ⇨	**36** Barstow Rd: ⇦ I-15 NB Ramps: ⇦ Barstow Rd: ⇨ (4%) ⇨ (7%) I-15 NB Ramps: ⇨ 7%
37 Barstow Rd: ⇦ (2%) ⇦ (5%) Armory Rd: ⇦ 5% Barstow Rd: ⇨ Armory Rd: ⇨ 2%	**38** Barstow Rd: ⇦ (2%) Rimrock Rd: ⇦ 2% ⇦ 3% Barstow Rd: ⇨ (3%) ⇨ (1%) Rimrock Rd: ⇨ 1%	**39** Hinkley Rd: ⇦ 99% Roadrunner Rd: ⇦ Hinkley Rd: ⇨ Roadrunner Rd: ⇨ (99%)	**40** Main St: ⇦ 24% Elk Dr: ⇦ Main St: ⇨ Elk Dr: ⇨ (24%)
41 A St: ⇦ (1%) Hinkley Rd: ⇦ A St: ⇨ Jiggs Rd: ⇨ 1%	**42** B St: ⇦ 59% Hinkley Rd: ⇦ B St: ⇨ Hinkley Rd: ⇨ (59%)	**43** C St: ⇦ (27%) Hinkley Rd: ⇦ 27% ⇦ 72% C St: ⇨ Hinkley Rd: ⇨ (72%)	**44** C St: ⇦ F St: ⇦ (18%) C St: ⇨ F St: ⇨ 18%

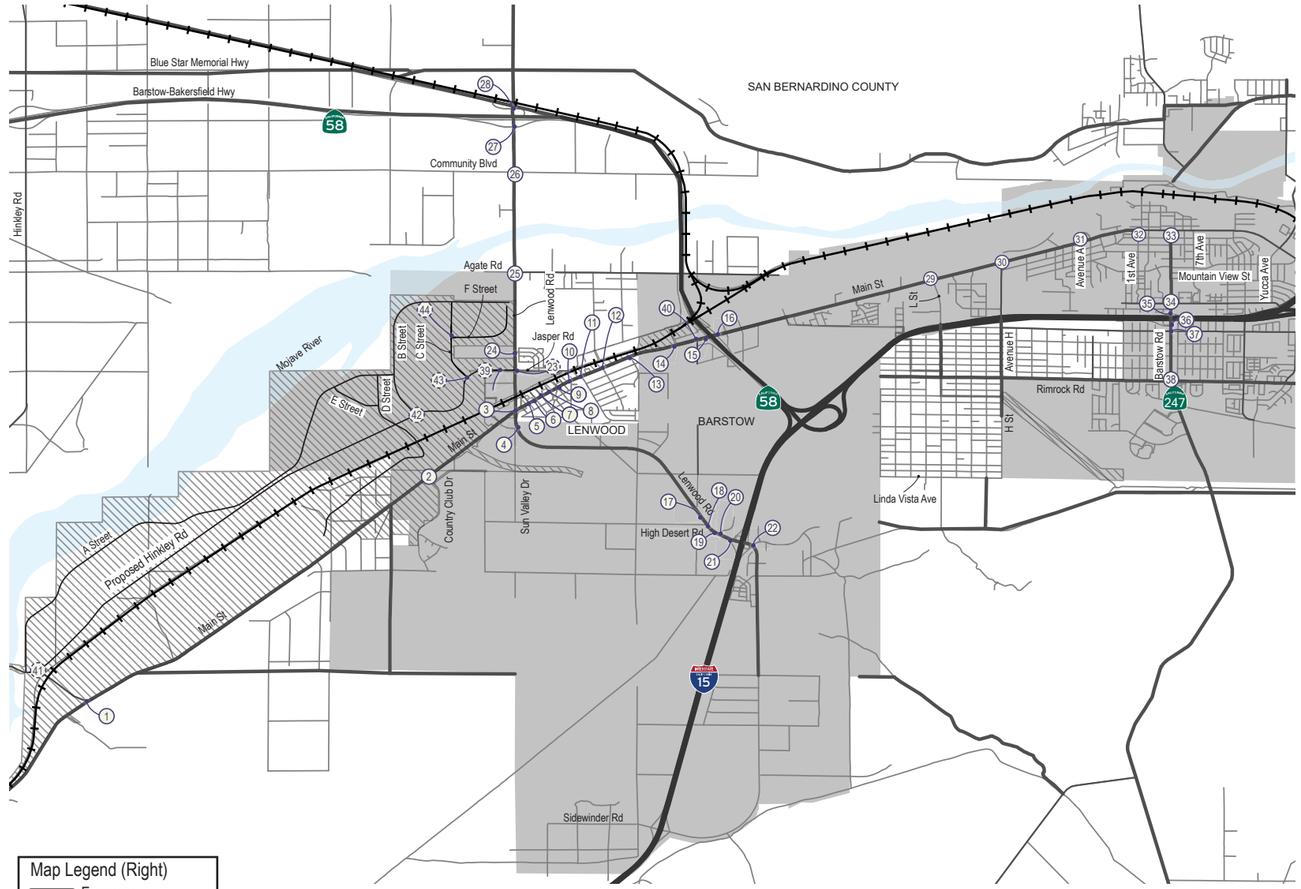


Figure 40: BIG Employee Traffic Distribution – Horizon Year 2048
Transload Warehouse Center (Page 2/2)

Source: Author Compilation, 2025

1 5 / 5 ⇦ Main St 5 / 5 ⇨	**2** 5 / 5 3 / 3 124 / 124 ⇦ Rail Yard Dwy 125 / 125 ⇦ Main St 5 / 5 ⇨ Country Club Dr 3 / 3 ⇧	**3** 35 / 35 ⇦ Lenwood Rd 32 / 32 ⇦ Main St 34 / 34 32 / 32 58 / 58 ⇨ 59 / 59 ⇧	**4** 1 / 1 57 / 57 ⇦ Lenwood Rd Sun Valley Dr ⇩ 1 / 1 ⇨ 57 / 57 ⇧
5 Holland St ⇦ 32 / 32 Main St 32 / 32 ⇨	**6** Hannan St ⇦ 32 / 32 Main St 32 / 32 ⇨ Hannan St	**7** Townsend St ⇦ 32 / 32 Main St 32 / 32 ⇨	**8** Woods Ave ⇦ 32 / 32 Main St 32 / 32 ⇨
9 Frank St ⇦ 32 / 32 Main St 32 / 32 ⇨ Frank St	**10** 32 / 32 ⇦ Main St 32 / 32 ⇨ Paris Ave	**11** 32 / 32 ⇦ Main St 32 / 32 ⇨ Ash Rd	**12** 32 / 32 ⇦ Main St 32 / 32 ⇨ Birch Rd
13 32 / 32 ⇦ Main St 32 / 32 ⇨ Western Dr	**14** Petitt Rd ⇦ 32 / 32 Main St 32 / 32 ⇨	**15** SR 58 EB Ramp ⇦ 32 / 32 Main St 26 / 26 5 / 5 ⇨	**16** SR 58 WB Ramp ⇦ 27 / 27 Main St 26 / 26 ⇨ 5 / 5 ⇩
17 57 / 57 ⇩ Lenwood Rd Love's Travel Stop Dwy ⇧ 57 / 57	**18** 1 / 1 55 / 55 ⇩ Lenwood Rd High Desert Rd ⇧ 1 / 1 ⇨ 56 / 56	**19** Truck Freightliner Service Point Dwy ⇦ 56 / 56 Lenwood Rd 55 / 55 ⇨	**20** Commerce Pkwy ⇦ 56 / 56 Lenwood Rd 55 / 55 ⇨
21 20 / 20 ⇩ I-15 SB Off Ramps 36 / 36 ⇦ Lenwood Rd 28 / 28 ⇨	**22** 3 / 3 ⇩ High Point Pkwy 5 / 5 ⇦ Lenwood Rd 3 / 3 5 / 5 ⇨ I-15 NB Off Ramps 28 / 28 ⇧	**23** 33 / 33 ⇩ Lenwood Rd 1 / 1 ⇦ Jasper Rd Transload Warehouse Center Dwy ⇩ 33 / 33 1 / 1 ⇧	**24** 33 / 33 ⇩ Lenwood Rd Cam del Sol ⇧ 33 / 33

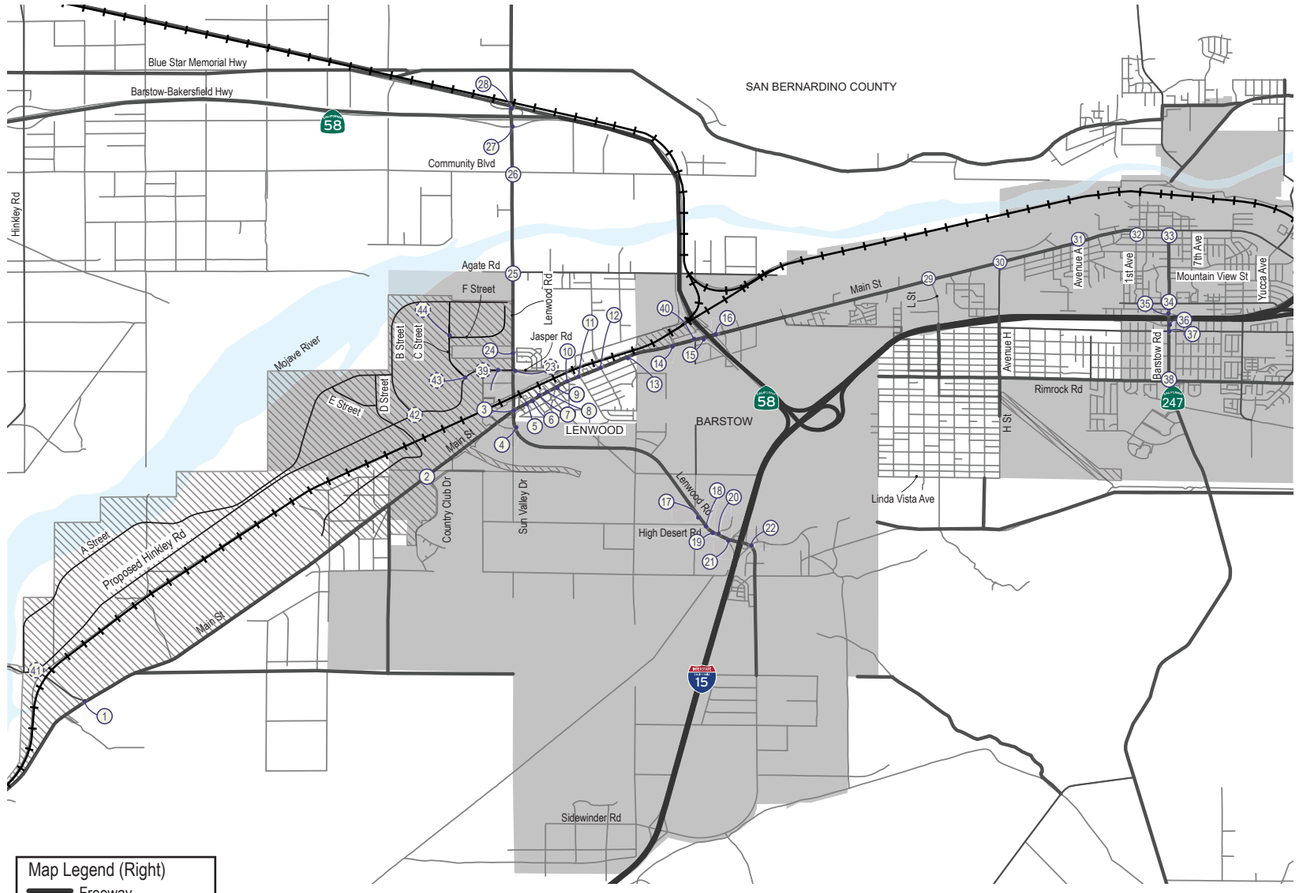


Figure 41: BIG Traffic Trip Assignment – Opening Year 2028
Rail Yard Employees (Page 1/2)

Source: Author Compilation, 2025

25 Lenwood Rd: 19 / 19 Agate Rd: 15 / 15 Agate Rd: 18 / 18, 15 / 15	**26** Lenwood Rd: 9 / 9 Community Blvd: 8 / 8 1 / 1 1 / 1, 9 / 9, 8 / 8	**27** Lenwood Rd: 7 / 7 SR 58 EB Ramps: 9 / 9 3 / 3	**28** SR 58 WB Ramps Lenwood Rd: 7 / 7 7 / 7, 3 / 3
29 Arco Dwy: 16 / 16 Main St 16 / 16, 7 / 7 L St: 7 / 7	**30** Ave H: 13 / 13 Main St 13 / 13, 3 / 3 3 / 3	**31** Ave A: 11 / 11 Main St 11 / 11, 3 / 3 3 / 3	**32** 3 / 3 1st Ave: 4 / 4 Main St 3 / 3, 4 / 4, 4 / 4 4 / 4
33 3 / 3 Main St 3 / 3, 1 / 1 Barstow Rd: 1 / 1	**34** 1 / 1 Barstow Rd: 4 / 4 Virginia Way 1 / 1 1 / 1, 1 / 1, 4 / 4	**35** Barstow Rd: 7 / 7 I-15 SB On-Ramp: I-15 SB Off-Ramp 9 / 9, 7 / 7	**36** Barstow Rd I-15 NB Ramps 7 / 7, 9 / 9 9 / 9
37 1 / 1 Barstow Rd: 8 / 8 8 / 8 Armory Rd 1 / 1	**38** 1 / 1 Barstow Rd: 1 / 1 Rimrock Rd 1 / 1, 1 / 1 1 / 1, 1 / 1 1 / 1	**39** Hinkley Rd Roadrunner Rd	**40** 32 / 32 Main St 32 / 32 Elk Dr
41 A St: Hinkley Rd Jiggs Rd	**42** B St: Hinkley Rd	**43** C St: Hinkley Rd	**44** C St: F St

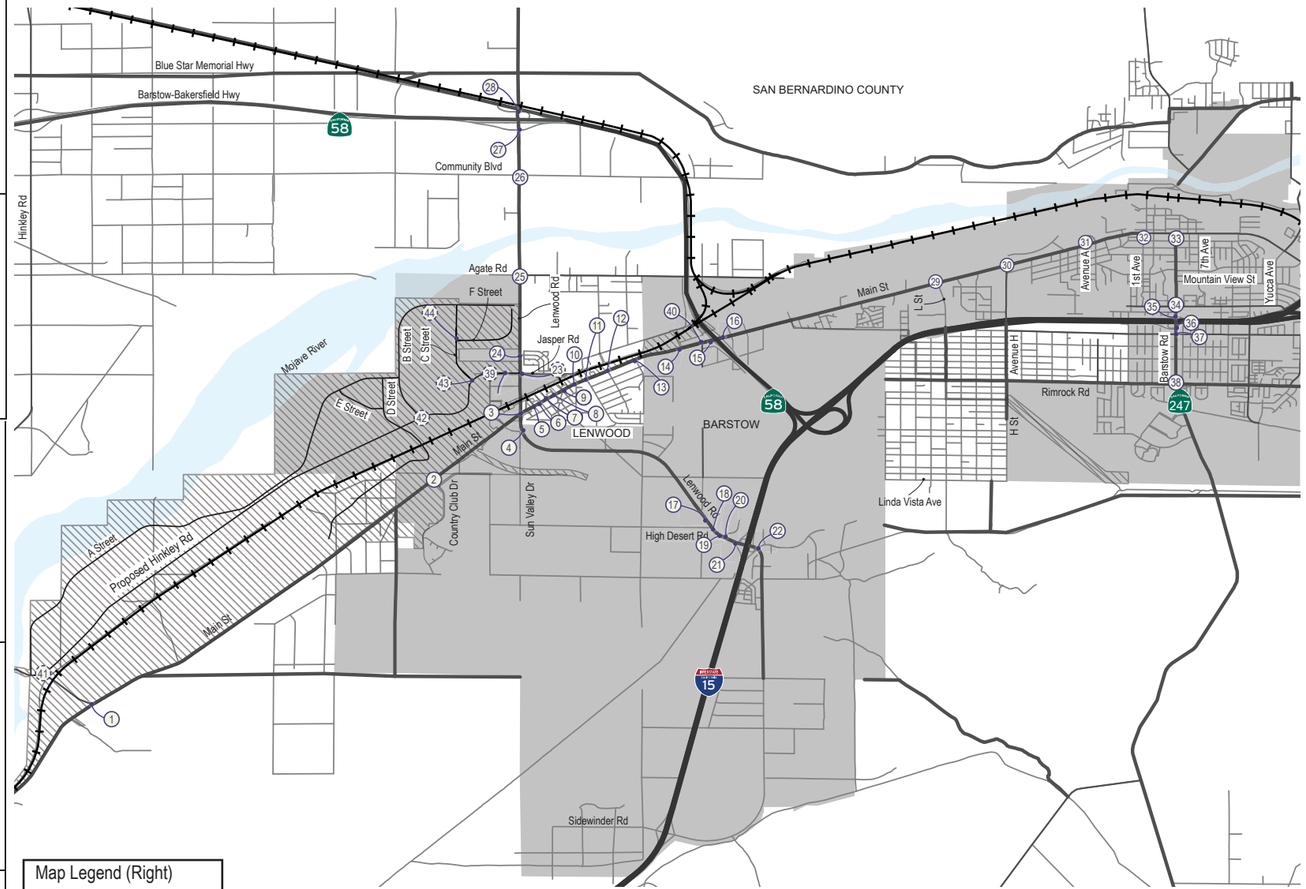


Figure 41: BIG Traffic Trip Assignment – Opening Year 2028
Rail Yard Employees (Page 2/2)

Source: Author Compilation, 2025

1 ⇦ 2 / 16 **Main St** 12 / 5 ⇨	**2** **Rail Yard Dwy** ⇦ 2 / 16 ⇦ 1 / 8 **Main St** 12 / 5 ⇨ **Country Club Dr** ⇧ 6 / 3	**3** 3 / 24 21 / 173 6 / 47 **Lenwood Rd** ⇦ 37 / 16 **Main St** 18 / 8 ⇦ ⇧ 135 / 60	**4** 0 / 4 21 / 169 **Lenwood Rd** ⇦ **Sun Valley Dr** 3 / 1 ⇨ ⇧ 132 / 59
5 **Holland St** ⇦ 37 / 16 **Main St** 6 / 47 ⇨	**6** **Hannan St** ⇦ 37 / 16 **Main St** 6 / 47 ⇨ **Hannan St**	**7** **Townsend St** ⇦ 37 / 16 **Main St** 6 / 47 ⇨	**8** **Woods Ave** ⇦ 37 / 16 **Main St** 6 / 47 ⇨
9 **Frank St** ⇦ 37 / 16 **Main St** 6 / 47 ⇨ **Frank St**	**10** ⇦ 37 / 16 **Main St** 6 / 47 ⇨ **Paris Ave**	**11** ⇦ 37 / 16 **Main St** 6 / 47 ⇨ **Ash Rd**	**12** ⇦ 37 / 16 **Main St** 6 / 47 ⇨ **Birch Rd**
13 ⇦ 37 / 16 **Main St** 6 / 47 ⇨ **Western Dr**	**14** 6 / 47 **Petitt Rd** ⇦ 37 / 16 ⇦ 37 / 16 **Main St** 6 / 47 ⇨	**15** **SR 58 EB Ramp** ⇦ 73 / 33 **Main St** 10 / 79 ⇨ 2 / 16 ⇦	**16** **SR 58 WB Ramp** ⇦ 61 / 27 **Main St** 10 / 79 ⇨ ⇧ 12 / 5
17 21 / 169 ⇦ **Lenwood Rd** **Love's Travel Stop Dwy** ⇧ 132 / 59	**18** 0 / 4 20 / 165 **Lenwood Rd** **High Desert Rd** 3 / 1 ⇨ ⇧ 129 / 58	**19** **Truck Freightliner Service Point Dwy** ⇦ 129 / 58 **Lenwood Rd** 20 / 165 ⇨	**20** **Commerce Pkwy** ⇦ 129 / 58 **Lenwood Rd** 20 / 165 ⇨
21 46 / 21 **I-15 SB Off Ramps** ⇦ 83 / 37 **Lenwood Rd** 10 / 83 ⇨	**22** 6 / 3 **High Point Pkwy** ⇦ 12 / 5 **Lenwood Rd** 1 / 8 2 / 16 ⇨ **I-15 NB Off Ramps** ⇧ 64 / 29	**23** 73 / 33 **Lenwood Rd** ⇦ 40 / 18 **Jasper Rd** **Transload Warehouse Center Dwy** 12 / 95 6 / 51 30 / 244 ⇦ ⇧ 190 / 85	**24** 73 / 33 **Lenwood Rd** **Cam del Sol** ⇧ 12 / 95

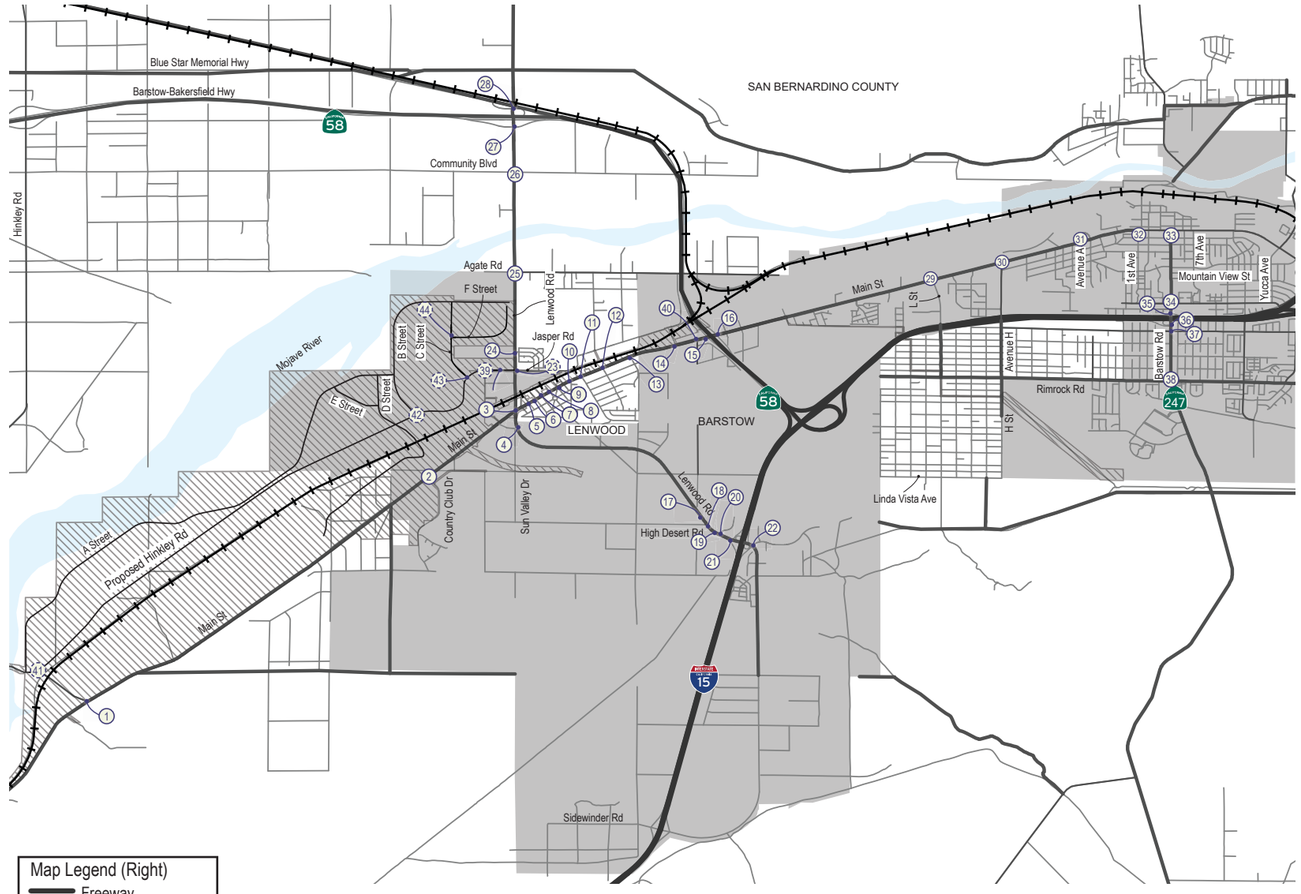


Figure 41: BIG Traffic Trip Assignment – Opening Year 2028
Transload Warehouse Center Employees (Page 1/2)

Source: Author Compilation, 2025

25 Lenwood Rd: ⇦ 40 / 18 Agate Rd: ⇨ 34 / 15 Agate Rd: ⇧ 6 / 51, ⇨ 5 / 43	**26** Lenwood Rd: ⇩ 18 / 8 Community Blvd: ⇦ 18 / 8 ⇦ 3 / 1 Community Blvd: ⇧ 0 / 4, ⇧ 3 / 24, ⇨ 3 / 24	**27** Lenwood Rd: ⇩ 15 / 7 SR 58 EB Ramps: ⇧ 3 / 24 ⇦ 3 / 1	**28** SR 58 WB Ramps: ⇧ 2 / 20, ⇨ 0 / 4 Lenwood Rd: ⇦ 15 / 7
29 Arco Dwy: ⇨ 37 / 16 Main St L St: ⇦ 6 / 47, ⇨ 2 / 20, ⇩ 15 / 7	**30** Ave H: ⇨ 31 / 14 Main St ⇦ 5 / 39, ⇨ 1 / 8, ⇩ 6 / 3	**31** Ave A: ⇦ 24 / 11 Main St ⇦ 4 / 32, ⇨ 1 / 8, ⇩ 6 / 3	**32** 1st Ave: ⇨ 9 / 4 Main St ⇦ 6 / 3 ⇦ 1 / 8, ⇨ 1 / 12, ⇨ 1 / 12, ⇩ 9 / 4
33 Main St: ⇨ 6 / 3 Barstow Rd: ⇦ 1 / 8, ⇨ 0 / 4, ⇩ 3 / 1	**34** Barstow Rd: ⇩ 3 / 1 Virginia Way: ⇦ 9 / 4 ⇦ 3 / 1 Virginia Way: ⇧ 0 / 4, ⇧ 0 / 4, ⇨ 1 / 12	**35** I-15 SB On-Ramp Barstow Rd: ⇦ 15 / 7 I-15 SB Off-Ramp: ⇧ 21 / 10, ⇨ 2 / 20	**36** I-15 NB Ramps: ⇧ 21 / 10 Barstow Rd: ⇦ 2 / 20, ⇦ 3 / 28
37 Barstow Rd: ⇦ 0 / 4, ⇨ 3 / 24 Armory Rd: ⇨ 18 / 8 ⇧ 3 / 1	**38** Barstow Rd: ⇦ 0 / 4 Rimrock Rd: ⇧ 3 / 1, ⇧ 3 / 1 0 / 4, 0 / 4, ⇧ 3 / 1	**39** Hinkley Rd: ⇦ 303 / 136 Roadrunner Rd: ⇦ 48 / 390	**40** Main St: ⇦ 73 / 33 Elk Dr: ⇦ 12 / 95 Hinkley Rd: ⇩ 9 / 71, ⇩ 55 / 25
41 A St: ⇨ 0 / 4 Hinkley Rd Jiggs Rd: ⇦ 3 / 1	**42** B St: ⇦ 181 / 81 Hinkley Rd ⇦ 28 / 232	**43** C St: ⇧ 13 / 106 Hinkley Rd: ⇦ 83 / 37, ⇦ 220 / 99 ⇦ 35 / 284	**44** A St: ⇨ 9 / 71 Hinkley Rd Jiggs Rd: ⇩ 55 / 25

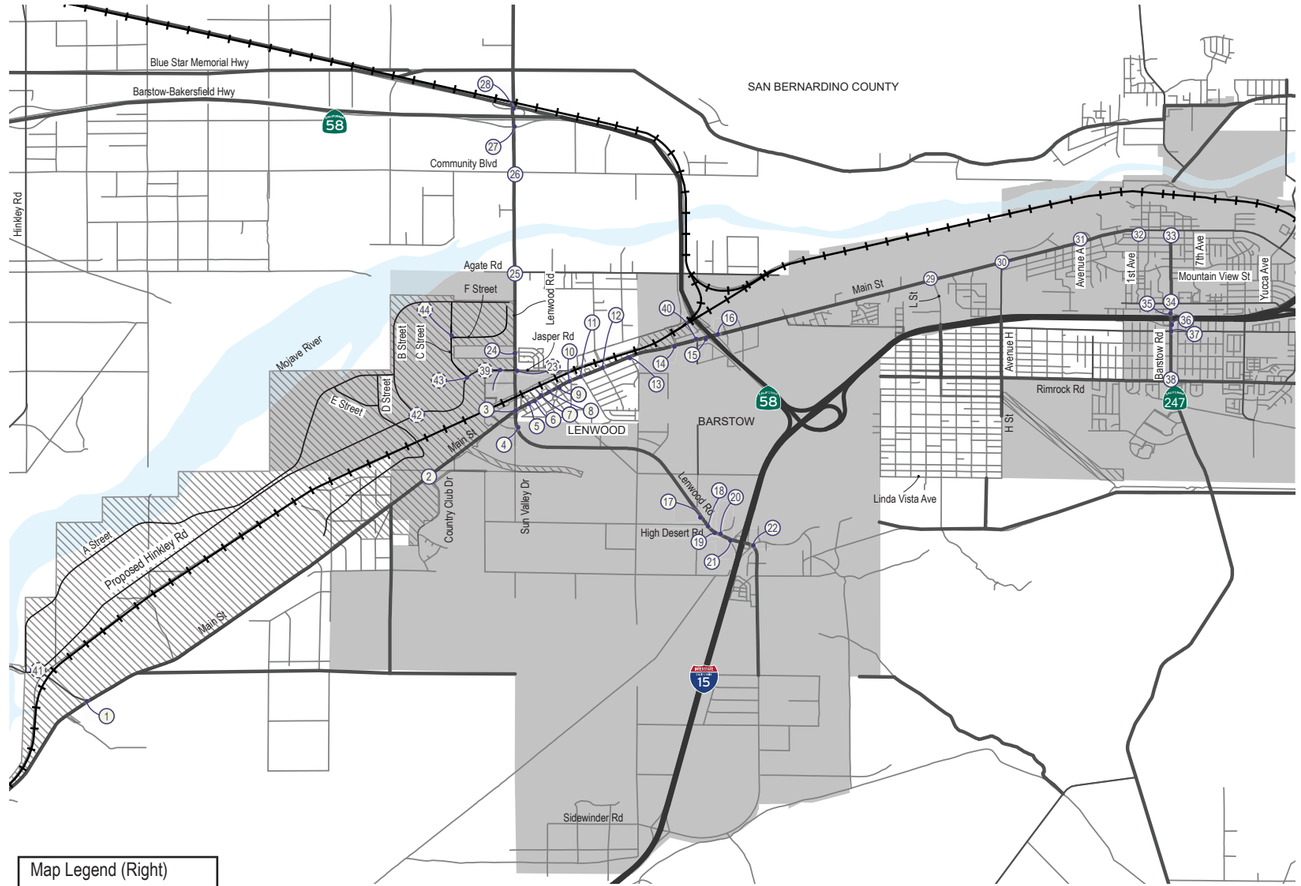


Figure 41: BIG Traffic Trip Assignment – Opening Year 2028
Transload Warehouse Center Employees (Page 2/2)

Source: Author Compilation, 2025

1	**2**	**3**	**4**
Main St	Rail Yard Dwy: 20 / 15 ⇦ ⇨ 30 / 25 Main St Country Club Dr	Lenwood Rd: 20 / 17 ⇦ ⇨ 3 / 3 Main St 13 / 10 ⇦ 2 / 2 ⇨ 5 / 3 ⇨ 7 / 6 ⇦	Lenwood Rd: 5 / 3 ⇩ ⇨ 7 / 6
5	**6**	**7**	**8**
Holland St: ⇦ 3 / 3 Main St 2 / 2 ⇨	Hannan St: ⇦ 3 / 3 Main St 2 / 2 ⇨ Hannan St	Townsend St: ⇦ 3 / 3 Main St 2 / 2 ⇨	Woods Ave: ⇦ 3 / 3 Main St 2 / 2 ⇨
9	**10**	**11**	**12**
Frank St: ⇦ 3 / 3 Main St 2 / 2 ⇨ Frank St	⇦ 3 / 3 Main St 2 / 2 ⇨ Paris Ave	⇦ 3 / 3 Main St 2 / 2 ⇨ Ash Rd	⇦ 3 / 3 Main St 2 / 2 ⇨ Birch Rd
13	**14**	**15**	**16**
⇦ 3 / 3 Main St 2 / 2 ⇨ Western Dr	Pettit Rd: ⇦ 3 / 3 Main St 2 / 2 ⇨	SR 58 EB Ramp: ⇦ 3 / 3 Main St 2 / 2 ⇨	SR 58 WB Ramp: Main St ⇩ 3 / 3
17	**18**	**19**	**20**
Lenwood Rd: 5 / 3 ⇩ Love's Travel Stop Dwy ⇧ 7 / 6	Lenwood Rd: 5 / 3 ⇩ High Desert Rd ⇧ 7 / 6	Truck Freightliner Service Point Dwy: ⇦ 7 / 6 Lenwood Rd 5 / 3 ⇨	Commerce Pkwy: ⇦ 7 / 6 Lenwood Rd 5 / 3 ⇨
21	**22**	**23**	**24**
I-15 SB Off Ramps: ⇦ 7 / 6 Lenwood Rd	High Point Pkwy: Lenwood Rd I-15 NB Off Ramps ⇦ 7 / 6	Lenwood Rd: 20 / 17 ⇩ Transload Warehouse Center Dwy Jasper Rd ⇧ 13 / 10	Lenwood Rd: 20 / 17 ⇩ Cam del Sol ⇧ 13 / 10

Source: Author Compilation, 2025

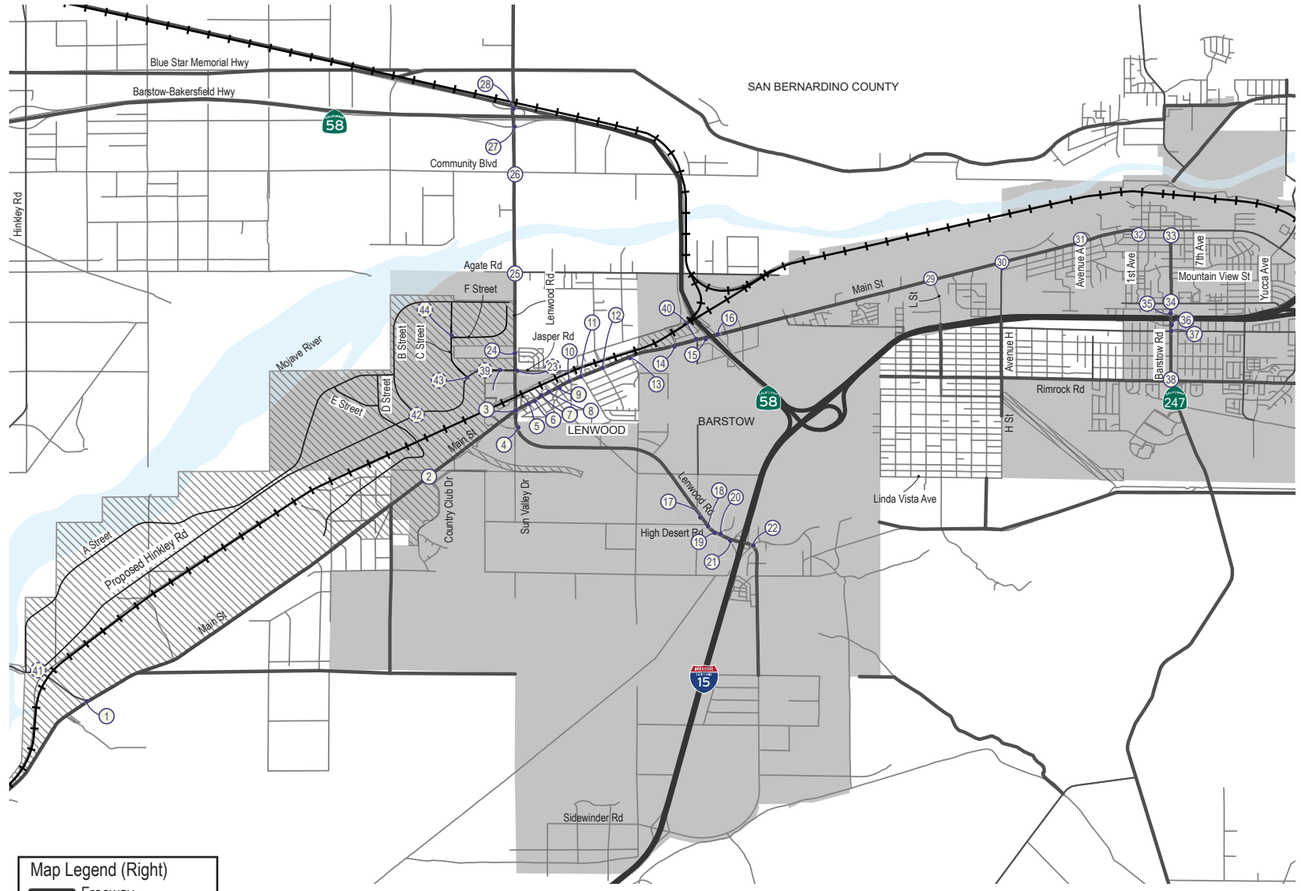


Figure 41: BIG Traffic Trip Assignment – Opening Year 2028
Traditional Intermodal Facility Heavy-Duty Trucks (PCE) (Page 1/2)

25	Lenwood Rd	Agate Rd	26	Lenwood Rd	Community Blvd	27	Lenwood Rd	SR 58 EB Ramps	28		SR 58 WB Ramps
	20 / 17 ⇩	13 / 10 ⇧		20 / 17 ⇩	13 / 10 ⇧		20 / 17 ⇦	13 / 10 ⇧		Lenwood Rd 13 / 10 ⇨	
29	Arco Dwy	Main St	30	Ave H	Main St	31	Ave A	Main St	32	1st Ave	Main St
	L St										
33	Main St		34	Barstow Rd	Virginia Way	35	Barstow Rd	I-15 SB Off-Ramp	36	Barstow Rd	I-15 NB Ramps
	Barstow Rd						I-15 SB On-Ramp				
37	Barstow Rd	Armory Rd	38	Barstow Rd	Rimrock Rd	39	Hinkley Rd		40		Main St
							Roadrunner Rd			Elk Dr	
41	A St	Hinkley Rd	42	B St	Hinkley Rd	43	C St	Hinkley Rd	44	C St	F St
	Jiggs Rd										

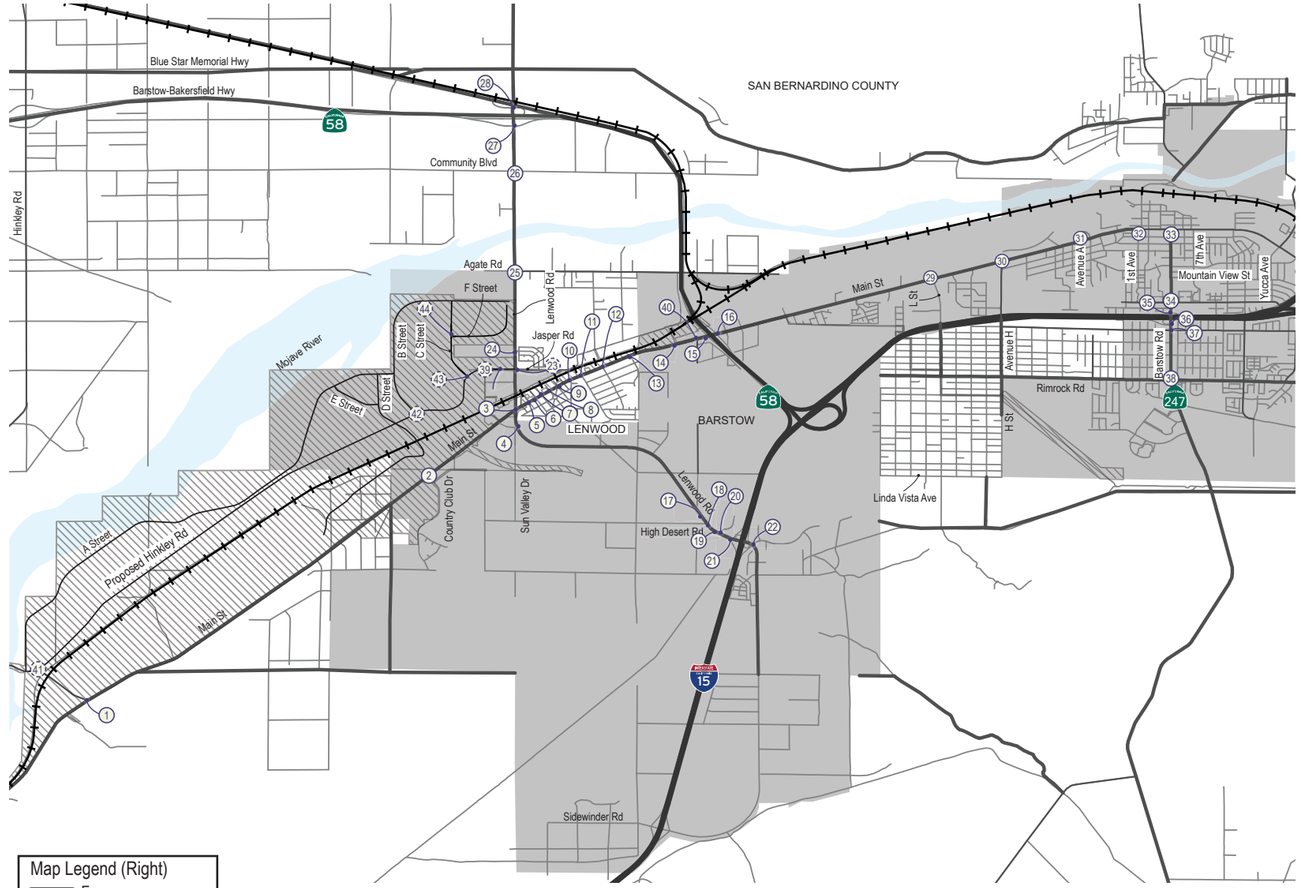


Figure 41: BIG Traffic Trip Assignment – Opening Year 2028
Traditional Intermodal Facility Heavy-Duty Trucks (PCE) (Page 2/2)

Source: Author Compilation, 2025

1 Main St	2 Rail Yard Dwy Main St Country Club Dr	3 23 / 13 Lenwood Rd Main St 23 / 10	4 23 / 13 Lenwood Rd 23 / 10
5 Holland St Main St	6 Hannan St Main St Hannan St	7 Townsend St Main St	8 Woods Ave Main St
9 Frank St Main St Frank St	10 Main St Paris Ave	11 Main St Ash Rd	12 Main St Birch Rd
13 Main St Western Dr	14 Petitt Rd Main St	15 SR 58 EB Ramp Main St	16 SR 58 WB Ramp Main St
17 23 / 13 Lenwood Rd Love's Travel Stop Dwy 23 / 10	18 23 / 13 Lenwood Rd High Desert Rd 23 / 10	19 Truck Freightliner Service Point Dwy 23 / 10 Lenwood Rd 23 / 13	20 Commerce Pkwy 23 / 10 Lenwood Rd 23 / 13
21 I-15 SB Off Ramps 23 / 10 Lenwood Rd	22 High Point Pkwy Lenwood Rd I-15 NB Off Ramps 23 / 10	23 Lenwood Rd Transload Warehouse Center Dwy Jasper Rd 23 / 13 23 / 10	24 Lenwood Rd Cam del Sol

Source: Author Compilation, 2025

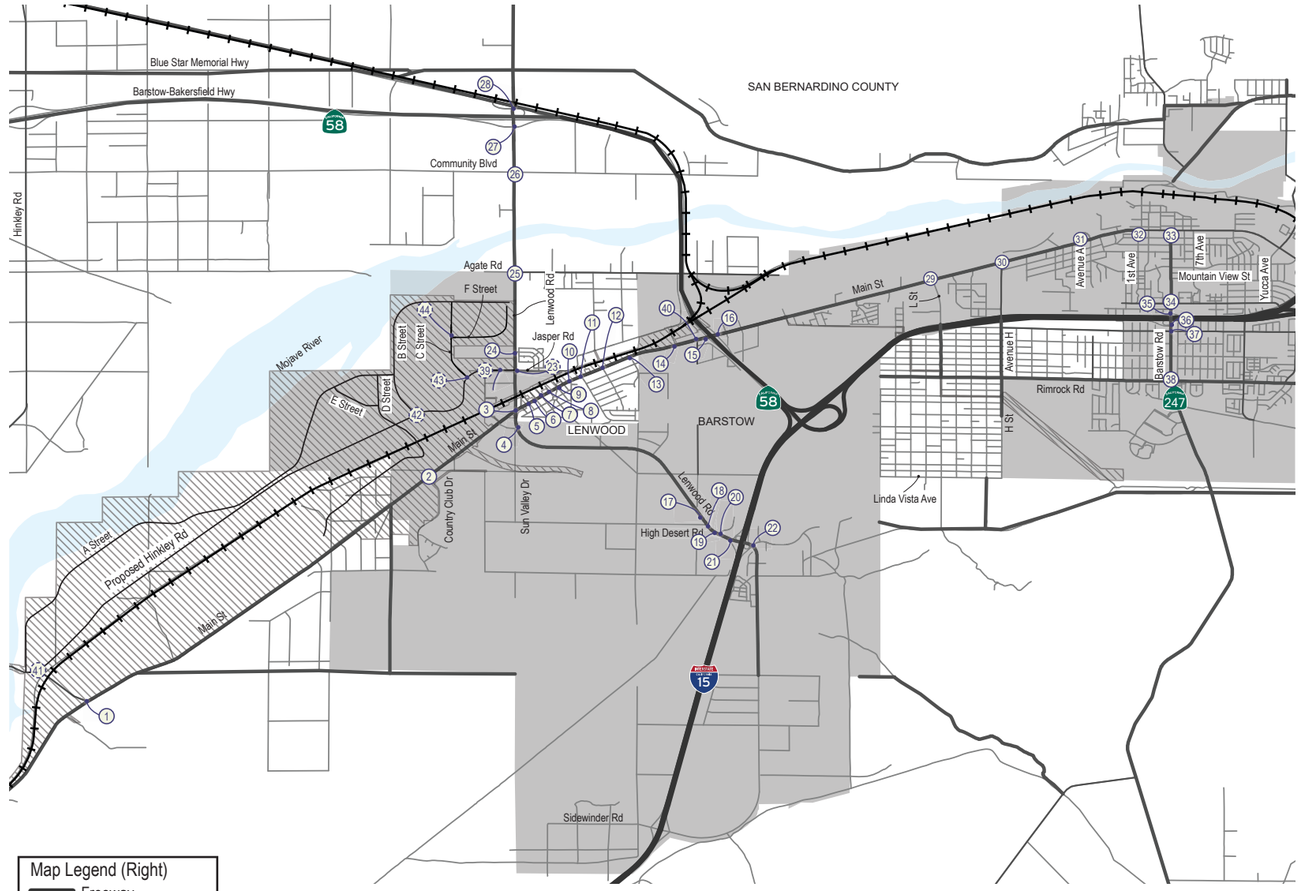


Figure 41: BIG Traffic Trip Assignment – Opening Year 2028
Transload Warehouse Center Heavy-Duty Trucks (PCE) (Page 1/2)

25 Lenwood Rd Agate Rd	26 Lenwood Rd Community Blvd	27 Lenwood Rd SR 58 EB Ramps	28 SR 58 WB Ramps Lenwood Rd
29 Arco Dwy Main St L St	30 Ave H Main St	31 Ave A Main St	32 1st Ave Main St
33 Main St Barstow Rd	34 Barstow Rd Virginia Way	35 I-15 SB On-Ramp I-15 SB Off-Ramp Barstow Rd	36 Barstow Rd I-15 NB Ramps Barstow Rd
37 Barstow Rd Armory Rd	38 Barstow Rd Rimrock Rd	39 23 / 10 Hinkley Rd 23 / 13 Roadrunner Rd	40 Main St Elk Dr
41 A St Hinkley Rd Jiggs Rd	42 B St 14 / 6 Hinkley Rd 14 / 8	43 6 / 4 C St 6 / 3 17 / 7 Hinkley Rd 17 / 9	44 C St 4 / 2 F St 4 / 2

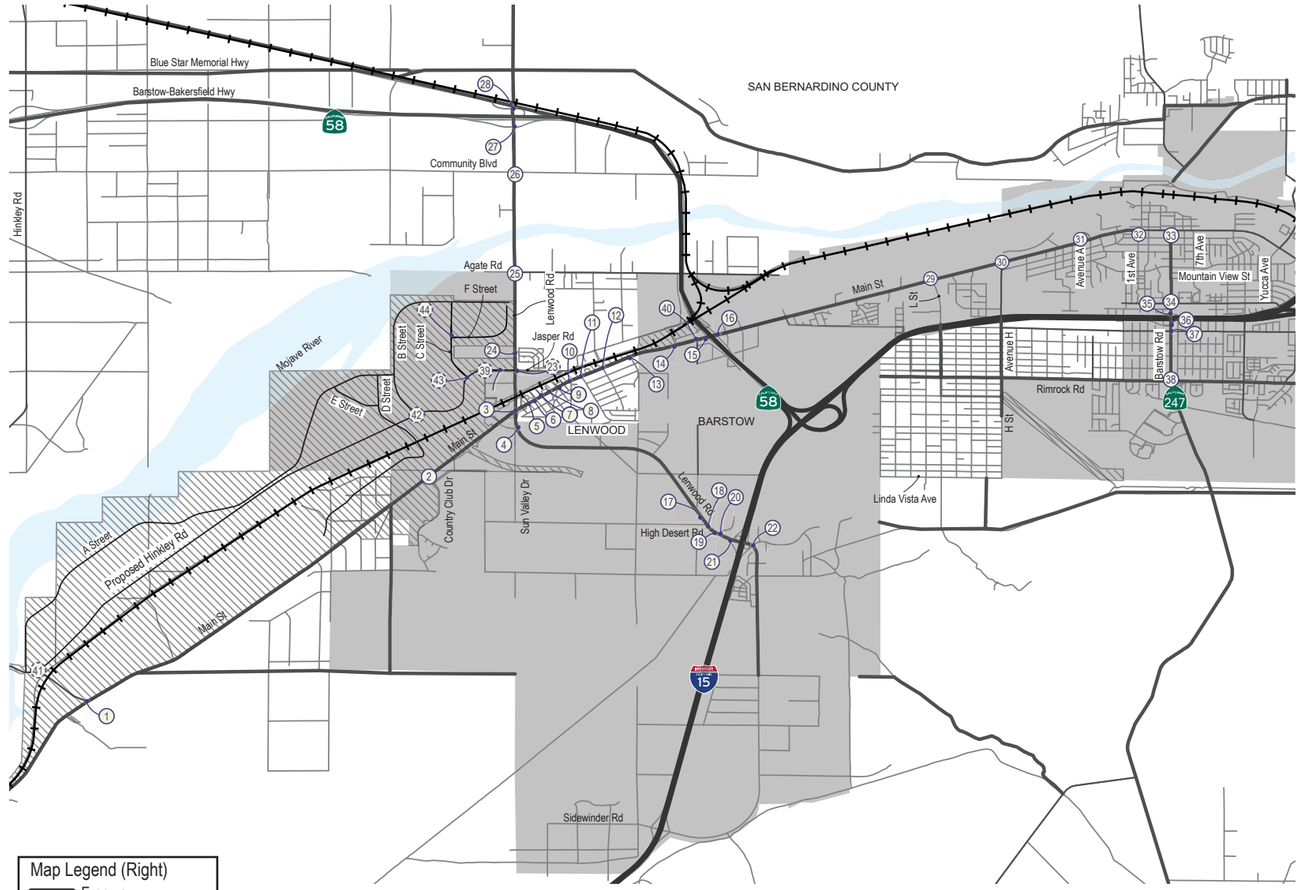
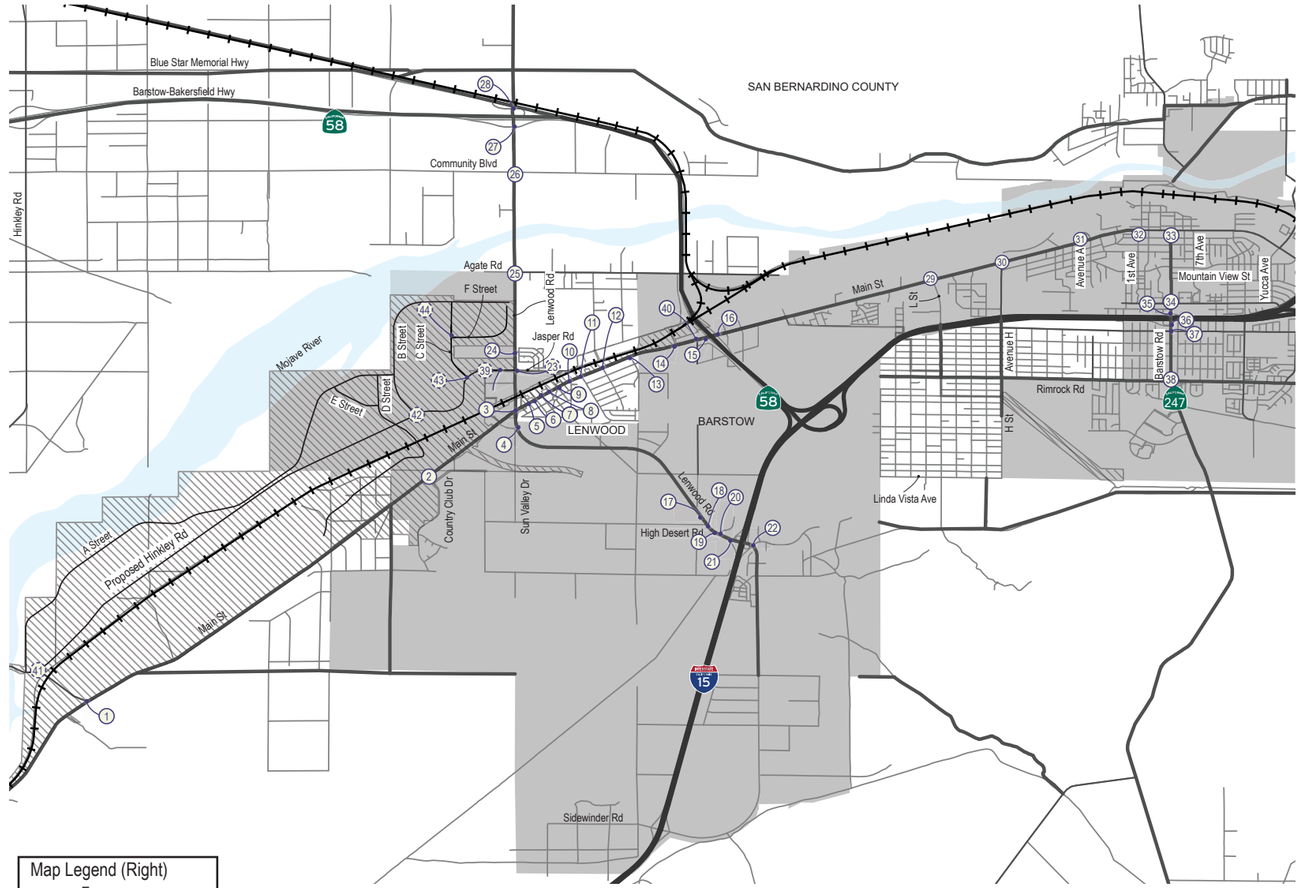


Figure 41: BIG Traffic Trip Assignment – Opening Year 2028
Transload Warehouse Center Heavy-Duty Trucks (PCE) (Page 2/2)

Source: Author Compilation, 2025

1 7 / 21 ⇦ Main St 17 / 10 ⇨	**2** 5 / 5 3 / 3 144 / 139 ⇦ Rail Yard Dwy 155 / 150 ⇦ 2 / 16 ⇦ 1 / 8 ⇦ Main St 5 / 5 ⇨ 12 / 5 ⇨ Country Club Dr ⇧ 3 / 3 ⇧ 6 / 3	**3** 58 / 76 44 / 186 6 / 47 ⇦ Lenwood Rd 37 / 16 ⇦ 35 / 35 ⇦ Main St 65 / 52 ⇨ 34 / 34 ⇨ 63 / 61 ⇨ ⇧ 66 / 65 ⇧ 158 / 70	**4** 1 / 5 106 / 242 ⇦ Lenwood Rd Sun Valley Dr ⇦ 4 / 2 ⇨ ⇧ 219 / 132
5 Holland St ⇦ 72 / 51 ⇦ Main St 40 / 81 ⇨	**6** Hannan St ⇦ 72 / 51 ⇦ Main St 40 / 81 ⇨ Hannan St	**7** Townsend St ⇦ 72 / 51 ⇦ Main St 40 / 81 ⇨	**8** Woods Ave ⇦ 72 / 51 ⇦ Main St 40 / 81 ⇨
9 Frank St ⇦ 72 / 51 ⇦ Main St 40 / 81 ⇨ Frank St	**10** 72 / 51 ⇦ Main St 40 / 81 ⇨ Paris Ave	**11** 72 / 51 ⇦ Main St 40 / 81 ⇨ Ash Rd	**12** 72 / 51 ⇦ Main St 40 / 81 ⇨ Birch Rd
13 72 / 51 ⇦ Main St 40 / 81 ⇨ Western Dr	**14** 6 / 47 ⇦ Pettit Rd 37 / 16 ⇦ 72 / 51 ⇦ Main St 40 / 81 ⇨	**15** SR 58 EB Ramp ⇦ 108 / 68 ⇦ Main St 36 / 105 ⇨ 9 / 23 ⇨	**16** SR 58 WB Ramp ⇦ 88 / 54 ⇦ Main St 36 / 105 ⇨ ⇧ 20 / 13
17 106 / 242 ⇦ Lenwood Rd Love's Travel Stop Dwy ⇦ ⇧ 219 / 132	**18** 1 / 5 103 / 236 ⇦ Lenwood Rd High Desert Rd ⇦ 4 / 2 ⇨ ⇧ 215 / 130	**19** Truck Freightliner Service Point Dwy ⇦ 215 / 130 ⇦ Lenwood Rd 103 / 236 ⇨	**20** Commerce Pkwy ⇦ 215 / 130 ⇦ Lenwood Rd 103 / 236 ⇨
21 66 / 41 ⇦ I-15 SB Off Ramps 149 / 89 ⇦ Lenwood Rd 38 / 111 ⇨	**22** 9 / 6 ⇦ High Point Pkwy 17 / 10 ⇦ Lenwood Rd 4 / 11 ⇦ 7 / 21 ⇨ I-15 NB Off Ramps ⇧ 122 / 73	**23** 73 / 33 53 / 50 ⇦ Lenwood Rd 40 / 18 ⇦ 1 / 1 ⇦ Jasper Rd Transload Warehouse Center Dwy ⇦ 12 / 95 ⇨ 6 / 51 ⇨ 53 / 257 ⇨ ⇧ 213 / 95 ⇧ 46 / 43 ⇧ 1 / 1	**24** 126 / 83 ⇦ Lenwood Rd Cam del Sol ⇦ ⇧ 58 / 138



Source: Author Compilation, 2025

Figure 41: BIG Traffic Trip Assignment – Opening Year 2028
Net Intersection Trips (PCE) (Page 1/2)

25 79 / 54 ⇩ Lenwood Rd 49 / 30 ⇦ Agate Rd 37 / 79 ⇧ 20 / 58 ⇩	**26** 47 / 34 ⇩ Lenwood Rd 26 / 16 ⇦ Community Blvd 4 / 2 ⇨ 1 / 5 ⇦ 25 / 43 ⇧ 11 / 32 ⇧	**27** 22 / 14 ⇩ Lenwood Rd SR 58 EB Ramps ⇧ 26 / 21 ⇨ 25 / 43 ⇧	**28** SR 58 WB Ramps 22 / 14 ⇦ Lenwood Rd 9 / 27 ⇧ 16 / 17 ⇩
29 Arco Dwy 53 / 32 ⇦ Main St 22 / 63 ⇨ 9 / 27 ⇦ L St 22 / 14 ⇨	**30** Ave H 44 / 27 ⇦ Main St 18 / 52 ⇨ 4 / 11 ⇦ 9 / 6 ⇨	**31** Ave A 35 / 22 ⇦ Main St 15 / 43 ⇨ 4 / 11 ⇦ 9 / 6 ⇨	**32** 9 / 6 ⇩ 1st Ave 13 / 8 ⇦ Main St 4 / 11 ⇨ 5 / 16 ⇩ 5 / 16 ⇧ 13 / 8 ⇨
33 9 / 6 ⇦ Main St 4 / 11 ⇨ 1 / 5 ⇦ Barstow Rd 4 / 2 ⇨	**34** 4 / 2 ⇩ Barstow Rd 13 / 8 ⇦ Virginia Way 4 / 2 ⇨ 1 / 5 ⇧ 1 / 5 ⇧ 5 / 16 ⇧	**35** 22 / 14 ⇩ I-15 SB On-Ramp I-15 SB Off-Ramp ⇧ Barstow Rd ⇩ 30 / 19 ⇧ 9 / 27 ⇧	**36** Barstow Rd I-15 NB Ramps 9 / 27 ⇨ Barstow Rd ⇩ 30 / 19 ⇧ 12 / 37 ⇦
37 1 / 5 ⇩ 11 / 32 ⇧ Barstow Rd 26 / 16 ⇦ Armory Rd 4 / 2 ⇧	**38** 1 / 5 ⇩ Barstow Rd 4 / 2 ⇦ 4 / 2 ⇦ Rimrock Rd 1 / 5 ⇨ 1 / 5 ⇦ 4 / 2 ⇩	**39** 326 / 146 ⇦ Hinkley Rd 71 / 403 ⇨ Roadrunner Rd	**40** 105 / 65 ⇦ Main St 44 / 127 ⇨ Elk Dr
41 A St 0 / 4 ⇦ Hinkley Rd 3 / 1 ⇨ Jiggs Rd	**42** B St 195 / 87 ⇦ Hinkley Rd 42 / 240 ⇨	**43** 19 / 110 ⇩ C St 89 / 40 ⇦ 237 / 106 ⇦ Hinkley Rd 52 / 293 ⇨	**44** C St 13 / 73 ⇦ F St 59 / 27 ⇩

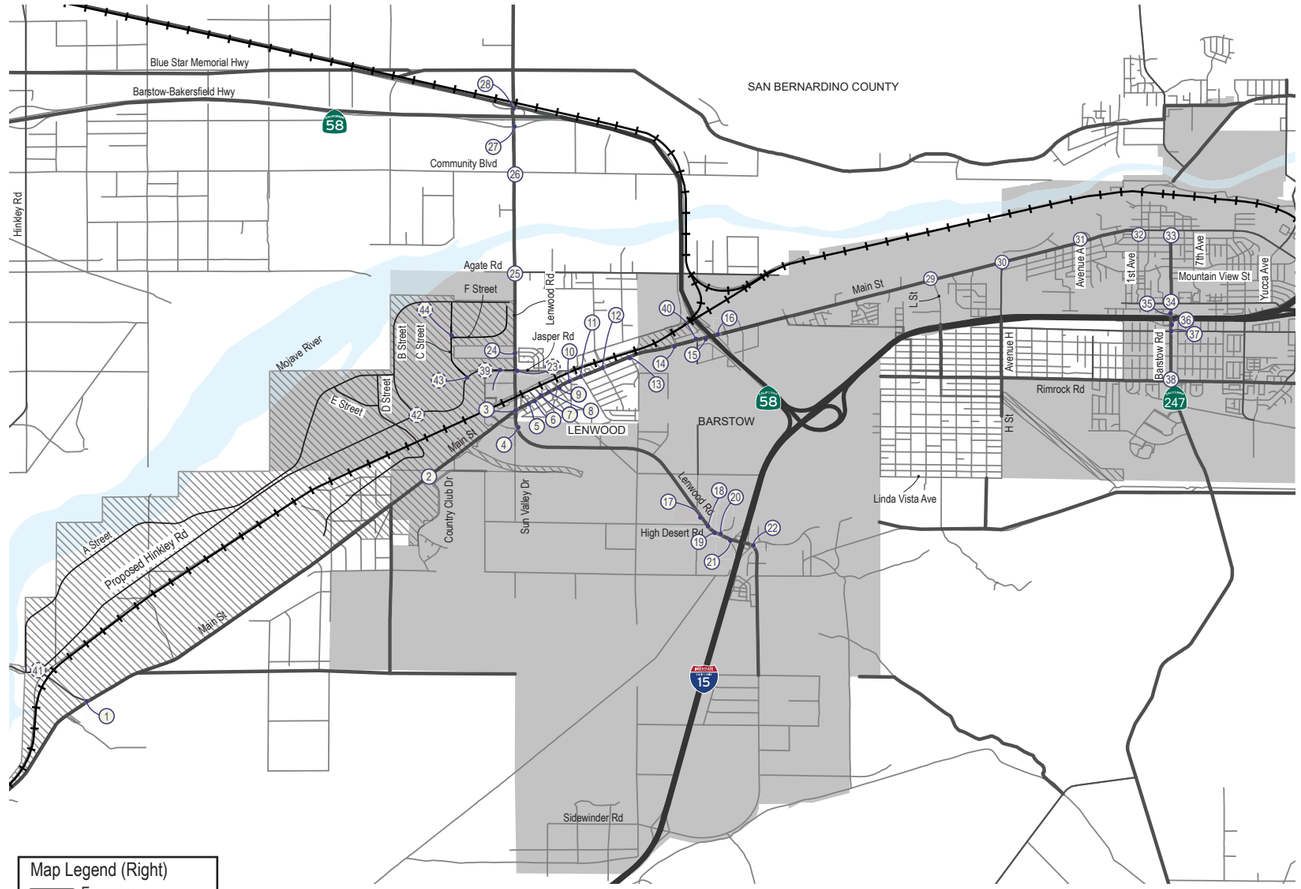


Figure 41: BIG Traffic Trip Assignment – Opening Year 2028
Net Intersection Trips (PCE) (Page 2/2)

Source: Author Compilation, 2025

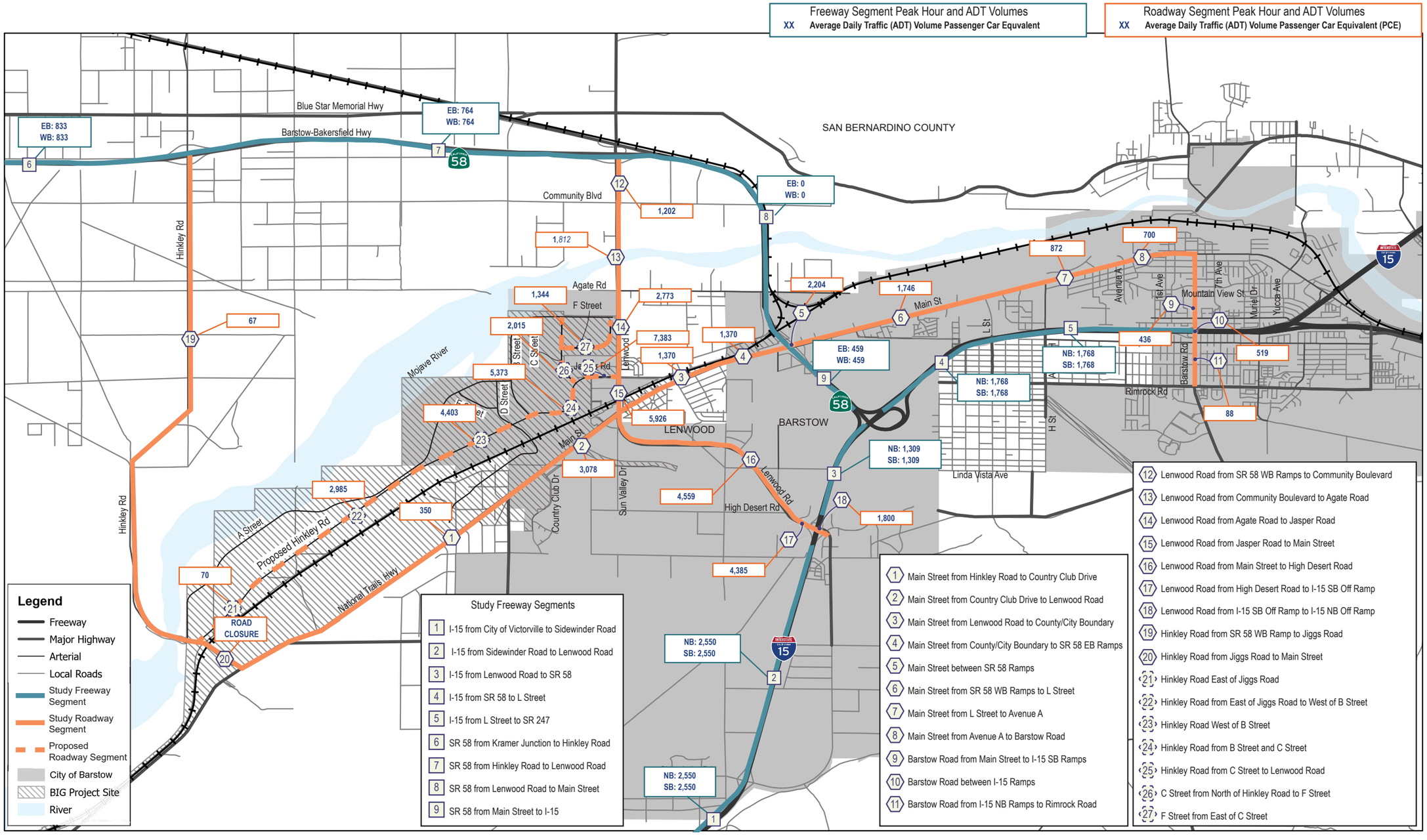


Figure 42: BIG Opening Year 2028 Roadway and Freeway Traffic Trip Assignment (PCE)

Source: Author Compilation, 2025

1 6 / 6 ⇦ Main St 6 / 6 ⇨	**2** 6 / 6 ⇨ 2 / 2 ⇩ 147 / 147 ⇦ Rail Yard Dwy 6 / 6 ⇦ Country Club Dr ⇧ 2 / 2	**3** 38 / 38 ⇨ Lenwood Rd 37 / 37 ⇨ 37 / 37 ⇩ 73 / 73 ⇦	**4** 4 / 4 ⇨ 69 / 69 ⇩ Lenwood Rd 4 / 4 ⇨ ⇧ 69 / 69
	⇦ 148 / 148 Main St	⇦ 38 / 38 Main St ⇧ 73 / 73	
5 Holland St ⇦ 38 / 38 Main St 37 / 37 ⇨	**6** Hannan St ⇦ 38 / 38 Main St 37 / 37 ⇨ Hannan St	**7** Townsend St ⇦ 38 / 38 Main St 37 / 37 ⇨	**8** Woods Ave ⇦ 38 / 38 Main St 37 / 37 ⇨
9 Frank St ⇦ 38 / 38 Main St 37 / 37 ⇨ Frank St	**10** ⇦ 38 / 38 Main St 37 / 37 ⇨ Paris Ave	**11** ⇦ 38 / 38 Main St 37 / 37 ⇨ Ash Rd	**12** ⇦ 38 / 38 Main St 37 / 37 ⇨ Birch Rd
13 ⇦ 38 / 38 Main St 37 / 37 ⇨ Western Dr	**14** Pettit Rd ⇦ 38 / 38 Main St 37 / 37 ⇨	**15** SR 58 EB Ramp ⇦ 38 / 38 Main St 31 / 31 ⇨ 6 / 6 ⇦	**16** SR 58 WB Ramp ⇦ 31 / 31 Main St 31 / 31 ⇨ ⇧ 6 / 6
17 69 / 69 ⇩ Lenwood Rd ⇧ 69 / 69 Love's Travel Stop Dwy	**18** 5 / 5 ⇨ 63 / 63 ⇩ Lenwood Rd High Desert Rd 5 / 5 ⇨ ⇧ 64 / 64	**19** Truck Freightliner Service Point Dwy ⇦ 64 / 64 Lenwood Rd 63 / 63 ⇨	**20** Commerce Pkwy ⇦ 64 / 64 Lenwood Rd 63 / 63 ⇨
21 22 / 22 ⇨ I-15 SB Off Ramps ⇦ 42 / 42 Lenwood Rd 34 / 34 ⇨	**22** 4 / 4 ⇨ High Point Pkwy ⇦ 8 / 8 Lenwood Rd 4 / 4 ⇨ 8 / 8 ⇨ I-15 NB Off Ramps ⇦ 30 / 30	**23** 36 / 36 ⇩ Lenwood Rd Transload Warehouse Center Dwy ⇦ 2 / 2 Jasper Rd ⇧ 36 / 36 ⇨ 2 / 2	**24** 36 / 36 ⇩ Lenwood Rd Cam del Sol ⇧ 36 / 36

Source: Author Compilation, 2025

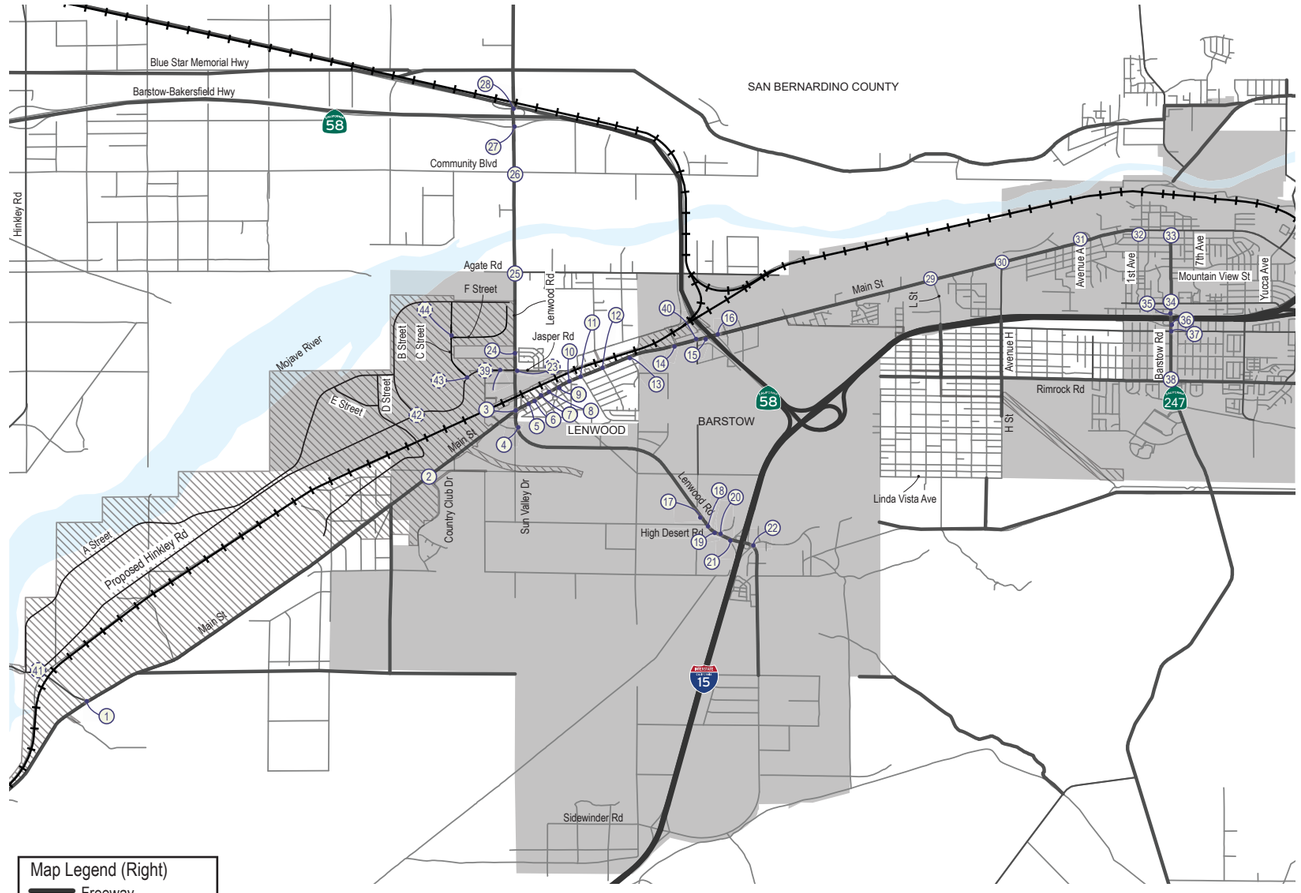


Figure 43: BIG Traffic Trip Assignment – Interim Year 2033
Rail Yard Employees (Page 1/2)

25 20 / 20 ⇩ Lenwood Rd ⇦ 16 / 16 Agate Rd ⇧ ⇨ 20 / 20 16 / 16	**26** 9 / 9 ⇩ Lenwood Rd ⇦ 9 / 9 Community Blvd 2 / 2 ⇦ ⇧ ⇧ ⇨ 2 / 2 9 / 9 9 / 9	**27** 7 / 7 ⇩ Lenwood Rd SR 58 EB Ramps ⇧ 9 / 9 2 / 2 ⇦	**28** SR 58 WB Ramps 7 / 7 ⇦ Lenwood Rd ⇦ ⇨ 7 / 7 2 / 2
29 Arco Dwy ⇩ ⇦ 18 / 18 Main St 18 / 18 9 / 9 ⇨ L St ⇧ 9 / 9	**30** Ave H ⇩ ⇦ 14 / 14 Main St 14 / 14 4 / 4 ⇨ ⇧ 4 / 4	**31** Ave A ⇩ ⇦ 11 / 11 Main St 11 / 11 3 / 3 ⇨ ⇧ 3 / 3	**32** 3 / 3 ⇩ 1st Ave ⇦ ⇦ 4 / 4 Main St 3 / 3 4 / 4 4 / 4 ⇨ ⇧ 4 / 4
33 ⇦ 2 / 2 Main St 2 / 2 2 / 2 ⇨ Barstow Rd ⇧ 2 / 2	**34** 2 / 2 ⇩ Barstow Rd ⇦ 4 / 4 Virginia Way 2 / 2 ⇦ ⇧ ⇧ ⇨ 2 / 2 2 / 2 4 / 4	**35** 7 / 7 ⇩ Barstow Rd I-15 SB On-Ramp ⇧ I-15 SB Off-Ramp 11 / 11 7 / 7	**36** Barstow Rd ⇩ I-15 NB Ramps 7 / 7 ⇦ ⇧ 11 / 11 11 / 11 ⇦
37 2 / 2 9 / 9 ⇩ Barstow Rd ⇦ 9 / 9 Armory Rd ⇧ 2 / 2	**38** 2 / 2 ⇩ Barstow Rd ⇦ 2 / 3 Rimrock Rd 3 / 3 2 / 2 ⇨ ⇧ 2 / 2	**39** Hinkley Rd Roadrunner Rd	**40** Main St Elk Dr
41 A St Hinkley Rd Jiggs Rd	**42** B St Hinkley Rd	**43** C St Hinkley Rd	**44** C St F St

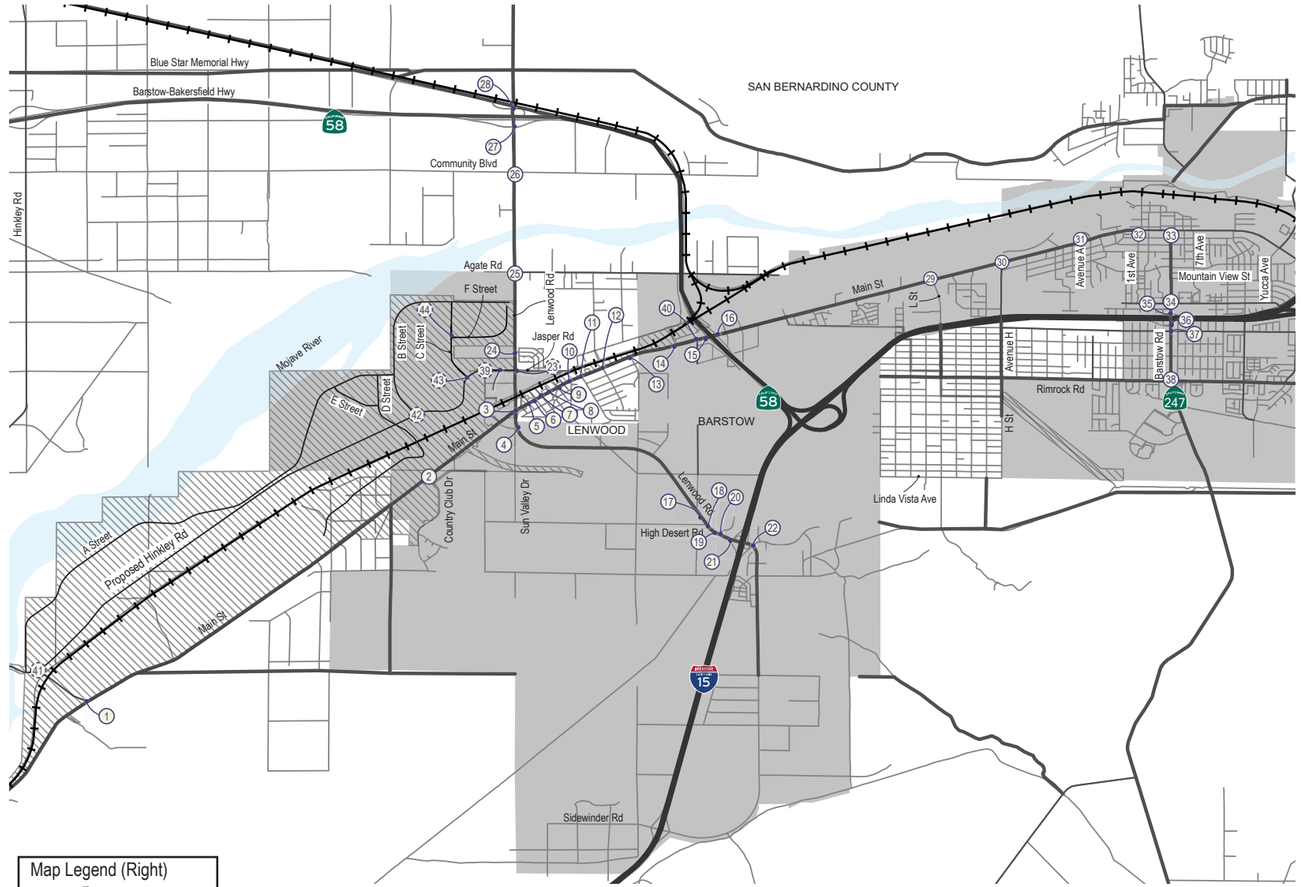


Figure 43: BIG Traffic Trip Assignment – Interim Year 2033
Rail Yard Employees (Page 2/2)

Source: Author Compilation, 2025

1 ⇦ 3 / 21 **Main St** 16 / 7 ⇨	**2** **Rail Yard Dwy** ⇦ 3 / 21 ⇖ 1 / 8 **Main St** 16 / 7 ⇨ **Country Club Dr** ⇧ 6 / 3	**3** 4 / 29 ⇖ 30 / 242 ⇩ 8 / 62 ⇦ **Lenwood Rd** ⇨ 48 / 22 **Main St** 22 / 10 ⇦ ⇧ 188 / 85	**4** 2 / 13 ⇖ 28 / 229 ⇩ **Lenwood Rd** **Sun Valley Dr** 10 / 5 ⇨ ⇧ 178 / 80
5 **Holland St** ⇦ 48 / 22 **Main St** 8 / 62 ⇨	**6** **Hannan St** ⇦ 48 / 22 **Main St** 8 / 62 ⇨ **Hannan St**	**7** **Townsend St** ⇦ 48 / 22 **Main St** 8 / 62 ⇨	**8** **Woods Ave** ⇦ 48 / 22 **Main St** 8 / 62 ⇨
9 **Frank St** ⇦ 48 / 22 **Main St** 8 / 62 ⇨ **Frank St**	**10** ⇦ 48 / 22 **Main St** 8 / 62 ⇨ **Paris Ave**	**11** ⇦ 48 / 22 **Main St** 8 / 62 ⇨ **Ash Rd**	**12** ⇦ 48 / 22 **Main St** 8 / 62 ⇨ **Birch Rd**
13 ⇦ 48 / 22 **Main St** 8 / 62 ⇨ **Western Dr**	**14** 8 / 62 ⇩ **Pettit Rd** ⇦ 48 / 22 ⇖ 48 / 22 **Main St** 8 / 62 ⇨	**15** **SR 58 EB Ramp** ⇦ 97 / 44 **Main St** 13 / 104 ⇨ 3 / 21 ⇦	**16** **SR 58 WB Ramp** ⇦ 81 / 36 **Main St** 13 / 104 ⇨ ⇧ 16 / 7
17 28 / 229 ⇩ **Lenwood Rd** **Love's Travel Stop Dwy** ⇧ 178 / 80	**18** 2 / 18 ⇖ 26 / 211 ⇩ **Lenwood Rd** **High Desert Rd** 14 / 6 ⇦ ⇧ 164 / 74	**19** **Truck Freightliner Service Point Dwy** ⇦ 164 / 74 **Lenwood Rd** 26 / 211 ⇨	**20** **Commerce PKwy** ⇦ 164 / 74 **Lenwood Rd** 26 / 211 ⇨
21 57 / 25 ⇖ **I-15 SB Off Ramps** ⇦ 107 / 48 **Lenwood Rd** 14 / 112 ⇨	**22** 10 / 5 ⇖ **High Point PKwy** ⇦ 20 / 9 **Lenwood Rd** 2 / 13 ⇦ 3 / 26 ⇨ **I-15 NB Off Ramps** ⇧ 77 / 35	**23** 89 / 40 ⇖ **Lenwood Rd** ⇦ 53 / 24 **Jasper Rd** **Transload Warehouse Center Dwy** 14 / 114 ⇦ 8 / 68 ⇨ 41 / 333 ⇦ 259 / 116 ⇧	**24** 89 / 40 ⇩ **Lenwood Rd** **Cam del Sol** ⇧ 14 / 114

Source: Author Compilation, 2025

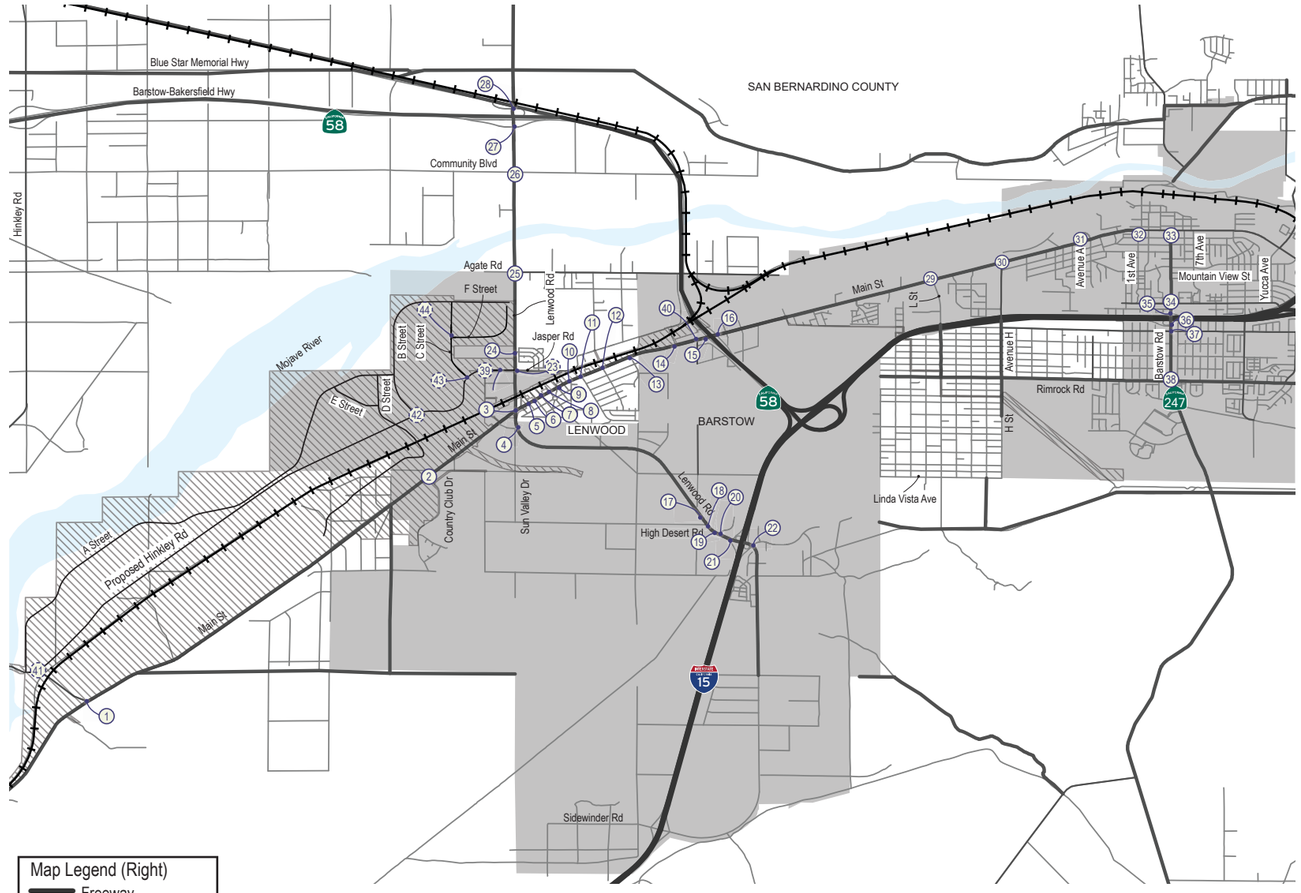


Figure 43: BIG Traffic Trip Assignment – Interim Year 2033
Transload Warehouse Center Employees (Page 1/2)

25 Lenwood Rd: ⇩ 46 / 21 Agate Rd: ⇦ 42 / 19 Agate Rd: ⇧ 7 / 60, ⇦ 7 / 55	**26** Lenwood Rd: ⇩ 20 / 9 Community Blvd: ⇦ 22 / 10 ⇨ 4 / 2 Community Blvd: ⇧ 1 / 5, ⇧ 3 / 26, ⇦ 4 / 29	**27** Lenwood Rd: ⇩ 18 / 8 SR 58 EB Ramps: ⇧ 3 / 26 ⇨ 2 / 1	**28** SR 58 WB Ramps Lenwood Rd: ⇨ 18 / 8 ⇧ 3 / 25 ⇦ 0 / 3
29 Arco Dwy Main St: ⇦ 46 / 21 ⇨ 7 / 60 ⇦ 4 / 29 L St: ⇩ 22 / 10	**30** Ave H Main St: ⇦ 36 / 16 ⇨ 6 / 47 ⇦ 2 / 13 ⇩ 10 / 5	**31** Ave A Main St: ⇦ 28 / 13 ⇨ 4 / 36 ⇦ 1 / 10 ⇩ 8 / 4	**32** 1st Ave Main St: ⇦ 10 / 5 ⇨ 8 / 4 ⇨ 1 / 10 ⇨ 2 / 13 ⇦ 2 / 13 ⇩ 10 / 5
33 Main St: ⇦ 6 / 3 ⇨ 1 / 8 ⇦ 1 / 5 Barstow Rd: ⇩ 4 / 2	**34** Barstow Rd ⇩ 4 / 2 Virginia Way: ⇦ 10 / 5 ⇨ 4 / 2 ⇧ 1 / 5, ⇧ 1 / 5, ⇧ 2 / 13	**35** Barstow Rd I-15 SB On-Ramp I-15 SB Off-Ramp ⇩ 18 / 8 ⇧ 28 / 13, ⇧ 3 / 23	**36** Barstow Rd I-15 NB Ramps ⇨ 3 / 23 ⇦ 4 / 36 ⇧ 28 / 13
37 Barstow Rd ⇩ 1 / 8 ⇦ 4 / 29 Armory Rd: ⇦ 22 / 10 ⇧ 6 / 3	**38** Barstow Rd ⇩ 1 / 8 Rimrock Rd: ⇦ 6 / 3 ⇦ 8 / 4 ⇨ 1 / 10 ⇦ 1 / 5 ⇩ 4 / 2	**39** Hinkley Rd: ⇦ 400 / 180 Roadrunner Rd ⇩ 63 / 515	**40** Main St Elk Dr
41 A St Hinkley Rd: ⇦ 1 / 5 ⇨ 4 / 2 Jiggs Rd	**42** B St Hinkley Rd: ⇦ 238 / 107 ⇨ 38 / 307	**43** C St Hinkley Rd: ⇩ 17 / 140 ⇦ 109 / 49 ⇦ 291 / 131 ⇨ 46 / 374	**44** C St F St: ⇨ 12 / 94 ⇩ 73 / 33

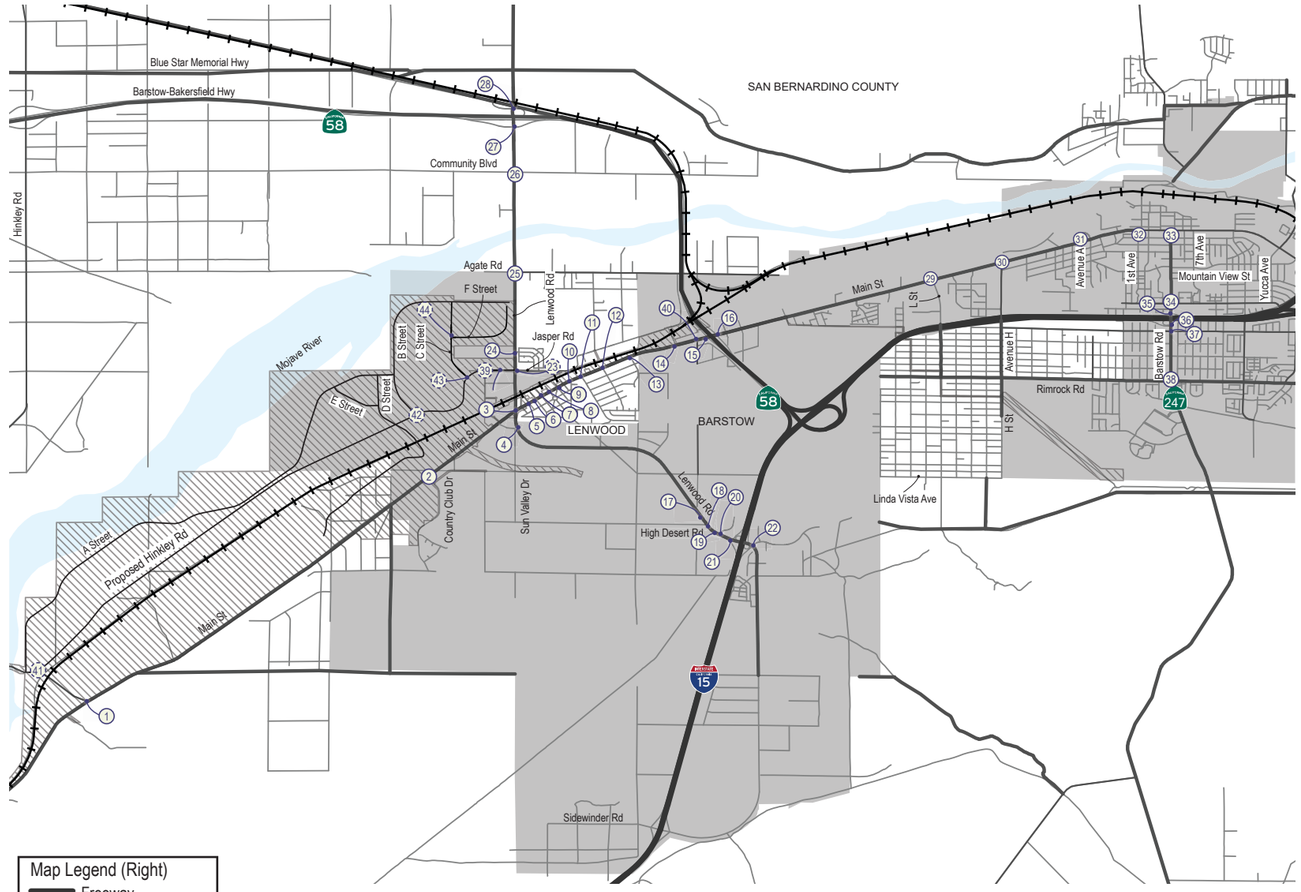


Figure 43: BIG Traffic Trip Assignment – Interim Year 2033
Transload Warehouse Center Employees (Page 2/2)

Source: Author Compilation, 2025

1 Main St 3 / 2 ⇨	**2** Rail Yard Dwy 25 / 20 ⇦ Main St ⇦ 38 / 30 Country Club Dr	**3** Lenwood Rd 25 / 20 ⇨ Main St ⇦ 4 / 3 17 / 13 ⇨ 3 / 2 ⇨ 6 / 5 ⇦ 9 / 7 ⇦	**4** Lenwood Rd 6 / 5 ⇩ 9 / 7 ⇧
5 Holland St Main St ⇦ 4 / 3 3 / 2 ⇨	**6** Hannan St Main St ⇦ 4 / 3 3 / 2 ⇨ Hannan St	**7** Townsend St Main St ⇦ 4 / 3 3 / 2 ⇨	**8** Woods Ave Main St ⇦ 4 / 3 3 / 2 ⇨
9 Frank St Main St ⇦ 4 / 3 3 / 2 ⇨ Frank St	**10** Main St ⇦ 4 / 3 3 / 2 ⇨ Paris Ave	**11** Main St ⇦ 4 / 3 3 / 2 ⇨ Ash Rd	**12** Main St ⇦ 4 / 3 3 / 2 ⇨ Birch Rd
13 Main St ⇦ 4 / 3 3 / 2 ⇨ Western Dr	**14** Pettit Rd Main St ⇦ 4 / 3 3 / 2 ⇨	**15** SR 58 EB Ramp Main St ⇦ 4 / 3 3 / 2 ⇦	**16** SR 58 WB Ramp Main St ⇩ 4 / 3
17 Lenwood Rd 6 / 5 ⇩ Love's Travel Stop Dwy ⇧ 9 / 7	**18** Lenwood Rd 6 / 5 ⇩ High Desert Rd ⇧ 9 / 7	**19** Truck Freightliner Service Point Dwy Lenwood Rd ⇦ 9 / 7 6 / 5 ⇨	**20** Commerce Pkwy Lenwood Rd ⇦ 9 / 7 6 / 5 ⇨
21 I-15 SB Off Ramps Lenwood Rd ⇦ 9 / 7	**22** High Point Pkwy Lenwood Rd I-15 NB Off Ramps ⇩ 9 / 7	**23** Lenwood Rd 25 / 20 ⇩ Jasper Rd ⇧ 17 / 13 Transload Warehouse Center Dwy	**24** Lenwood Rd 25 / 20 ⇩ Cam del Sol ⇧ 17 / 13

Source: Author Compilation, 2025

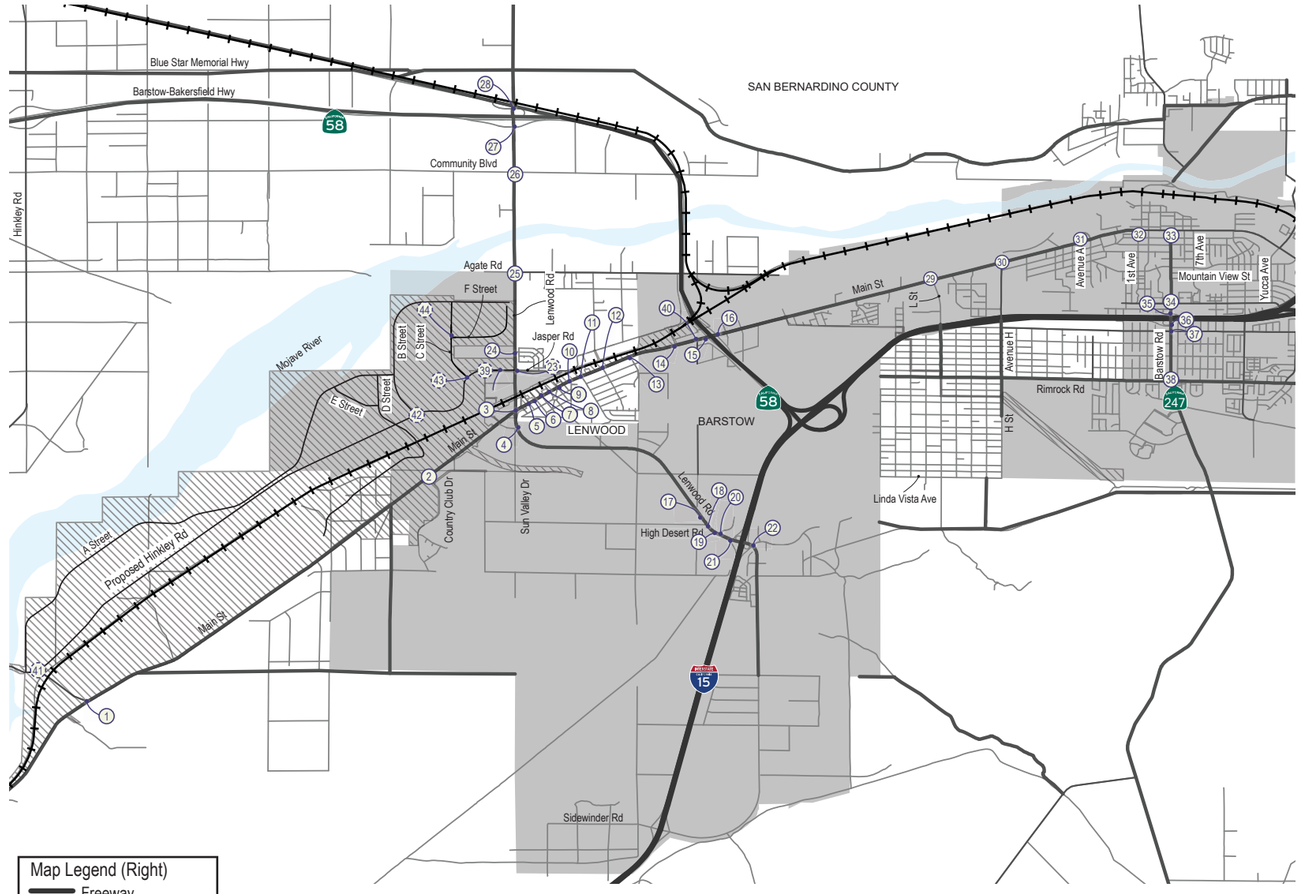


Figure 43: BIG Traffic Trip Assignment – Interim Year 2033
Traditional Intermodal Facility Heavy-Duty Trucks (PCE) (Page 1/2)

25 Lenwood Rd (25 / 20) Agate Rd 17 / 13	**26** Lenwood Rd (25 / 20) Community Blvd 17 / 13	**27** Lenwood Rd SR 58 EB Ramps 25 / 20 17 / 13	**28** SR 58 WB Ramps Lenwood Rd 17 / 13
29 Arco Dwy Main St L St	**30** Ave H Main St	**31** Ave A Main St	**32** 1st Ave Main St
33 Main St Barstow Rd Armory Rd	**34** Barstow Rd Virginia Way Rimrock Rd	**35** Barstow Rd I-15 SB On-Ramp I-15 SB Off-Ramp Hinkley Rd Roadrunner Rd	**36** Barstow Rd I-15 NB Ramps Main St Elk Dr
37 Barstow Rd Hinkley Rd Jiggs Rd	**38** Barstow Rd F St	**39** C St Hinkley Rd	**40** C St F St
41 A St Hinkley Rd	**42** B St Hinkley Rd	**43** C St Hinkley Rd	**44**

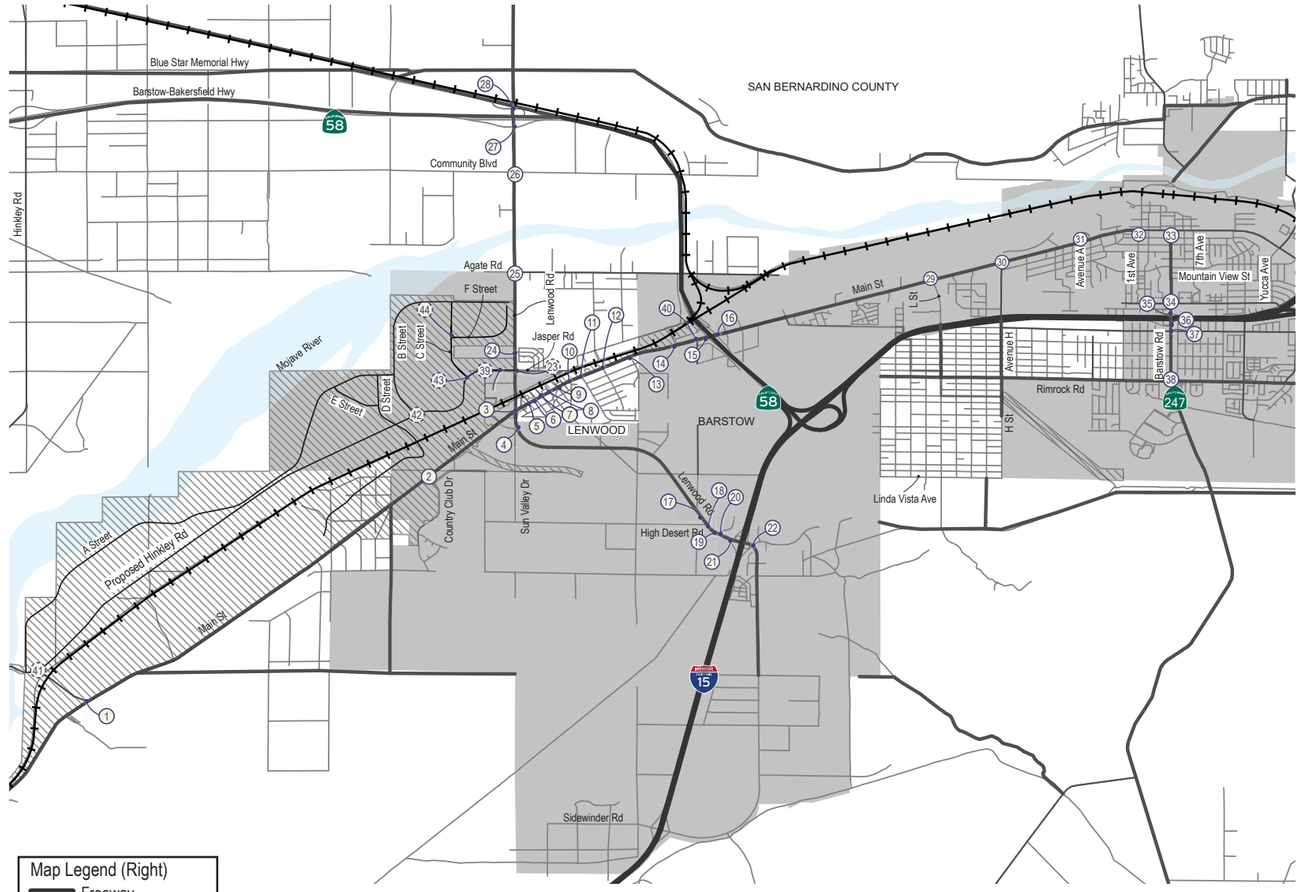


Figure 43: BIG Traffic Trip Assignment – Interim Year 2033
Traditional Intermodal Facility Heavy-Duty Trucks (PCE) (Page 2/2)

Source: Author Compilation, 2025

1 Main St	2 Rail Yard Dwy Main St Country Club Dr	3 30 / 15 ⇩ Lenwood Rd Main St ⇧ 28 / 15	4 30 / 15 ⇩ Lenwood Rd ⇧ 28 / 15
5 Holland St Main St	6 Hannan St Main St Hannan St	7 Townsend St Main St	8 Woods Ave Main St
9 Frank St Main St Frank St	10 Main St Paris Ave	11 Main St Ash Rd	12 Main St Birch Rd
13 Main St Western Dr	14 Pettit Rd Main St	15 SR 58 EB Ramp Main St	16 SR 58 WB Ramp Main St
17 30 / 15 ⇩ Lenwood Rd Love's Travel Stop Dwy ⇧ 28 / 15	18 30 / 15 ⇩ Lenwood Rd High Desert Rd ⇧ 28 / 15	19 Truck Freightliner Service Point Dwy ⇦ 28 / 15 Lenwood Rd 30 / 15 ⇨	20 Commerce Pkwy ⇦ 28 / 15 Lenwood Rd 30 / 15 ⇨
21 I-15 SB Off Ramps ⇦ 28 / 15 Lenwood Rd	22 High Point Pkwy Lenwood Rd I-15 NB Off Ramps ⇩ 28 / 15	23 Lenwood Rd Transload Warehouse Center Dwy Jasper Rd 30 / 15 ⇦ ⇩ 28 / 15	24 Lenwood Rd Cam del Sol

Source: Author Compilation, 2025

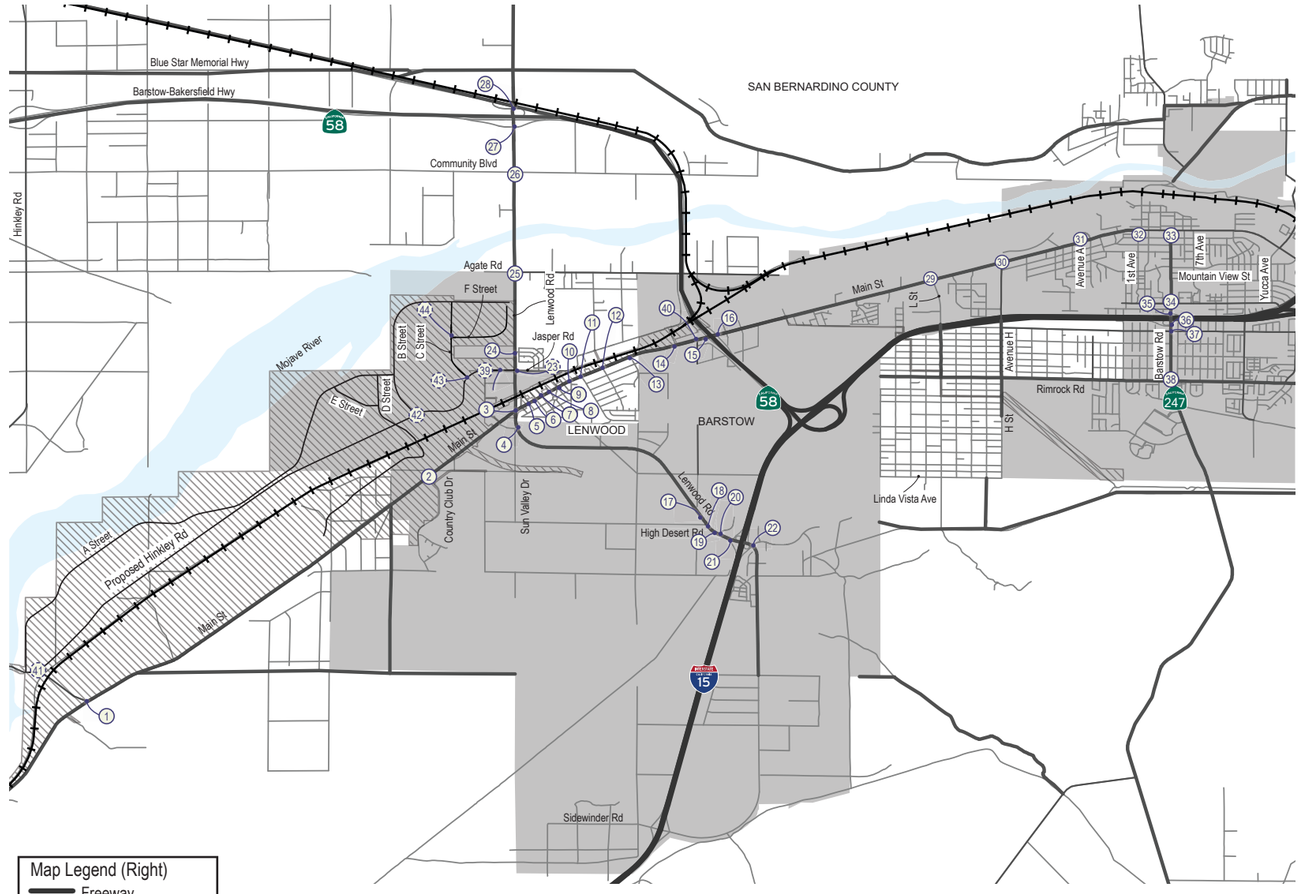


Figure 43: BIG Traffic Trip Assignment – Interim Year 2033
Transload Warehouse Center Heavy-Duty Trucks (PCE) (Page 1/2)

25 Lenwood Rd Agate Rd	**26** Lenwood Rd Community Blvd	**27** Lenwood Rd SR 58 EB Ramps	**28** SR 58 WB Ramps Lenwood Rd
29 Arco Dwy Main St L St	**30** Ave H Main St	**31** Ave A Main St	**32** 1st Ave Main St
33 Main St Barstow Rd Armory Rd	**34** Barstow Rd Virginia Way Rimrock Rd	**35** I-15 SB On-Ramp I-15 SB Off-Ramp Barstow Rd ⇦ 28 / 15 Hinkley Rd 30 / 15 ⇨ Roadrunner Rd	**36** Barstow Rd I-15 NB Ramps Barstow Rd Main St Elk Dr
41 A St Hinkley Rd Jiggs Rd	**42** B St ⇦ 17 / 9 Hinkley Rd 18 / 9 ⇨	**43** 8 / 4 ⇨ C St ⇦ 8 / 4 ⇦ 20 / 11 Hinkley Rd 22 / 11 ⇨	**44** C St ⇨ 5 / 3 F St ⇨ 5 / 3

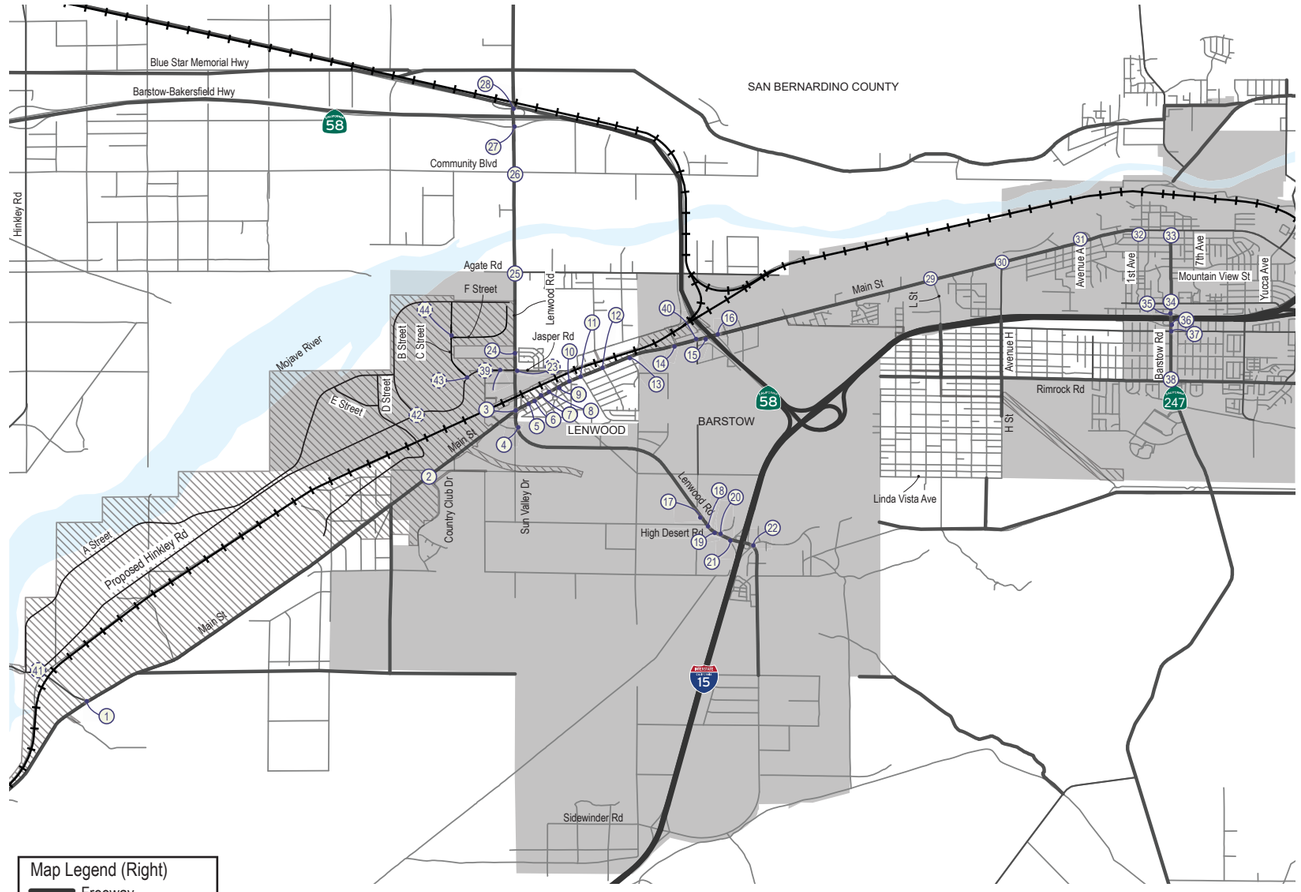


Figure 43: BIG Traffic Trip Assignment – Interim Year 2033
Transload Warehouse Center Heavy-Duty Trucks (PCE) (Page 2/2)

Source: Author Compilation, 2025

1 9 / 27 ⇦ Main St 22 / 13 ⇨	**2** 6 / 6 ⇨ 2 / 2 ⇩ 172 / 167 ⇦ Rail Yard Dwy 6 / 6 ⇨ 16 / 7 ⇦ Country Club Dr 186 / 178 ⇦ 3 / 21 ⇦ 1 / 8 ⇦ Main St 2 / 2 ⇧ 6 / 3 ⇧	**3** 67 / 87 ⇨ 60 / 257 ⇩ 8 / 62 ⇦ Lenwood Rd 76 / 60 ⇦ 40 / 39 ⇨ 79 / 78 ⇨ 48 / 22 ⇦ 42 / 41 ⇦ Main St 82 / 80 ⇧ 216 / 100 ⇧	**4** 6 / 17 ⇨ 133 / 318 ⇩ Lenwood Rd 14 / 9 ⇨ Sun Valley Dr 284 / 171 ⇧
5 90 / 63 ⇦ Main St 48 / 101 ⇨ Holland St	**6** 90 / 63 ⇦ Main St 48 / 101 ⇨ Hannan St	**7** 90 / 63 ⇦ Main St 48 / 101 ⇨ Townsend St	**8** 90 / 63 ⇦ Main St 48 / 101 ⇨ Woods Ave
9 90 / 63 ⇦ Main St 48 / 101 ⇨ Frank St	**10** 90 / 63 ⇦ Main St 48 / 101 ⇨ Paris Ave	**11** 90 / 63 ⇦ Main St 48 / 101 ⇨ Ash Rd	**12** 90 / 63 ⇦ Main St 48 / 101 ⇨ Birch Rd
13 90 / 63 ⇦ Main St 48 / 101 ⇨ Western Dr	**14** 8 / 62 ⇦ Pettit Rd 48 / 22 ⇦ 90 / 63 ⇦ Main St 48 / 101 ⇨	**15** SR 58 EB Ramp 139 / 85 ⇦ Main St 44 / 135 ⇨ 12 / 29 ⇦	**16** SR 58 WB Ramp 112 / 67 ⇦ Main St 44 / 135 ⇨ 26 / 16 ⇧
17 133 / 318 ⇩ Lenwood Rd Love's Travel Stop Dwy 284 / 171 ⇧	**18** 7 / 23 ⇧ 125 / 294 ⇩ Lenwood Rd High Desert Rd 19 / 11 ⇦ 265 / 160 ⇧	**19** Truck Freightliner Service Point Dwy 265 / 160 ⇦ Lenwood Rd 125 / 294 ⇨	**20** Commerce Pkwy 265 / 160 ⇦ Lenwood Rd 125 / 294 ⇨
21 79 / 47 ⇧ I-15 SB Off Ramps 186 / 112 ⇦ Lenwood Rd 48 / 146 ⇨	**22** 14 / 9 ⇧ High Point Pkwy 28 / 17 ⇦ Lenwood Rd 6 / 17 ⇨ 11 / 34 ⇦ I-15 NB Off Ramps 144 / 87 ⇧	**23** 89 / 40 ⇨ 61 / 56 ⇩ Lenwood Rd Transload Warehouse Center Dwy 53 / 24 ⇦ 2 / 2 ⇧ Jasper Rd 14 / 114 ⇨ 8 / 68 ⇦ 71 / 348 ⇦ 287 / 131 ⇧ 53 / 49 ⇧ 2 / 2 ⇧	**24** 150 / 96 ⇩ Lenwood Rd Cam del Sol 67 / 163 ⇧

Source: Author Compilation, 2025

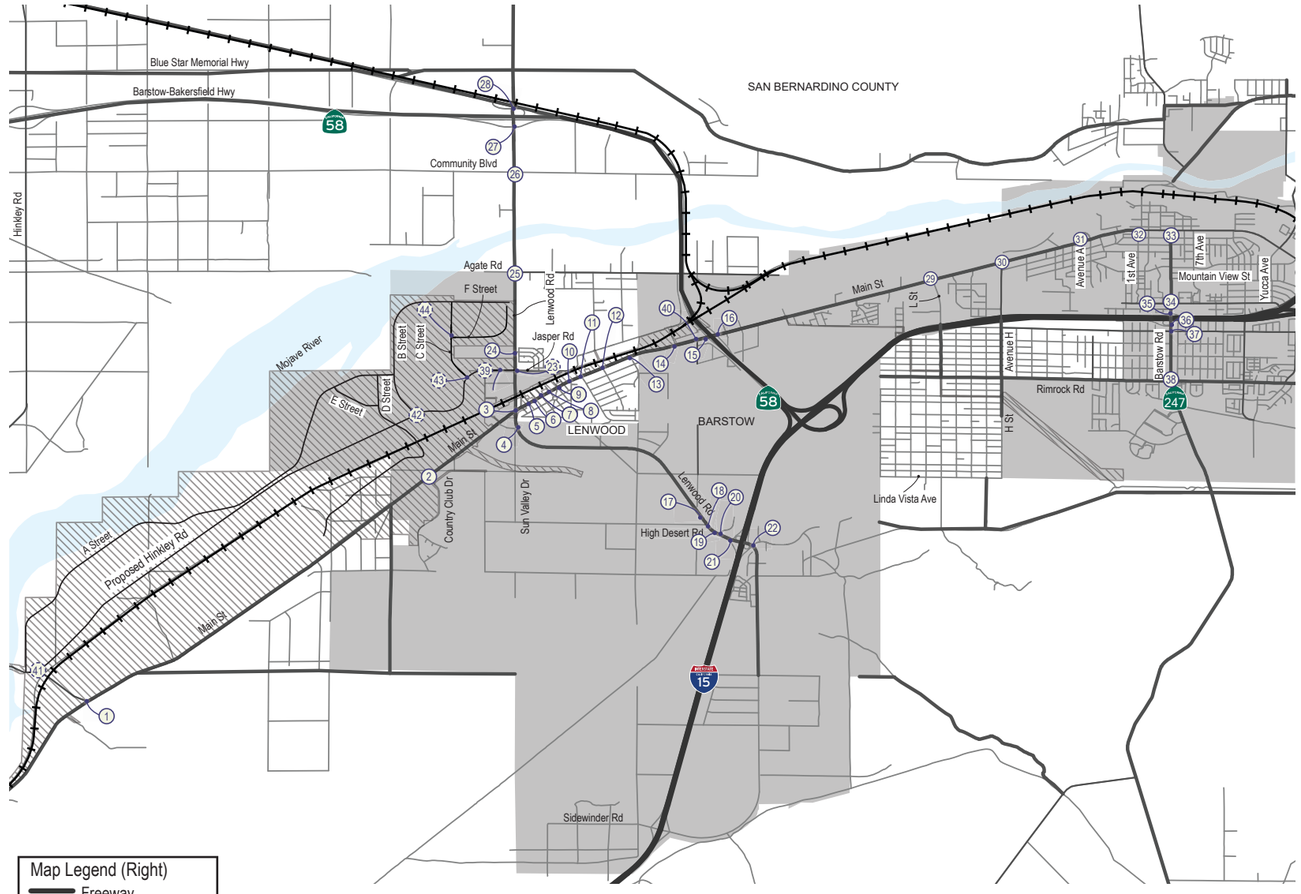


Figure 43: BIG Traffic Trip Assignment – Interim Year 2033
Net Intersection Trips (PCE) (Page 1/2)

25 Lenwood Rd: ⇩ 91 / 61 Agate Rd: ⇨ 58 / 35 Agate Rd: ⇧ 44 / 93, ⇦ 23 / 71	**26** Lenwood Rd: ⇩ 54 / 38 Community Blvd: ⇦ 31 / 19 ⇨ 6 / 4 Community Blvd: ⇧ 3 / 7, ⇧ 29 / 48, ⇦ 13 / 38	**27** Lenwood Rd: ⇩ 25 / 15 SR 58 EB Ramps: ⇧ 29 / 48 ⇨ 29 / 23	**28** SR 58 WB Ramps Lenwood Rd: ⇨ 25 / 15 ⇦ 10 / 32 ⇦ 19 / 18
29 Arco Dwy Main St: ⇦ 64 / 39 L St: ⇨ 25 / 78, ⇦ 13 / 38 ⇩ 31 / 19	**30** Ave H Main St: ⇦ 50 / 30 ⇨ 20 / 61, ⇦ 6 / 17 ⇩ 14 / 9	**31** Ave A Main St: ⇦ 39 / 24 ⇨ 15 / 47, ⇦ 4 / 13 ⇩ 11 / 7	**32** 1st Ave Main St: ⇦ 14 / 9 ⇨ 4 / 13, ⇦ 6 / 17, ⇦ 6 / 17 ⇩ 11 / 7 ⇩ 14 / 9
33 Main St: ⇦ 8 / 5 Barstow Rd: ⇨ 3 / 10, ⇦ 3 / 7 ⇩ 6 / 4	**34** Barstow Rd Virginia Way: ⇦ 14 / 9 ⇩ 6 / 4 ⇧ 3 / 7, ⇧ 3 / 7, ⇧ 6 / 17	**35** I-15 SB On-Ramp: ⇩ 25 / 15 I-15 SB Off-Ramp Barstow Rd: ⇧ 39 / 24, ⇧ 10 / 30	**36** Barstow Rd I-15 NB Ramps ⇧ 39 / 24 ⇨ 10 / 30 ⇦ 15 / 47 Barstow Rd
37 Barstow Rd Armory Rd: ⇦ 31 / 19 ⇨ 3 / 10, ⇦ 13 / 38 ⇧ 8 / 5	**38** Barstow Rd Rimrock Rd: ⇦ 8 / 5, ⇦ 11 / 7 ⇨ 3 / 10 ⇨ 4 / 13, ⇨ 3 / 7 ⇧ 6 / 4	**39** Hinkley Rd: ⇦ 428 / 195 Roadrunner Rd ⇨ 93 / 530	**40** Main St Elk Dr
41 A St Hinkley Rd: ⇦ 1 / 5 Jiggs Rd ⇨ 4 / 2	**42** B St Hinkley Rd: ⇦ 255 / 116 ⇨ 56 / 316	**43** C St Hinkley Rd: ⇩ 117 / 53, ⇩ 311 / 142 ⇧ 25 / 144 ⇨ 68 / 385	**44** C St F St: ⇩ 17 / 97 ⇧ 78 / 36

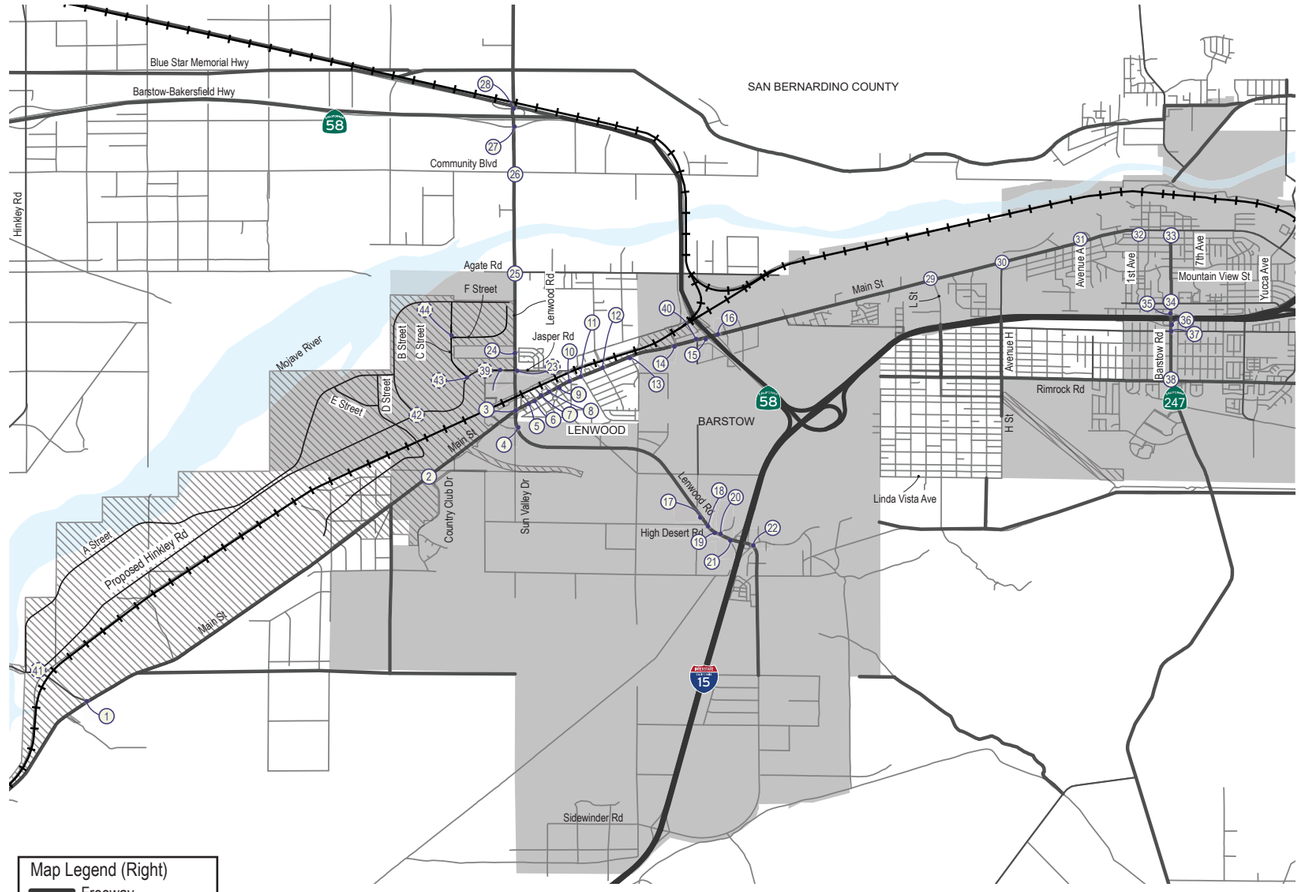


Figure 43: BIG Traffic Trip Assignment – Interim Year 2033
Net Intersection Trips (PCE) (Page 2/2)

Source: Author Compilation, 2025

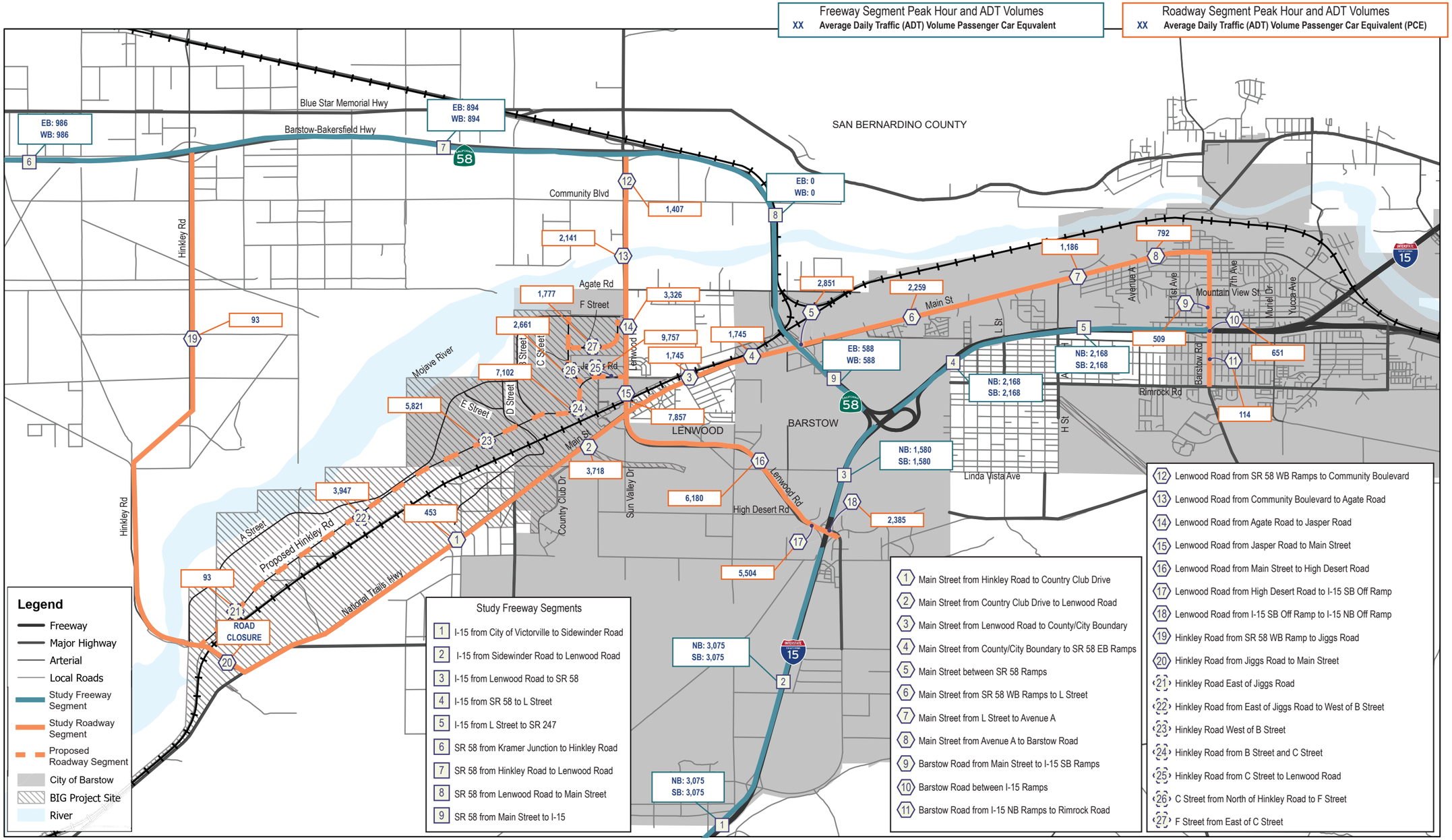


Figure 44: BIG Interim Year 2033 Roadway and Freeway Mainline Segment Traffic Trip Assignment (PCE)

Source: Author Compilation, 2025

1 ⇦ 7 / 7 **Main St** 7 / 7 ⇨	**2** 7 / 7 2 / 2 165 / 165 **Rail Yard Dwy** ⇦ 166 / 166 **Main St** 7 / 7 ⇨ **Country Club Dr** ⇧ 2 / 2	**3** 39 / 39 ⇩ **Lenwood Rd** ⇦ 42 / 42 **Main St** 38 / 38 42 / 42 85 / 85 ⇧ 86 / 86 ⇧	**4** 7 / 7 78 / 78 ⇩ **Lenwood Rd** **Sun Valley Dr** 7 / 7 ⇨ ⇧ 79 / 79
5 **Holland St** ⇦ 42 / 42 **Main St** 42 / 42 ⇨	**6** **Hannan St** ⇦ 42 / 42 **Main St** 42 / 42 ⇨ **Hannan St**	**7** **Townsend St** ⇦ 42 / 42 **Main St** 42 / 42 ⇨	**8** **Woods Ave** ⇦ 42 / 42 **Main St** 42 / 42 ⇨
9 **Frank St** ⇦ 42 / 42 **Main St** 42 / 42 ⇨ **Frank St**	**10** ⇦ 42 / 42 **Main St** 42 / 42 ⇨ **Paris Ave**	**11** ⇦ 42 / 42 **Main St** 42 / 42 ⇨ **Ash Rd**	**12** ⇦ 42 / 42 **Main St** 42 / 42 ⇨ **Birch Rd**
13 ⇦ 42 / 42 **Main St** 42 / 42 ⇨ **Western Dr**	**14** **Petitt Rd** ⇦ 42 / 42 **Main St** 42 / 42 ⇨	**15** **SR 58 EB Ramp** ⇦ 42 / 42 **Main St** 35 / 35 7 / 7 ⇧	**16** **SR 58 WB Ramp** ⇦ 35 / 35 **Main St** 35 / 35 ⇨ ⇧ 7 / 7
17 78 / 78 ⇩ **Lenwood Rd** **Love's Travel Stop Dwy** ⇧ 79 / 79	**18** 10 / 10 68 / 68 **Lenwood Rd** **High Desert Rd** 11 / 11 ⇨ ⇧ 68 / 68	**19** **Truck Freightliner Service Point Dwy** ⇦ 68 / 68 **Lenwood Rd** 68 / 68 ⇨	**20** **Commerce Pkwy** ⇦ 68 / 68 **Lenwood Rd** 68 / 68 ⇨
21 23 / 23 ⇩ **I-15 SB Off Ramps** ⇦ 46 / 46 **Lenwood Rd** 38 / 38 ⇨	**22** 5 / 5 ⇩ **High Point Pkwy** ⇦ 11 / 11 **Lenwood Rd** 5 / 5 10 / 10 ⇨ **I-15 NB Off Ramps** ⇧ 30 / 30	**23** 37 / 37 ⇩ **Lenwood Rd** **Transload Warehouse Center Dwy** ⇧ 2 / 2 **Jasper Rd** ⇧ 37 / 37 ⇧ 2 / 2	**24** 37 / 37 ⇩ **Lenwood Rd** **Cam del Sol** ⇧ 37 / 37

Source: Author Compilation, 2025

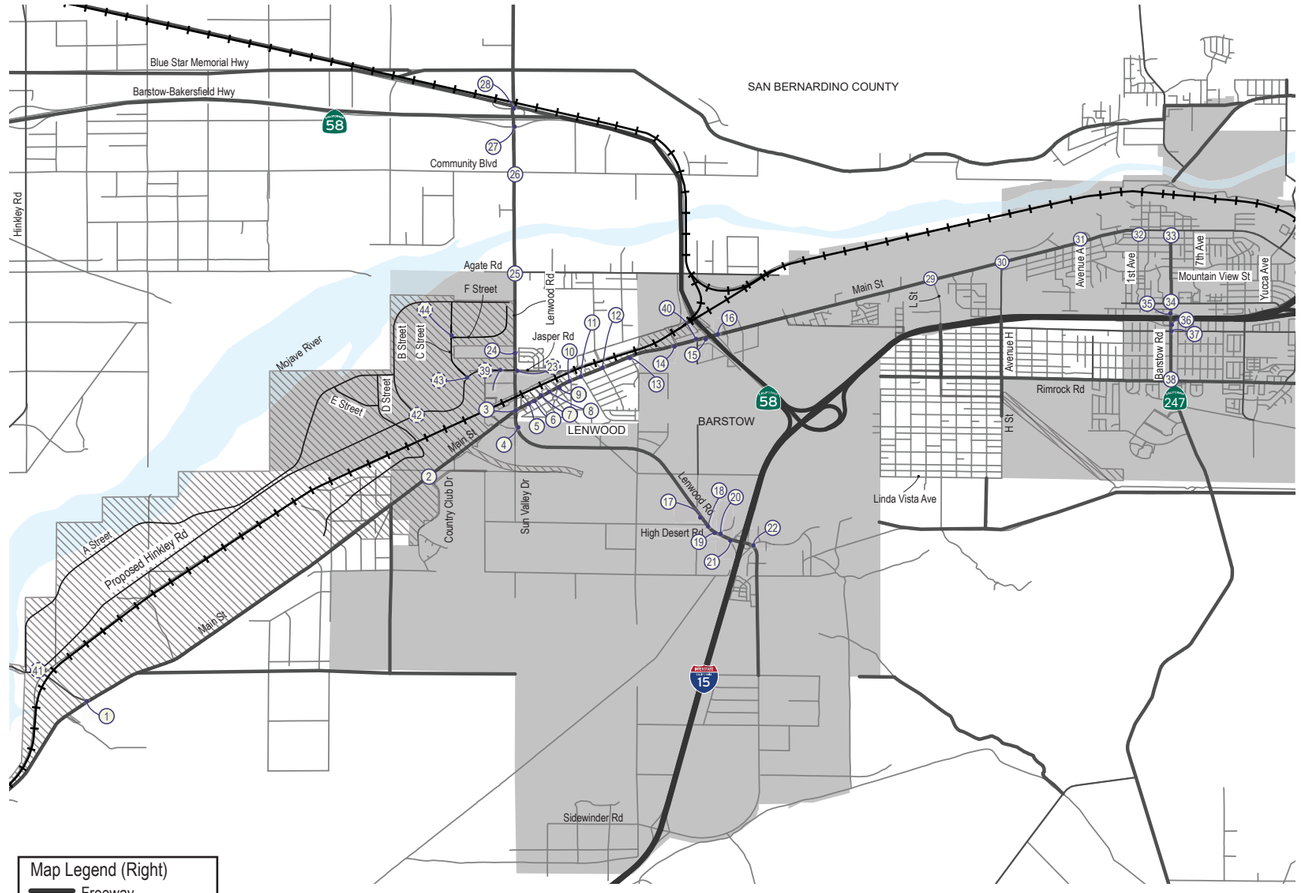


Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048
Rail Yard Employees (Page 1/2)

25 Lenwood Rd: 19 / 19 Agate Rd: 18 / 18 19 / 19 17 / 17	**26** Lenwood Rd: 9 / 9 Community Blvd: 9 / 9 2 / 2 2 / 2 9 / 9 9 / 9	**27** Lenwood Rd: 7 / 7 SR 58 EB Ramps 2 / 2 9 / 9	**28** SR 58 WB Ramps Lenwood Rd: 7 / 7 7 / 7 2 / 2
29 Arco Dwy Main St: 19 / 19 19 / 19 10 / 10 L St 11 / 11	**30** Ave H Main St: 14 / 14 14 / 14 5 / 5 5 / 5	**31** Ave A Main St: 11 / 11 10 / 10 3 / 3 4 / 4	**32** 4 / 4 1st Ave Main St: 4 / 4 3 / 3 3 / 3 3 / 3 4 / 4
33 Main St: 2 / 2 2 / 2 2 / 2 Barstow Rd 2 / 2	**34** 2 / 2 Barstow Rd Virginia Way: 4 / 4 2 / 2 2 / 2 2 / 2 3 / 3	**35** 7 / 7 Barstow Rd I-15 SB On-Ramp I-15 SB Off-Ramp 12 / 12 7 / 7	**36** Barstow Rd I-15 NB Ramps 7 / 7 12 / 12 12 / 12
37 3 / 3 9 / 9 Barstow Rd Armory Rd: 9 / 9 4 / 4	**38** 3 / 3 Barstow Rd 4 / 4 5 / 5 Rimrock Rd 5 / 5 2 / 2 2 / 2	**39** Hinkley Rd Roadrunner Rd	**40** 42 / 42 Main St 42 / 42 Elk Dr
41 A St Hinkley Rd Jiggs Rd	**42** B St Hinkley Rd	**43** C St Hinkley Rd	**44** C St F St

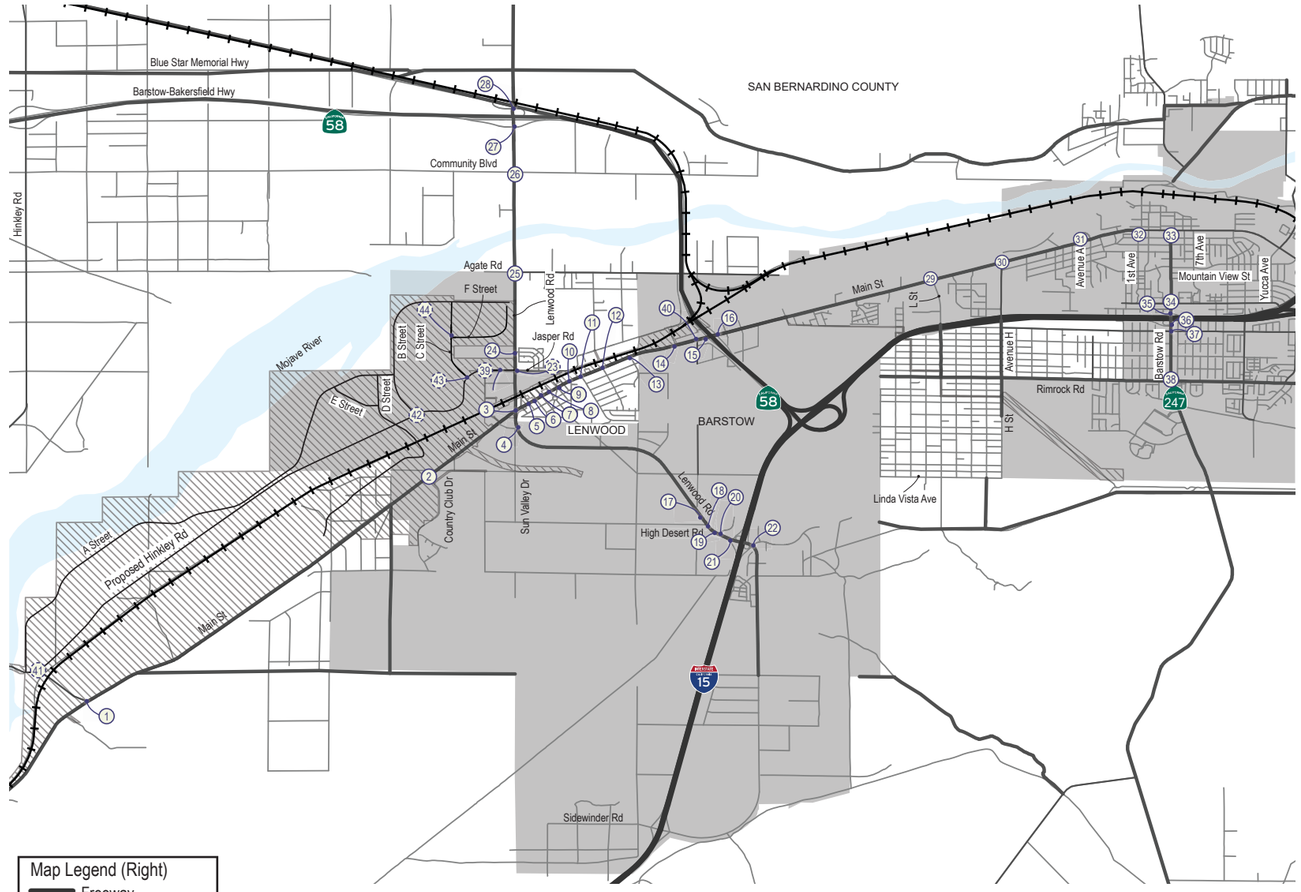


Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048
Rail Yard Employees (Page 2/2)

Source: Author Compilation, 2025

1	**2**	**3**	**4**
3 / 24 ⇦ Main St	Rail Yard Dwy: 3 / 24 ⇦, 1 / 6 ⇨ Main St	4 / 30 ⇦, 36 / 294 ⇩, 9 / 72 ⇨ Lenwood Rd; 56 / 25 ⇦ Main St	3 / 24 ⇦, 33 / 270 ⇩ Lenwood Rd; Sun Valley Dr: 19 / 8 ⇨, 210 / 95 ⇧
19 / 8 ⇨	Country Club Dr: 19 / 8 ⇨, 5 / 2 ⇧	23 / 11 ⇦; 228 / 103 ⇧ Main St	
5	**6**	**7**	**8**
Holland St: 56 / 25 ⇦ Main St	Hannan St: 56 / 25 ⇦ Main St	Townsend St: 56 / 25 ⇦ Main St	Woods Ave: 56 / 25 ⇦ Main St
9 / 72 ⇨	Hannan St: 9 / 72 ⇨	9 / 72 ⇨	9 / 72 ⇨
9	**10**	**11**	**12**
Frank St: 56 / 25 ⇦ Main St	56 / 25 ⇦ Main St	56 / 25 ⇦ Main St	56 / 25 ⇦ Main St
9 / 72 ⇨ Frank St	9 / 72 ⇨ Paris Ave	9 / 72 ⇨ Ash Rd	9 / 72 ⇨ Birch Rd
13	**14**	**15**	**16**
56 / 25 ⇦ Main St	9 / 72 ⇦ Pettit Rd; 56 / 25 ⇦, 56 / 25 ⇦ Main St	SR 58 EB Ramp: 112 / 50 ⇦ Main St	SR 58 WB Ramp: 93 / 42 ⇦ Main St
9 / 72 ⇨ Western Dr	9 / 72 ⇨	15 / 120 ⇨, 3 / 24 ⇦	15 / 120 ⇨; 19 / 8 ⇧
17	**18**	**19**	**20**
33 / 270 ⇩ Lenwood Rd; Love's Travel Stop Dwy: 210 / 95 ⇧	4 / 36 ⇧, 29 / 234 ⇩ Lenwood Rd; High Desert Rd: 28 / 13 ⇨, 182 / 82 ⇧	Truck Freightliner Service Point Dwy: 182 / 82 ⇦ Lenwood Rd	Commerce Pkwy: 182 / 82 ⇦ Lenwood Rd
		29 / 234 ⇨	29 / 234 ⇨
21	**22**	**23**	**24**
61 / 27 ⇧ I-15 SB Off Ramps: 121 / 55 ⇦ Lenwood Rd	14 / 6 ⇧ High Point Pkwy: 28 / 13 ⇦ Lenwood Rd	93 / 42 ⇧ Lenwood Rd; 61 / 27 ⇦ Jasper Rd	93 / 42 ⇩ Lenwood Rd; Cam del Sol: 15 / 120 ⇧
16 / 132 ⇨	2 / 18 ⇨, 4 / 36 ⇦ I-15 NB Off Ramps: 79 / 36 ⇧	15 / 120 ⇨, 10 / 78 ⇦, 49 / 396 ⇧ Transload Warehouse Center Dwy; 308 / 139 ⇧	15 / 120 ⇧

Source: Author Compilation, 2025

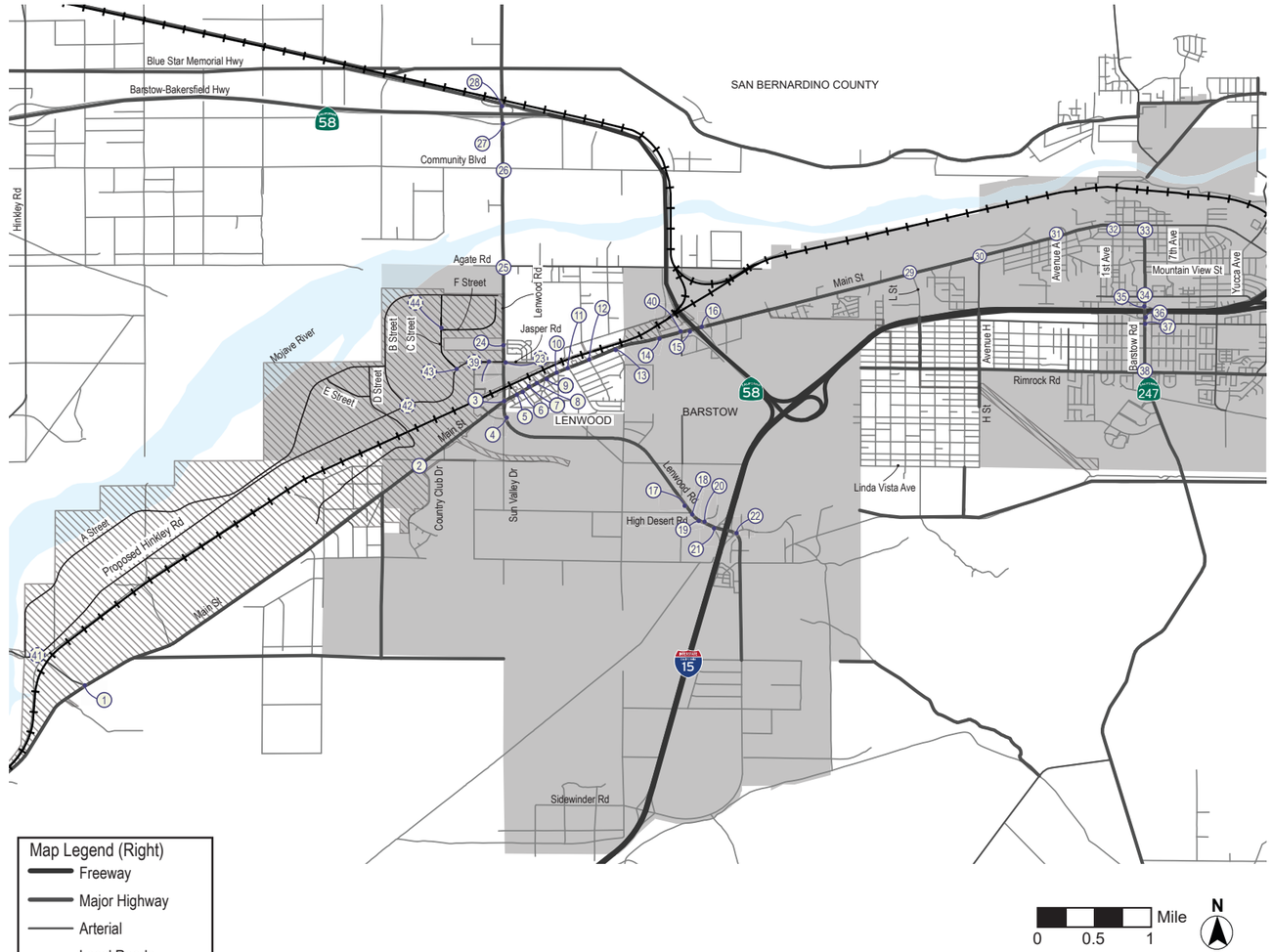


Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048
Transload Warehouse Center Employees (Page 1/2)

25 Lenwood Rd: 47 / 21 Agate Rd: 47 / 21 Agate Rd: 7 / 60, 7 / 60	**26** Lenwood Rd: 19 / 8 Community Blvd: 23 / 11 5 / 2 1 / 6, 3 / 24, 4 / 30	**27** Lenwood Rd: 19 / 8 SR 58 EB Ramps: 3 / 24	**28** SR 58 WB Ramps Lenwood Rd: 19 / 8 3 / 27
29 Arco Dwy Main St: 51 / 23 L St: 8 / 66, 4 / 36 28 / 13	**30** Ave H Main St: 37 / 17 6 / 48, 2 / 18 14 / 6	**31** Ave A Main St: 28 / 13 4 / 36, 1 / 12 9 / 4	**32** 9 / 4 1st Ave Main St: 9 / 4 1 / 12, 1 / 12, 1 / 12 9 / 4
33 Main St: 5 / 2 Barstow Rd 1 / 6, 1 / 6 5 / 2	**34** 5 / 2 Barstow Rd Virginia Way: 9 / 4 5 / 2 1 / 6, 1 / 6, 1 / 12	**35** 19 / 8 Barstow Rd I-15 SB On-Ramp I-15 SB Off-Ramp 33 / 15, 3 / 24	**36** Barstow Rd I-15 NB Ramps 3 / 24 5 / 42 33 / 15
37 1 / 12, 4 / 30 Barstow Rd Armory Rd: 23 / 11 9 / 4	**38** 1 / 12 Barstow Rd Rimrock Rd: 9 / 4, 14 / 6 2 / 18, 1 / 6 5 / 2	**39** Hinkley Rd: 461 / 208 Roadrunner Rd 73 / 594	**40** Main St: 112 / 50 Elk Dr 18 / 144
41 A St Hinkley Rd: 1 / 6 Jiggs Rd 5 / 2	**42** B St Hinkley Rd: 275 / 124 44 / 354	**43** 20 / 162 C St Hinkley Rd: 126 / 57, 336 / 151 53 / 432	**44** C St F St: 13 / 108 84 / 38

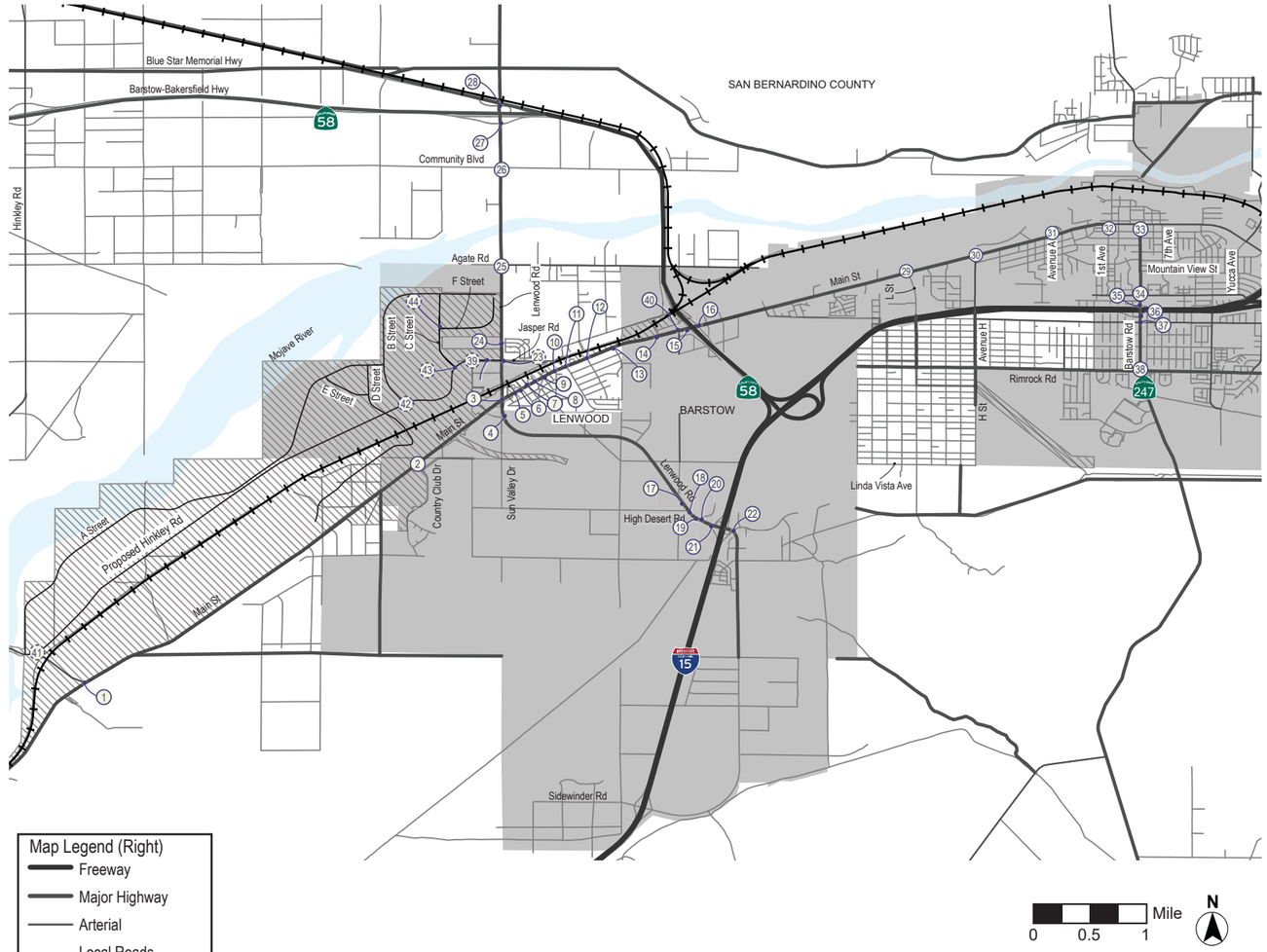


Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048
Transload Warehouse Center Employees (Page 2/2)

Source: Author Compilation, 2025

1 Main St	**2** 33 / 25 ⇦ Rail Yard Dwy 48 / 38 ⇦ Main St Country Club Dr	**3** 32 / 25 ⇦ Lenwood Rd 5 / 4 ⇦ Main St 22 / 17 ⇨ 4 / 3 ⇨ 8 / 6 ⇨ ⇦ 11 / 9	**4** 8 / 6 ⇨ Lenwood Rd ⇧ 11 / 9
5 Holland St 5 / 4 ⇦ Main St 4 / 3 ⇨	**6** Hannan St 5 / 4 ⇦ Main St 4 / 3 ⇨ Hannan St	**7** Townsend St 5 / 4 ⇦ Main St 4 / 3 ⇨	**8** Woods Ave 5 / 4 ⇦ Main St 4 / 3 ⇨
9 Frank St 5 / 4 ⇦ Main St 4 / 3 ⇨ Frank St	**10** 5 / 4 ⇦ Main St 4 / 3 ⇨ Paris Ave	**11** 5 / 4 ⇦ Main St 4 / 3 ⇨ Ash Rd	**12** 5 / 4 ⇦ Main St 4 / 3 ⇨ Birch Rd
13 5 / 4 ⇦ Main St 4 / 3 ⇨ Western Dr	**14** Pettit Rd 5 / 4 ⇦ Main St 4 / 3 ⇨	**15** SR 58 EB Ramp 5 / 4 ⇦ Main St 4 / 3 ⇧	**16** SR 58 WB Ramp Main St ⇩ 5 / 4
17 8 / 6 ⇩ Lenwood Rd Love's Travel Stop Dwy ⇧ 11 / 9	**18** 8 / 6 ⇩ Lenwood Rd High Desert Rd ⇧ 11 / 9	**19** Truck Freightliner Service Point Dwy ⇦ 11 / 9 Lenwood Rd 8 / 6 ⇨	**20** Commerce Pkwy ⇦ 11 / 9 Lenwood Rd 8 / 6 ⇨
21 I-15 SB Off Ramps 11 / 9 ⇦ Lenwood Rd	**22** High Point Pkwy Lenwood Rd I-15 NB Off Ramps ⇧ 11 / 9	**23** 32 / 25 ⇩ Lenwood Rd Transload Warehouse Center Dwy Jasper Rd ⇧ 22 / 17	**24** 32 / 25 ⇩ Lenwood Rd Cam del Sol ⇧ 22 / 17

Source: Author Compilation, 2025

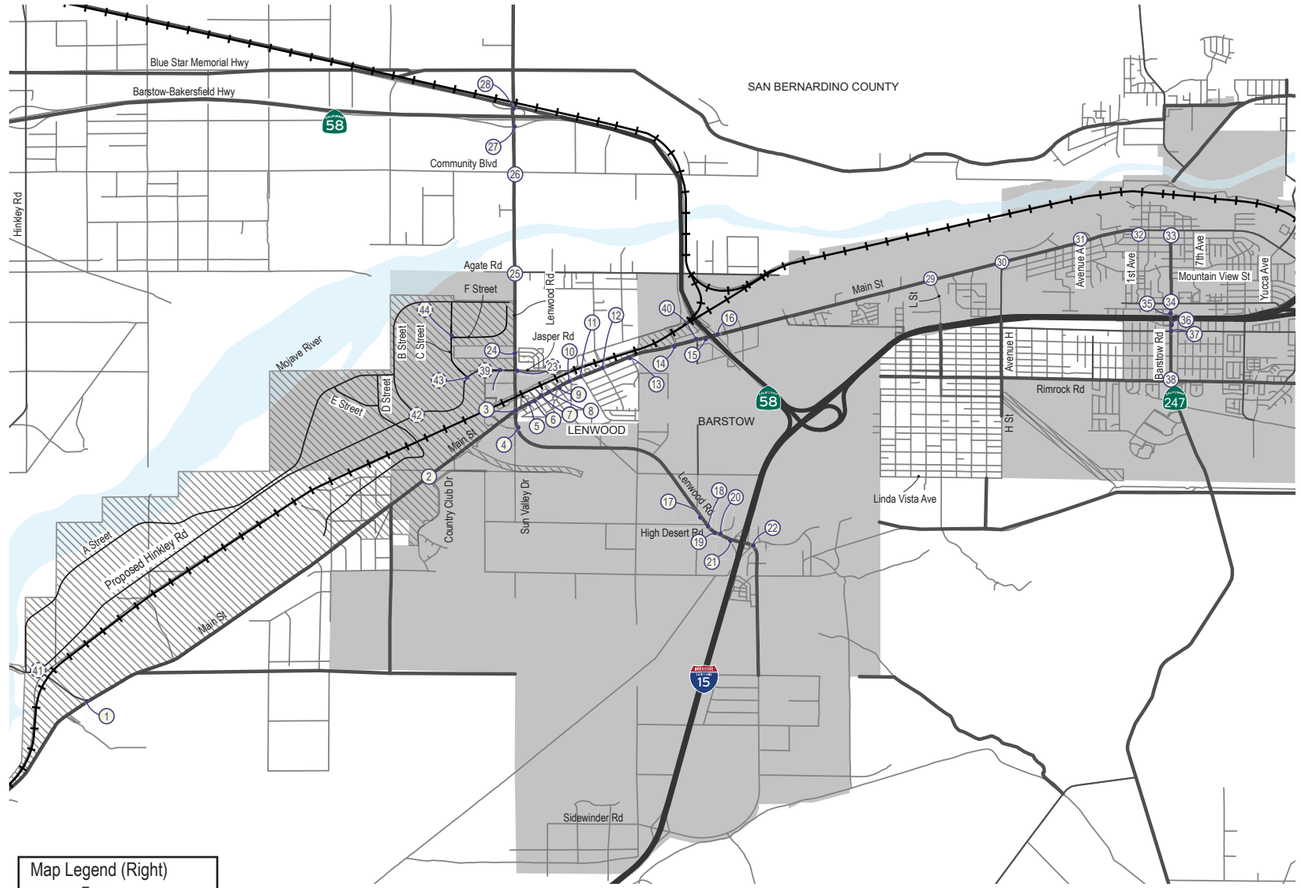


Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048
Traditional Intermodal Facility Heavy-Duty Trucks (PCE) (Page 1/2)

25	Lenwood Rd / Agate Rd 32 / 25 ⇩ ⇧ 22 / 17	26	Lenwood Rd / Community Blvd 32 / 25 ⇩ ⇧ 22 / 17	27	Lenwood Rd / SR 58 EB Ramps 32 / 25 ⇨ ⇧ 22 / 17	28	SR 58 WB Ramps / Lenwood Rd ⇦ 22 / 17
29	Arco Dwy / Main St L St	30	Ave H / Main St	31	Ave A / Main St	32	1st Ave / Main St
33	Main St Barstow Rd	34	Barstow Rd / Virginia Way	35	Barstow Rd / I-15 SB On-Ramp / I-15 SB Off-Ramp	36	Barstow Rd / I-15 NB Ramps
37	Barstow Rd / Armory Rd	38	Barstow Rd / Rimrock Rd	39	Hinkley Rd Roadrunner Rd	40	Main St Elk Dr
41	A St / Hinkley Rd Jiggs Rd	42	B St / Hinkley Rd	43	C St / Hinkley Rd	44	C St / F St

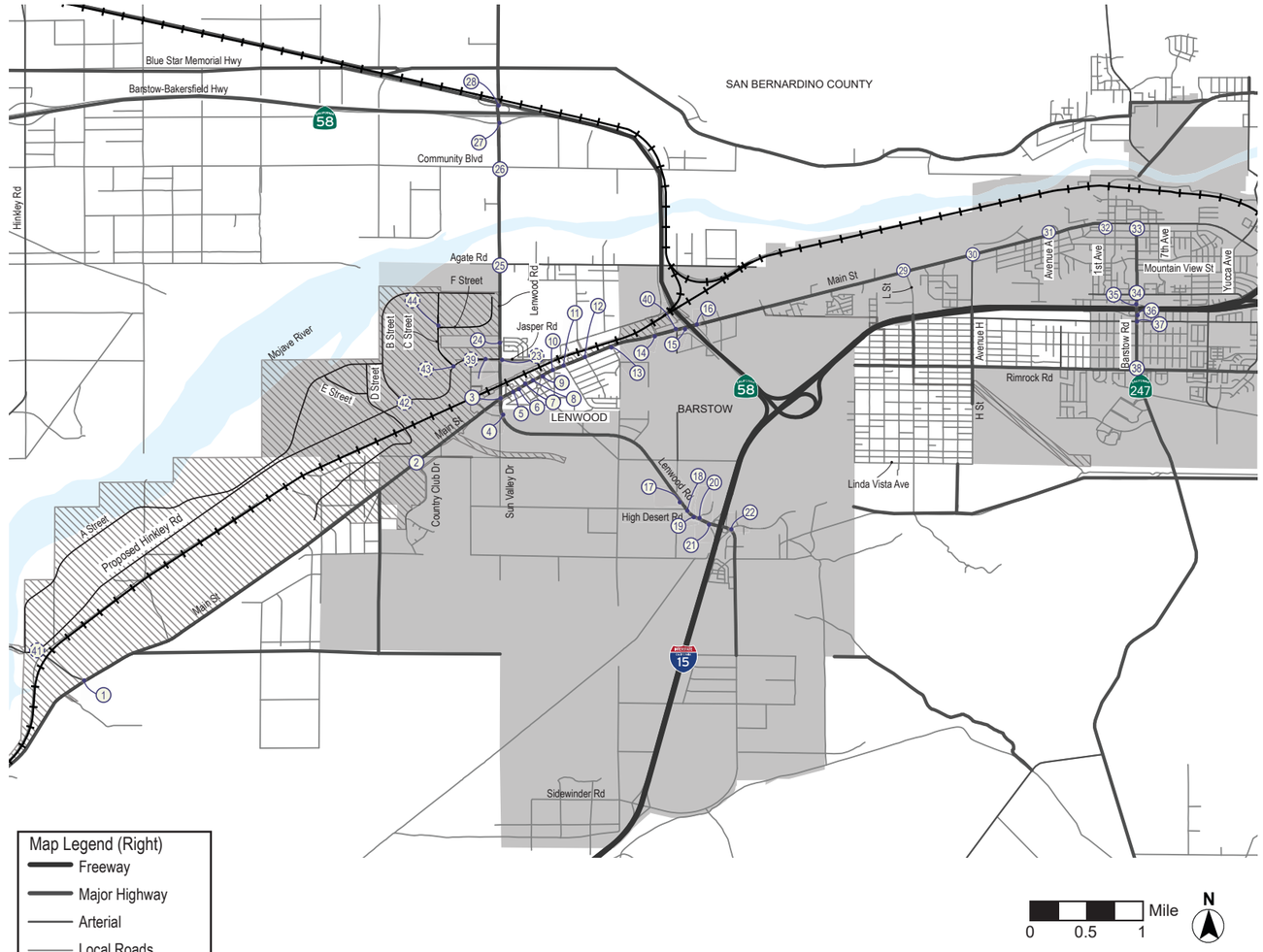


Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048
Traditional Intermodal Facility Heavy-Duty Trucks (PCE) (Page 2/2)

Source: Author Compilation, 2025

1 Main St	2 Rail Yard Dwy / Country Club Dr Main St	3 35 / 18 ⇩ Lenwood Rd Main St ⇧ 33 / 18	4 35 / 18 ⇩ Lenwood Rd ⇧ 33 / 18
5 Holland St Main St	6 Hannan St / Hannan St Main St	7 Townsend St Main St	8 Woods Ave Main St
9 Frank St / Frank St Main St	10 Main St Paris Ave	11 Main St Ash Rd	12 Main St Birch Rd
13 Main St Western Dr	14 Petit Rd Main St	15 SR 58 EB Ramp Main St	16 SR 58 WB Ramp Main St
17 35 / 18 ⇩ Lenwood Rd Love's Travel Stop Dwy ⇧ 33 / 18	18 35 / 18 ⇩ Lenwood Rd High Desert Rd ⇧ 33 / 18	19 Truck Freightliner Service Point Dwy ⇦ 33 / 18 Lenwood Rd 35 / 18 ⇨	20 Commerce Pkwy ⇦ 33 / 18 Lenwood Rd 35 / 18 ⇨
21 I-15 SB Off Ramps ⇦ 33 / 18 Lenwood Rd	22 High Point Pkwy Lenwood Rd I-15 NB Off Ramps / ⇩ 33 / 18	23 Lenwood Rd Transload Warehouse Center Dwy Jasper Rd 35 / 18 ⇧ / ⇩ 33 / 18	24 Lenwood Rd Cam del Sol

Source: Author Compilation, 2025

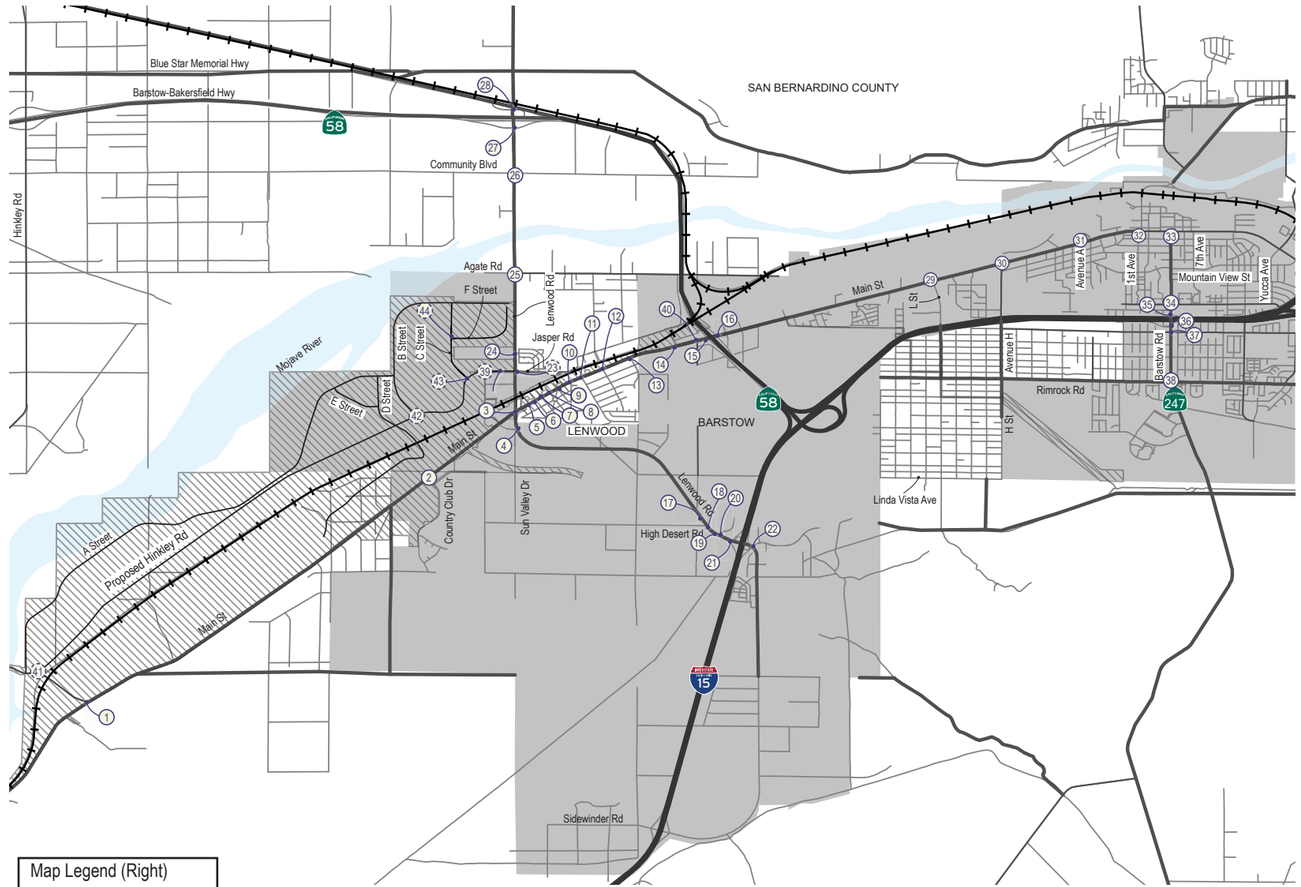


Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048
Transload Warehouse Center Heavy-Duty Trucks (PCE) (Page 1/2)

25 Lenwood Rd / Agate Rd	26 Lenwood Rd / Community Blvd	27 Lenwood Rd / SR 58 EB Ramps	28 SR 58 WB Ramps / Lenwood Rd
29 Arco Dwy / Main St L St	30 Ave H / Main St	31 Ave A / Main St	32 1st Ave / Main St
33 Main St / Barstow Rd	34 Barstow Rd / Virginia Way	35 Barstow Rd / I-15 SB On-Ramp / I-15 SB Off-Ramp	36 Barstow Rd / I-15 NB Ramps
37 Barstow Rd / Armory Rd	38 Barstow Rd / Rimrock Rd	39 33 / 18 ⇦ Hinkley Rd 35 / 18 ⇨ Roadrunner Rd	40 Main St / Elk Dr
41 A St / Hinkley Rd Jiggs Rd	42 B St 19 / 11 ⇦ Hinkley Rd 21 / 11 ⇨	43 9 / 5 ⇨ C St 9 / 5 ⇦ 24 / 13 ⇦ Hinkley Rd 25 / 13 ⇨	44 C St 6 / 3 ⇦ F St 6 / 3 ⇨

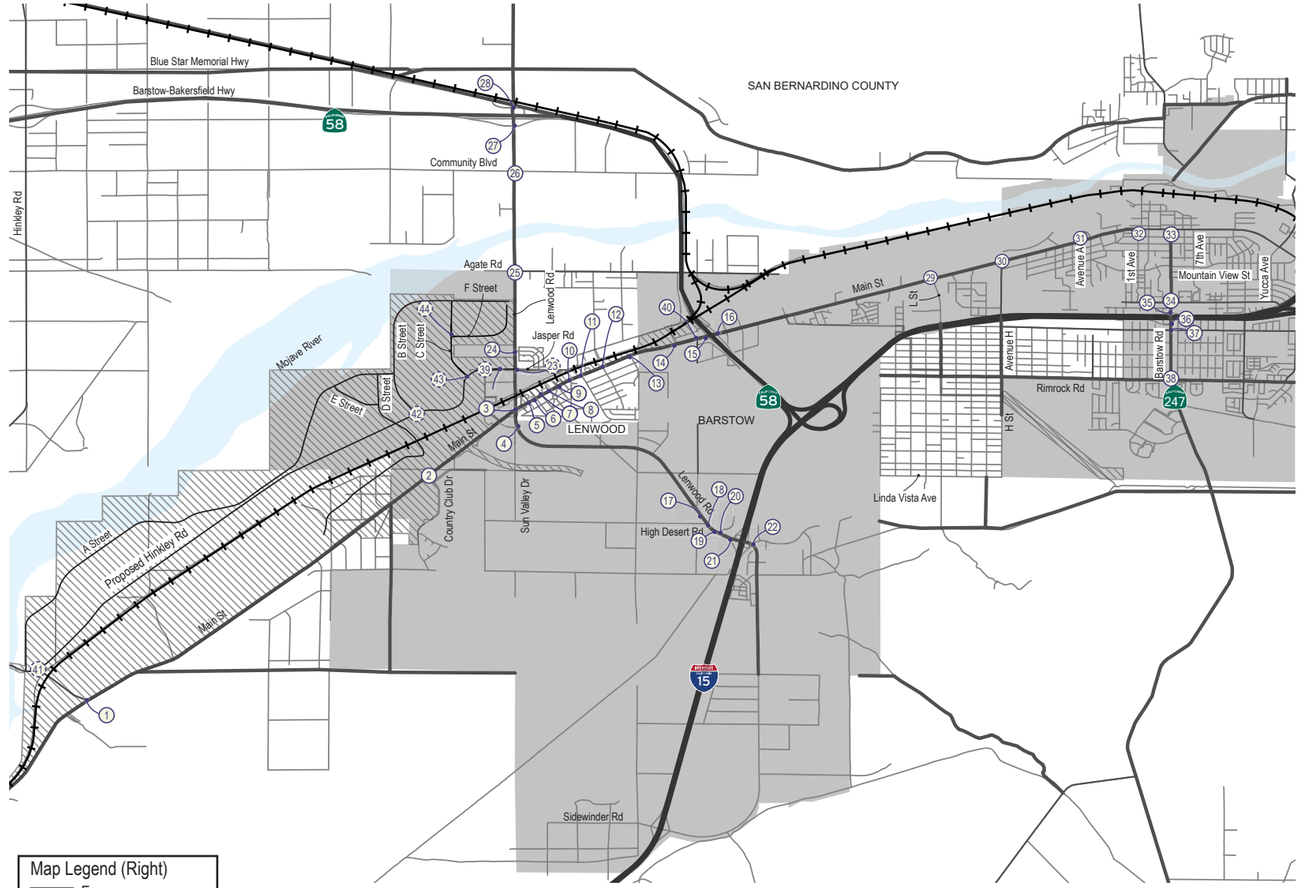


Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048
Transload Warehouse Center Heavy-Duty Trucks (PCE) (Page 2/2)

Source: Author Compilation, 2025

1 10 / 31 ⇦ **Main St** 26 / 15 ⇨	**2** 7 / 7 2 / 2 198 / 190 ⇦ **Rail Yard Dwy** 214 / 204 ⇦ 3 / 24 ⇦ 1 / 6 ⇦ **Main St** 7 / 7 ⇨ 19 / 8 ⇨ **Country Club Dr** ⇧ 2 / 2 ⇧ 5 / 2	**3** 75 / 94 ⇦ 71 / 312 ⇩ 9 / 72 ⇦ **Lenwood Rd** 56 / 25 ⇦ 47 / 46 ⇦ **Main St** 83 / 66 ⇦ 46 / 45 ⇨ 93 / 91 ⇦ ⇧ 97 / 95 ⇧ 261 / 121	**4** 10 / 31 ⇦ 154 / 372 ⇩ **Lenwood Rd** **Sun Valley Dr** ⇦ 26 / 15 ⇧ 333 / 201
5 **Holland St** 103 / 71 ⇦ **Main St** 55 / 117 ⇨	**6** **Hannan St** 103 / 71 ⇦ **Main St** 55 / 117 ⇨ **Hannan St**	**7** **Townsend St** 103 / 71 ⇦ **Main St** 55 / 117 ⇨	**8** **Woods Ave** 103 / 71 ⇦ **Main St** 55 / 117 ⇨
9 **Frank St** 103 / 71 ⇦ **Main St** 55 / 117 ⇨ **Frank St**	**10** 103 / 71 ⇦ **Main St** 55 / 117 ⇨ **Paris Ave**	**11** 103 / 71 ⇦ **Main St** 55 / 117 ⇨ **Ash Rd**	**12** 103 / 71 ⇦ **Main St** 55 / 117 ⇨ **Birch Rd**
13 103 / 71 ⇦ **Main St** 55 / 117 ⇨ **Western Dr**	**14** 9 / 72 ⇦ **Pettit Rd** 56 / 25 ⇦ 103 / 71 ⇦ **Main St** 55 / 117 ⇨	**15** **SR 58 EB Ramp** 159 / 96 ⇦ **Main St** 50 / 155 ⇨ 14 / 34 ⇦	**16** **SR 58 WB Ramp** 128 / 77 ⇦ **Main St** 50 / 155 ⇨ ⇧ 31 / 19
17 154 / 372 ⇦ **Lenwood Rd** **Love's Travel Stop Dwy** ⇧ 333 / 201	**18** 14 / 46 ⇦ 140 / 326 ⇩ **Lenwood Rd** **High Desert Rd** ⇦ 39 / 24 ⇧ 294 / 177	**19** **Truck Freightliner Service Point Dwy** 294 / 177 ⇦ **Lenwood Rd** 140 / 326 ⇨	**20** **Commerce Pkwy** 294 / 177 ⇦ **Lenwood Rd** 140 / 326 ⇨
21 84 / 50 ⇦ **I-15 SB Off Ramps** 211 / 128 ⇦ **Lenwood Rd** 54 / 170 ⇨	**22** 19 / 11 ⇦ **High Point Pkwy** 39 / 24 ⇦ **Lenwood Rd** 7 / 23 ⇨ 14 / 46 ⇨ **I-15 NB Off Ramps** ⇧ 153 / 93	**23** 93 / 42 ⇦ 69 / 62 ⇩ **Lenwood Rd** **Transload Warehouse Center Dwy** 61 / 27 ⇦ 2 / 2 ⇦ **Jasper Rd** 15 / 120 ⇨ 10 / 78 ⇨ 84 / 414 ⇦ ⇧ 341 / 157 ⇧ 59 / 54 ⇧ 2 / 2	**24** 162 / 104 ⇩ **Lenwood Rd** **Cam del Sol** ⇧ 74 / 174

Source: Author Compilation, 2025

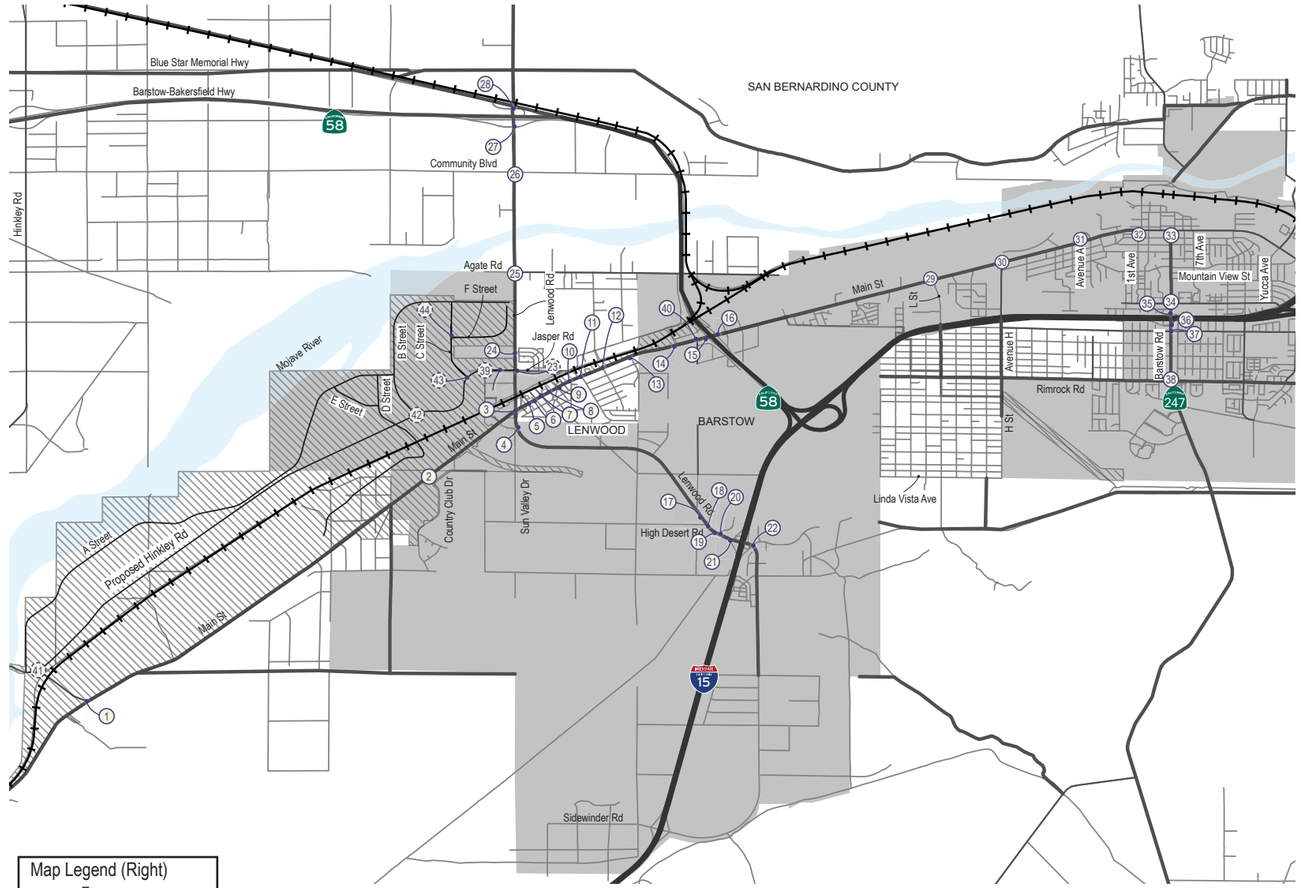


Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048
Net Intersection Trips (PCE) (Page 1/2)

25 98 / 65 ⇩ Lenwood Rd 65 / 39 ⇦ Agate Rd 48 / 96 ⇧ 24 / 77 ⇩	**26** 60 / 42 ⇩ Lenwood Rd 32 / 20 ⇦ Community Blvd 7 / 4 ⇦ 3 / 8 ⇧ 34 / 50 ⇧ 13 / 39 ⇧	**27** 26 / 15 ⇩ Lenwood Rd SR 58 EB Ramps 34 / 27 ⇦ 34 / 50 ⇧	**28** SR 58 WB Ramps 26 / 15 ⇦ Lenwood Rd 10 / 34 ⇧ 24 / 19 ⇩
29 Arco Dwy 70 / 42 ⇧ Main St 27 / 85 ⇨ 14 / 46 ⇦ L St 39 / 24 ⇩	**30** Ave H 51 / 31 ⇧ Main St 20 / 62 ⇨ 7 / 23 ⇦ 19 / 11 ⇩	**31** Ave A 39 / 24 ⇧ Main St 14 / 46 ⇨ 4 / 15 ⇦ 13 / 8 ⇩	**32** 13 / 8 ⇩ 1st Ave 13 / 8 ⇧ Main St 4 / 15 ⇨ 4 / 15 ⇩ 4 / 15 ⇩ 13 / 8 ⇩
33 7 / 4 ⇧ Main St 3 / 8 ⇨ 3 / 8 ⇦ Barstow Rd 7 / 4 ⇩	**34** 7 / 4 ⇩ Barstow Rd 13 / 8 ⇩ Virginia Way 7 / 4 ⇦ 3 / 8 ⇧ 3 / 8 ⇧ 4 / 15 ⇧	**35** 26 / 15 ⇩ Barstow Rd I-15 SB On-Ramp I-15 SB Off-Ramp 45 / 27 ⇧ 10 / 31 ⇧	**36** Barstow Rd I-15 NB Ramps 10 / 31 ⇨ 17 / 54 ⇦ 45 / 27 ⇧
37 4 / 15 ⇨ Barstow Rd 13 / 39 ⇦ 32 / 20 ⇩ Armory Rd 13 / 8 ⇧	**38** 4 / 15 ⇩ Barstow Rd 13 / 8 ⇧ 19 / 11 ⇩ Rimrock Rd 7 / 23 ⇨ 3 / 8 ⇦ 7 / 4 ⇧	**39** 494 / 226 ⇦ Hinkley Rd 108 / 612 ⇨ Roadrunner Rd	**40** 154 / 92 ⇦ Main St 60 / 186 ⇨ Elk Dr
41 A St 1 / 6 ⇦ Hinkley Rd 5 / 2 ⇨ Jiggs Rd	**42** B St 294 / 135 ⇦ Hinkley Rd 65 / 365 ⇨	**43** 29 / 167 ⇩ C St 135 / 62 ⇦ 360 / 164 ⇦ Hinkley Rd 78 / 445 ⇨	**44** C St 19 / 111 ⇦ F St 90 / 41 ⇧

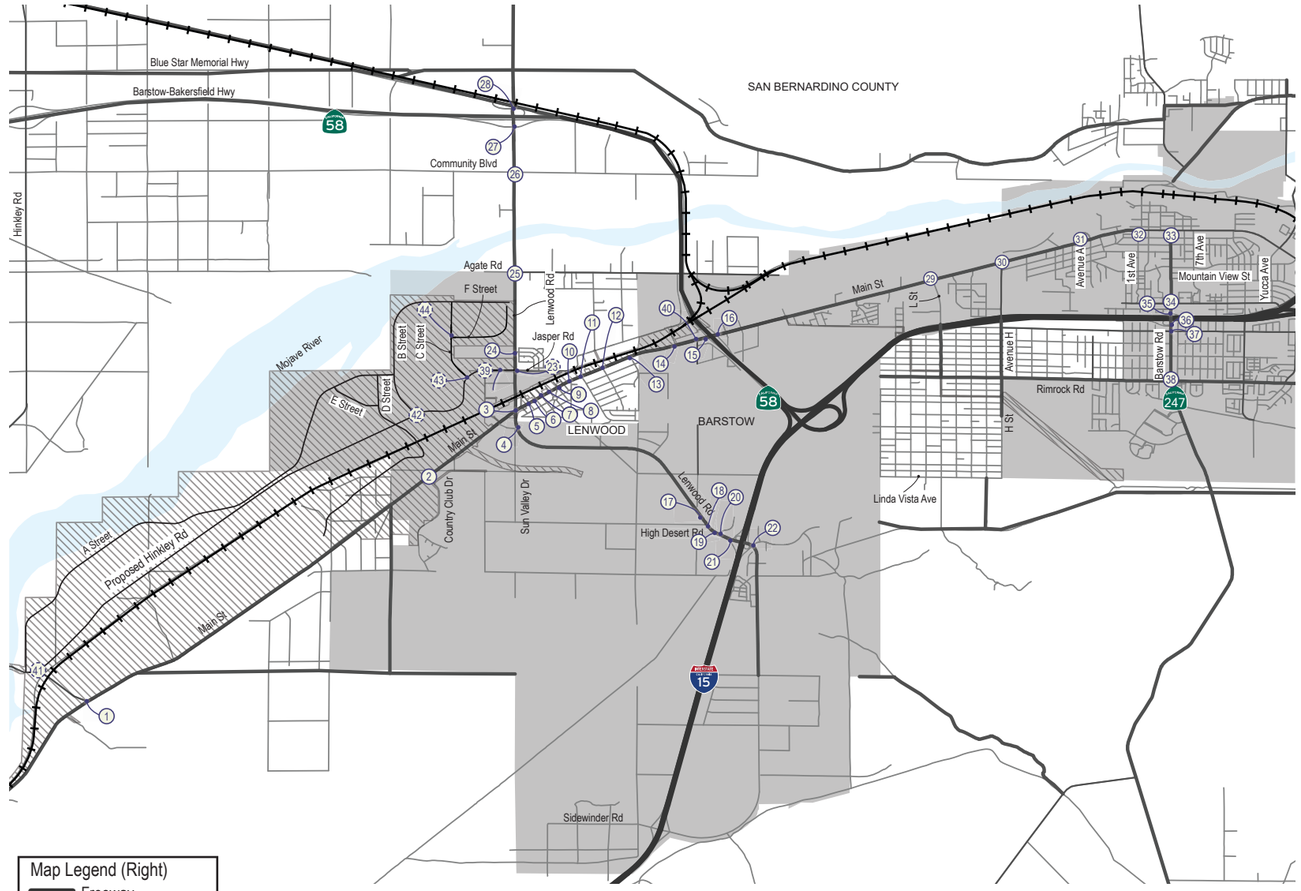


Figure 45: BIG Traffic Trip Assignment – Horizon Year 2048
Net Intersection Trips (PCE) (Page 2/2)

Source: Author Compilation, 2025

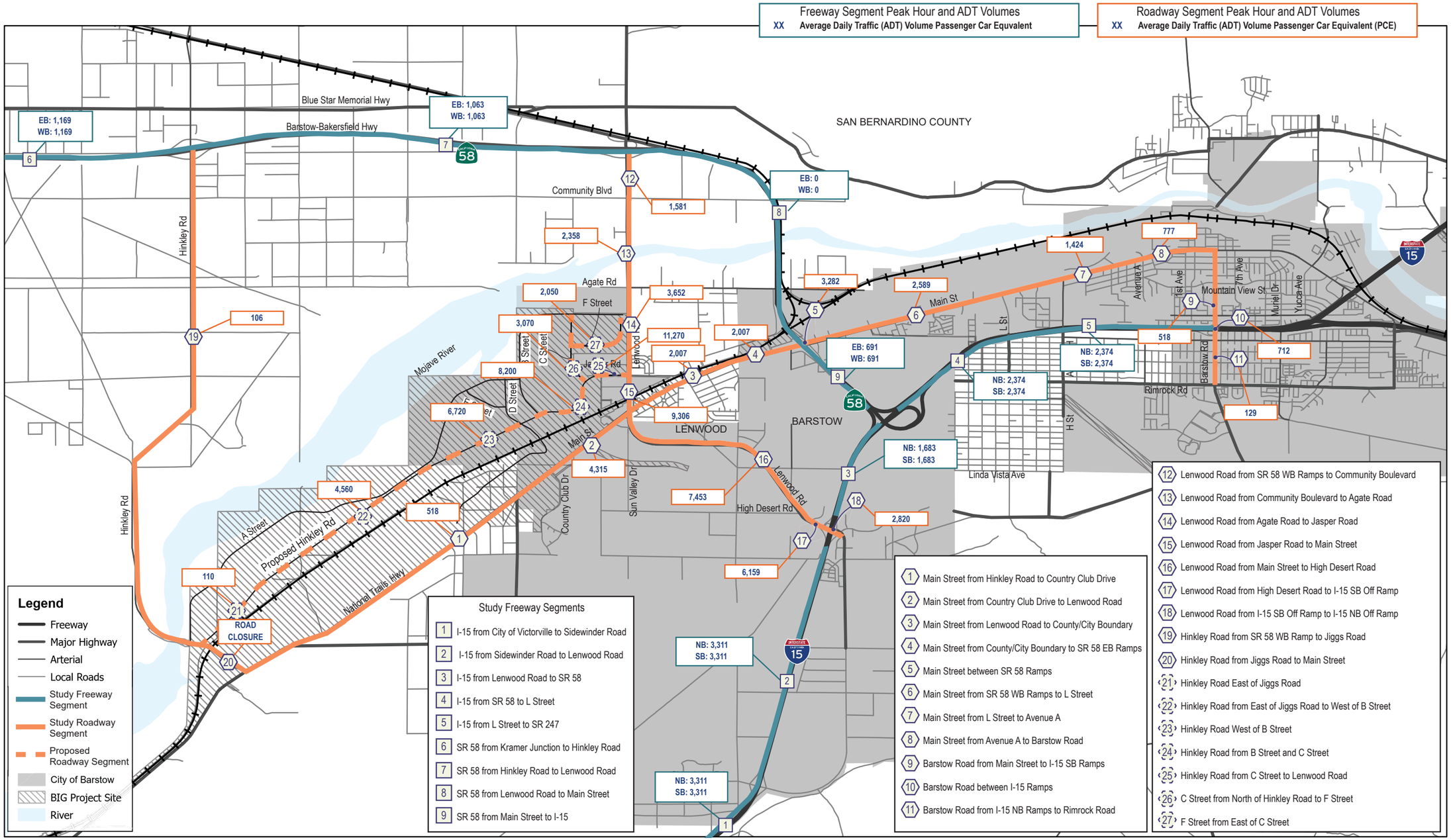


Figure 46: BIG Horizon Year 2048 Roadway and Freeway Mainline Segment Traffic Trip Assignment (PCE)

Source: Author Compilation, 2025

5.5 Plus BIG LOS Analysis

Opening Year 2028 Plus BIG

Forecast BIG Opening Year 2028 trips were added to Opening Year 2028 No BIG Baseline traffic volumes to develop Opening Year 2028 Plus BIG conditions. LOS analysis was conducted for the study area intersections, freeway off-ramps, and roadway segments for Opening Year 2028 Plus BIG conditions to evaluate if BIG would cause any transportation deficiencies inconsistent with applicable LOS standards. Where LOS analysis determined deficiencies, transportation improvements were identified and incorporated as TMs. **Section 6.0 Plus BIG Transportation Modifications** discusses the proposed transportation improvements and modifications and the resulting LOS. BIG traffic assignment along freeway mainline segments is reported for informational purposes.

Intersection Operations

Forecast peak hour turning movements at study area intersections are illustrated in **Figure 47: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Opening Year 2028 Plus BIG**. **Table 37: Study Area Intersection Operations – Opening Year 2028 Plus BIG** and **Figure 48: Study Area Intersection Level of Service – Opening Year 2028 Plus BIG** summarize the study area intersection LOS analysis results and indicate all intersections are forecast to operate at acceptable LOS according to agency performance criteria under Opening Year 2028 Plus BIG conditions. Detailed Synchro reports for intersection analysis are in **Appendix G: Synchro Analysis Worksheets.**

Roadway Segment Operations

Forecast roadway segment ADT volumes are illustrated in **Figure 49: Study Area Roadway Segment Volumes – Opening Year 2028 Plus BIG. Table 38: Study Area Roadway Segment Operations - Opening Year 2028 Plus BIG** and **Figure 50: Study Area Roadway Segment Level of Service – Opening Year 2028 Plus BIG** summarize the study area roadway segment LOS analysis results and indicate all roadway segments are forecast to operate at acceptable LOS according to agency performance criteria for Opening Year 2028 Plus BIG conditions except the following:

- Roadway Segment 14, Lenwood Road between Agate Road and Jasper Road (LOS D)

The roadway segment listed above was analyzed further to determine whether they would experience a transportation deficiency inconsistent with the relevant standards under Opening Year 2028 Plus BIG conditions, based on the transportation deficiency criteria detailed in **Section 3.5 Consistency with Applicable LOS Standards**.

the Opening Year Segment 14 features signalized intersections spaced more than two miles apart. As such, the segment operates more like an uninterrupted-flow highway with isolated intersections. An analysis using HCS, based on HCM, Version 6.0, was performed. The HCS results show that Segment 14 operates acceptably in both directions during the AM and PM peak hours under 2028 scenario. Therefore, no widening improvements are recommended for this segment. Detailed HCS analysis reports for arterial analysis are in **Appendix K: HCS Worksheets**.

1

	105 / 471	
	Main St	
239 / 145		

2

5 / 5 3 / 3 144 / 139	Rail Yard Dwy	155 / 150 133 / 462 3 / 30
		Main St
5 / 5 195 / 141 0 / 13	Country Club Dr	3 / 3 12 / 13

3

74 / 116 185 / 388 155 / 242	Lenwood Rd	250 / 232 157 / 304 40 / 60
		Main St
96 / 70 182 / 154 93 / 101		96 / 105 358 / 245 40 / 80

4

2 / 5 295 / 510	Lenwood Rd	
Sun Valley Dr		
7 / 2 0 / 2		0 / 2 478 / 449

5

0 / 3 2 / 3	Holland St	362 / 519 2 / 3
		Main St
3 / 2 330 / 432 0 / 3		2 / 2 5 / 4

6

2 / 2	Hannan St	362 / 521 2 / 3
		Main St
3 / 3 334 / 435 2 / 0	Hannan St	2 / 2

7

0 / 5 2 / 2	Townsend St	2 / 0 359 / 517 3 / 2
		Main St
2 / 2 331 / 434 3 / 2		2 / 2

8

2 / 3	Woods Ave	0 / 2 352 / 519 3 / 2
		Main St
3 / 2 346 / 434 0 / 2		2 / 3

9

0 / 2 2 / 2	Frank St	348 / 499 5 / 20
		Main St
3 / 3 329 / 422 6 / 18	Frank St	12 / 23 12 / 15

10

		341 / 516 16 / 16
		Main St
340 / 431 9 / 13	Paris Ave	10 / 3 16 / 8

11

		341 / 499 17 / 24
		Main St
326 / 412 32 / 23	Ash Rd	14 / 25 14 / 22

12

		370 / 515 11 / 57
		Main St
332 / 432 8 / 20	Birch Rd	7 / 14 33 / 27

13

	399 / 584 9 / 25	
	Main St	
343 / 457 8 / 11	Western Dr	3 / 7 25 / 18

14

21 / 31 102 / 130	Pettit Rd	80 / 132 386 / 599
		Main St
19 / 38 373 / 465		

15

14 / 20 3 / 10 23 / 31	SR 58 EB Ramp	450 / 715 56 / 44
		Main St
280 / 386 204 / 214		

16

SR 58 WB Ramp		28 / 42 311 / 481
		Main St
21 / 21 291 / 402		192 / 267 50 / 76

17

23 / 23 271 / 495 5 / 1	Lenwood Rd	0 / 3
		1 / 13
		Love's Travel Stop Dwy
12 / 24 14 / 0 23 / 18		26 / 28 474 / 431 11 / 8

18

7 / 9 291 / 523	Lenwood Rd	
High Desert Rd		
7 / 3 173 / 183		77 / 90 509 / 430

19

9 / 7 12 / 5	Truck Freightliner Service Point Dwy	19 / 20 536 / 527 53 / 98
		Lenwood Rd
3 / 10 351 / 575 15 / 19		9 / 8 85 / 52

20

20 / 18 9 / 6 119 / 143	Commerce Pkwy	90 / 108 588 / 559 48 / 58
		Lenwood Rd
21 / 19 419 / 625 16 / 20		8 / 18 3 / 3 47 / 74

21

300 / 355 182 / 372	I-15 SB Off Ramps	483 / 444
		Lenwood Rd
257 / 396		

22

189 / 269 6 / 41	High Point Pkwy	33 / 108 333 / 563
		Lenwood Rd
71 / 173 181 / 387	I-15 NB Off Ramps	391 / 325 79 / 112 188 / 191

23

73 / 33 285 / 418 16 / 31	Lenwood Rd	52 / 54 40 / 18 29 / 28
Transload Warehouse Center Dwy		Jasper Rd
12 / 106 8 / 51 56 / 262		219 / 97 443 / 373 12 / 27

24

341 / 436 5 / 6	Lenwood Rd	4 / 4 20 / 17
		Cam del Sol
		443 / 443 15 / 29

Source: Author Compilation, 2025

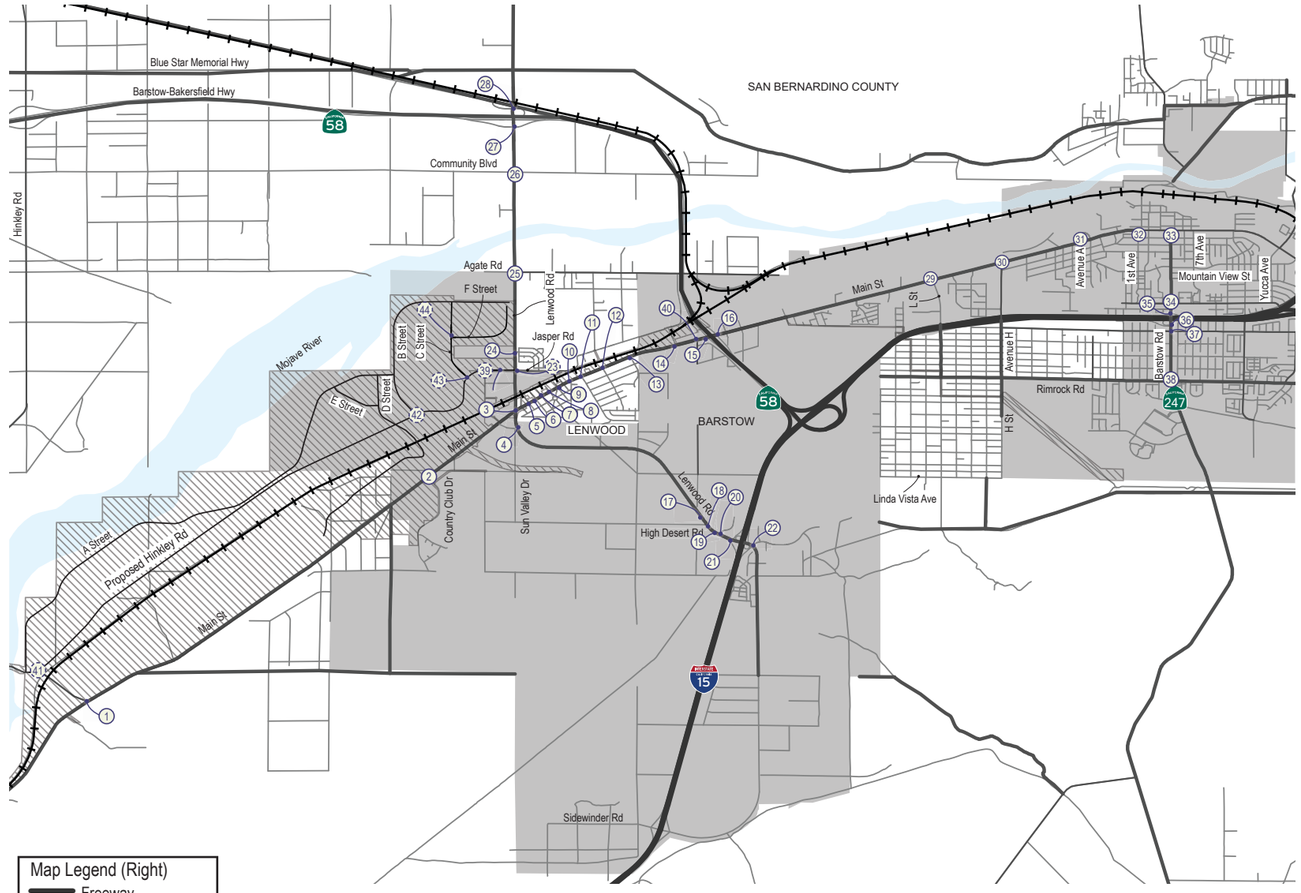


Figure 47: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Opening Year 2028 Plus BIG
(Page 1/2)

25

	Lenwood Rd	Agate Rd
	128 / 127 0 / 12	0 / 4 67 / 53
2 / 0	1 / 0 60 / 170 57 / 87	

26

	Lenwood Rd	Community Blvd
17 / 30 77 / 57 20 / 22	16 / 19 19 / 50 37 / 24	
18 / 43 20 / 34 5 / 2	1 / 5 43 / 72 17 / 42	

27

	Lenwood Rd	SR 58 EB Ramps
39 / 52 20 / 15		
6 / 6 0 / 2 77 / 65	63 / 114 18 / 22	

28

	Lenwood Rd	SR 58 WB Ramps
		12 / 22 8 / 15
6 / 30 43 / 46	27 / 53	46 / 62

29

	Arco Dwy	Main St
12 / 31 36 / 57 18 / 24		4 / 6 219 / 284 147 / 267
14 / 23 288 / 282 124 / 154	L St	107 / 174 20 / 41 181 / 206

30

	Ave H	Main St
13 / 12 3 / 5 28 / 12		18 / 8 345 / 506 54 / 106
19 / 10 439 / 472 39 / 78		65 / 64 4 / 3 99 / 97

31

	Ave A	Main St
1 / 6 0 / 2 5 / 7		10 / 6 475 / 616 23 / 49
9 / 2 485 / 610 98 / 93		71 / 97 4 / 0 24 / 48

32

	1st Ave	Main St
168 / 210 49 / 41 158 / 199		109 / 140 302 / 441 24 / 18
132 / 140 346 / 479 30 / 46		52 / 43 30 / 32 24 / 17

33

	Barstow Rd	Main St
		289 / 400 49 / 104
350 / 463 132 / 197		134 / 187 59 / 80

34

	Barstow Rd	Virginia Way
8 / 5 273 / 497 63 / 100		57 / 87 36 / 43 149 / 246
1 / 9 39 / 64 41 / 72		24 / 45 436 / 401 172 / 261

35

	I-15 SB On-Ramp	I-15 SB Off-Ramp
196 / 360 353 / 587		83 / 129 63 / 187
Barstow Rd		217 / 340 635 / 693

36

	Barstow Rd	I-15 NB Ramps
66 / 84 301 / 730		
285 / 229 236 / 320	Barstow Rd	106 / 81 634 / 828

37

	Barstow Rd	Armory Rd
14 / 42 405 / 688 173 / 348		231 / 327 13 / 21 35 / 84
53 / 91 11 / 21 19 / 29		10 / 21 415 / 454 32 / 69

38

	Barstow Rd	Rimrock Rd
87 / 213 149 / 193 151 / 194		129 / 102 176 / 210 43 / 48
110 / 137 112 / 236 32 / 31		19 / 34 114 / 209 16 / 36

39

		Hinkley Rd
		326 / 146 1 / 1
71 / 403	Roadrunner Rd	1 / 1

40

		Main St
		326 / 547 4 / 15
334 / 495 3 / 0	Elk Dr	2 / 4 4 / 18

41

	A St	Hinkley Rd
		0 / 4
3 / 1	Jiggs Rd	

42

	B St	Hinkley Rd
		195 / 87
42 / 240		

43

	C St	Hinkley Rd
19 / 110		89 / 40 237 / 106
52 / 293		

44

	C St	F St
		13 / 73
		59 / 27

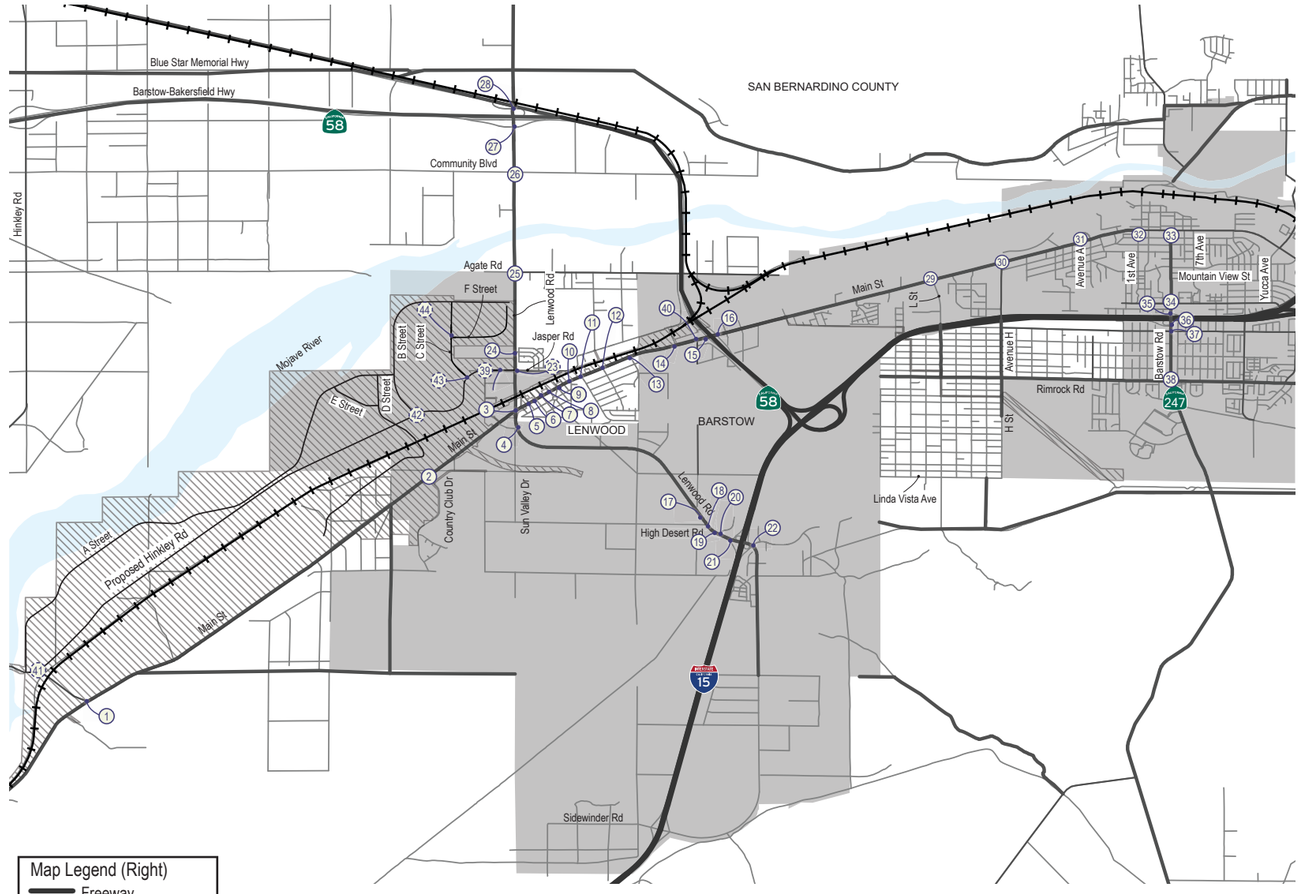


Figure 47: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Opening Year 2028 Plus BIG
(Page 2/2)

Source: Author Compilation, 2025

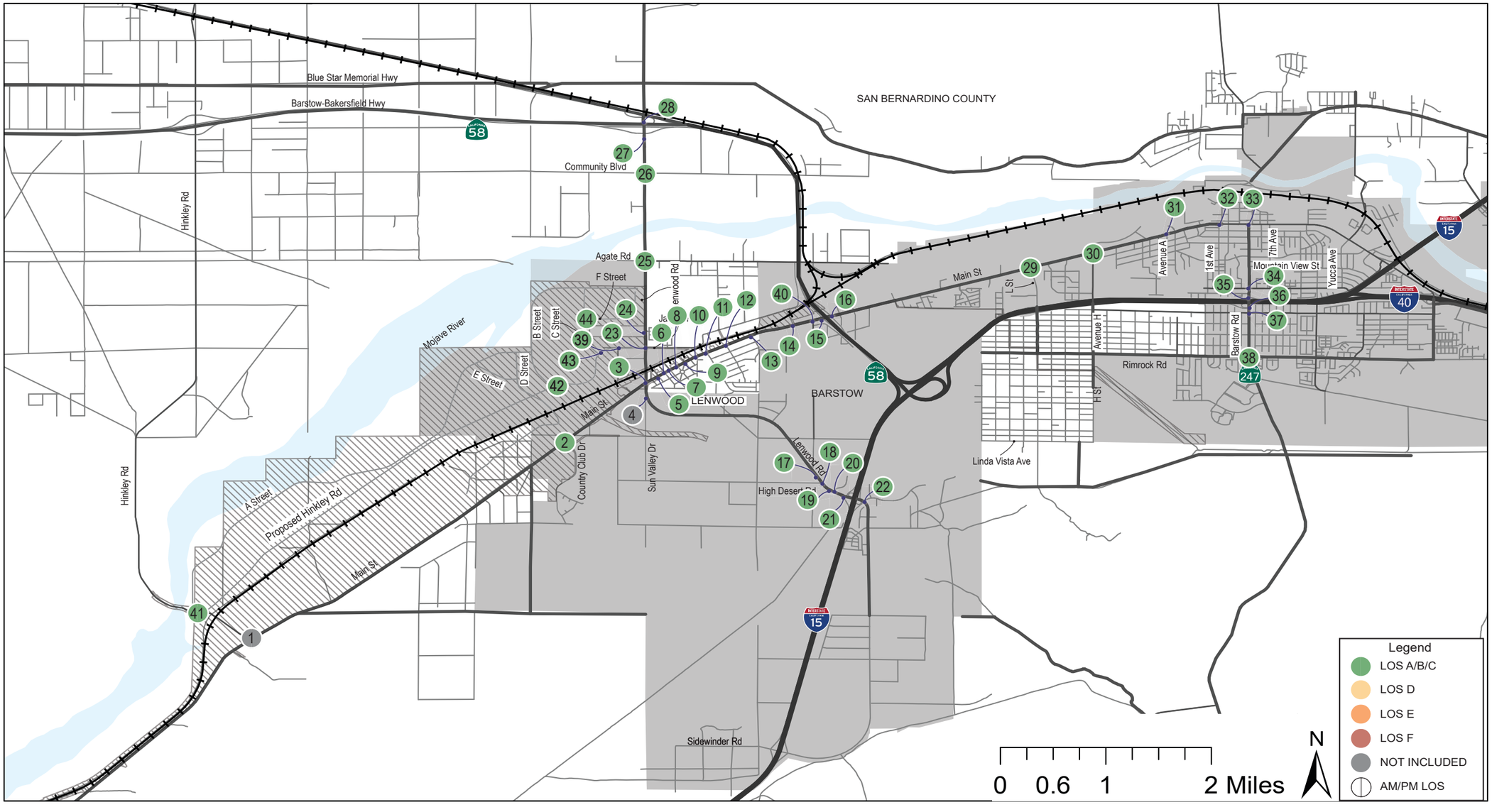


Figure 48: Study Area Intersection Level of Service – Opening Year 2028 Plus BIG

Source: Author Compilation, 2025

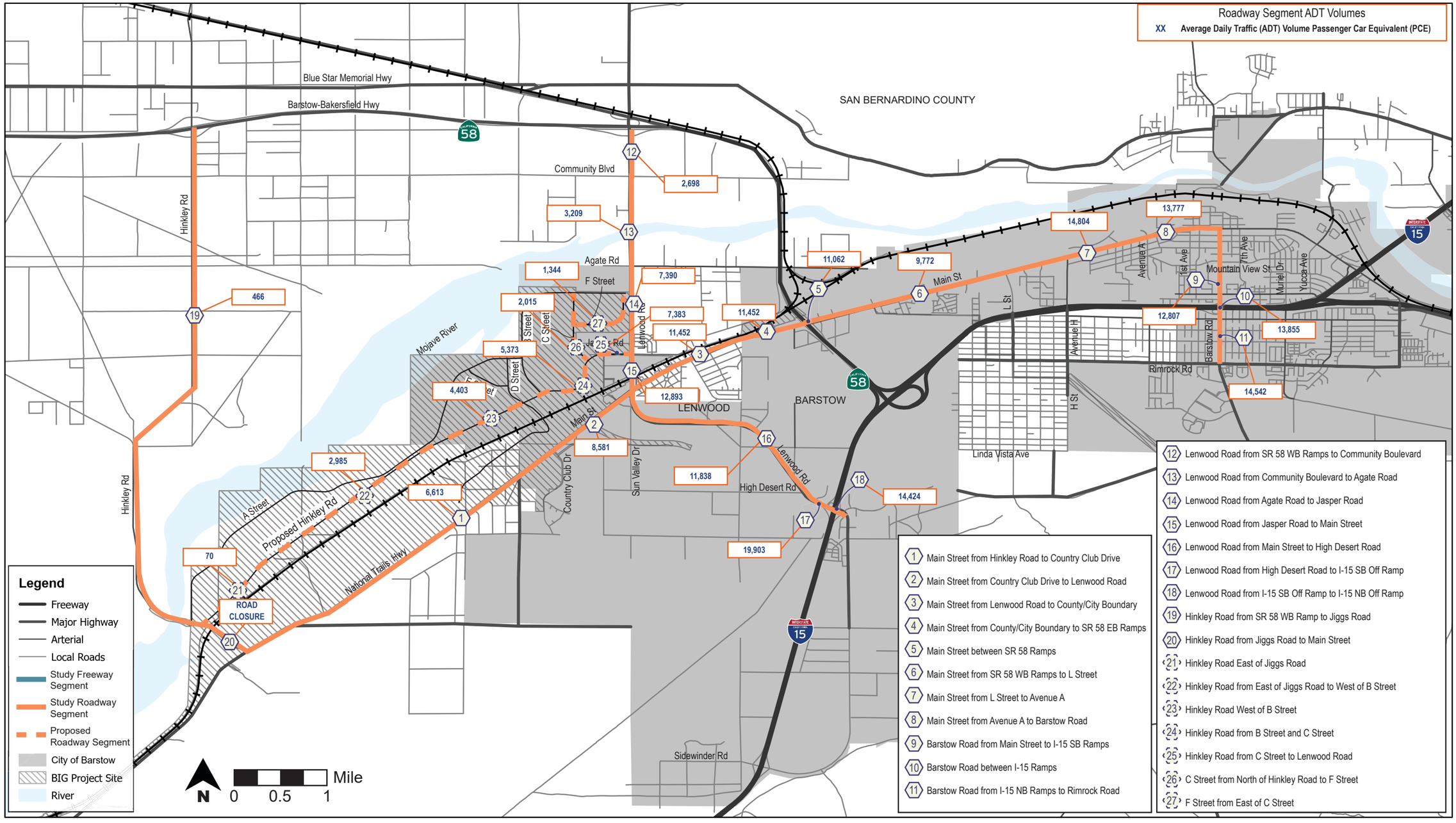


Figure 49: Study Area Roadway Segment Volumes – Opening Year 2028 Plus BIG

Source: Author Compilation, 2025

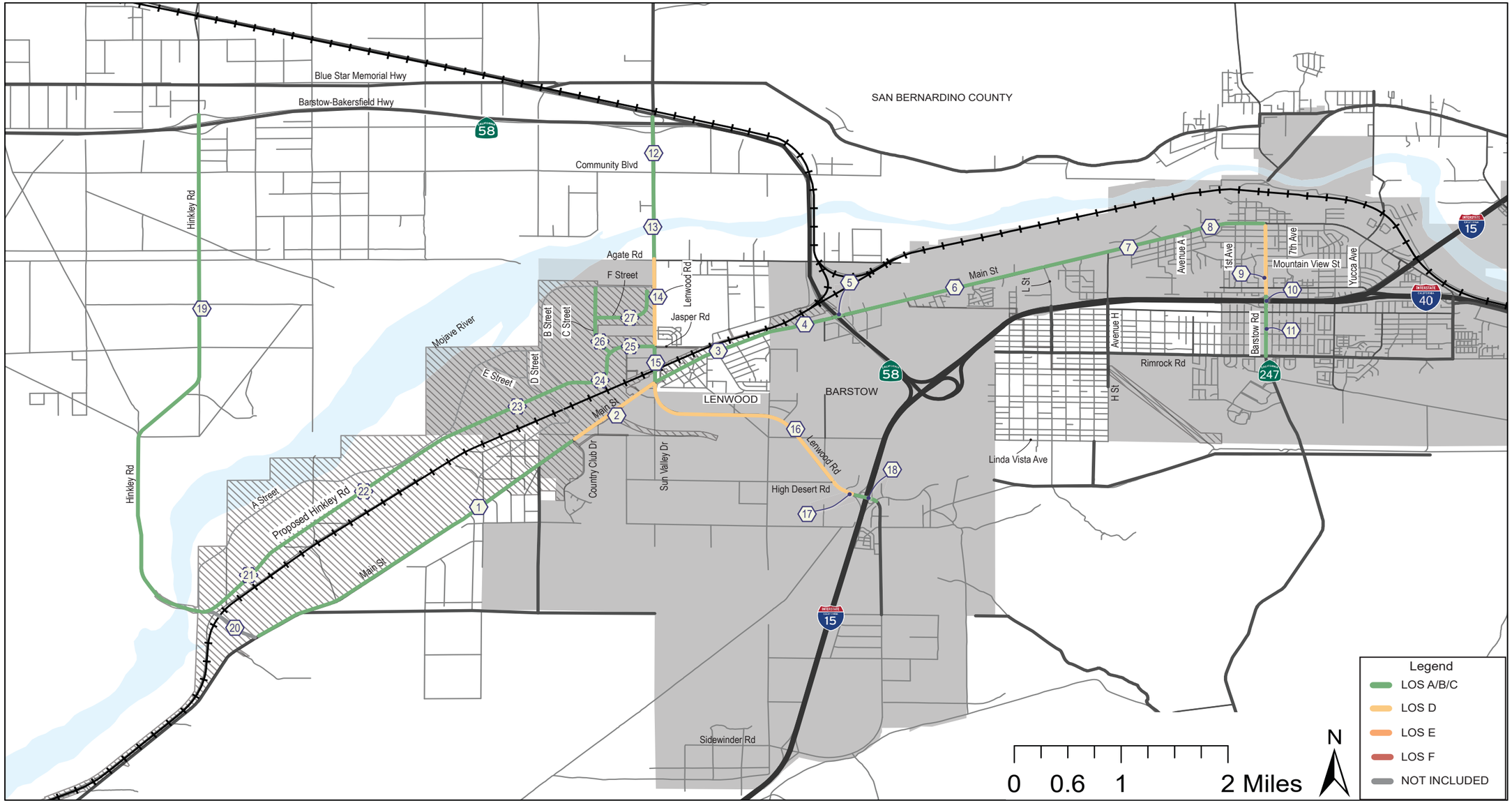


Figure 50: Study Area Roadway Segment Level of Service – Opening Year 2028 Plus BIG

Source: Author Compilation, 2025

Table 37: Study Area Intersection Operations – Opening Year 2028 Plus BIG											
Intersection		Peak Hour	Opening Year 2028 No BIG Baseline			Opening Year 2028 Plus BIG			LOS Threshold (c)	Difference (d)	Transportation Deficiency?
			Traffic Control	Delay (a)	LOS (b)	Traffic Control	Delay (a)	LOS (b)			
1	Main Street & Vacated Hinkley Road	AM	(e)								
		PM									
2	Main Street & Country Club Drive/Main Street Driveway	AM	One-Way Stop	9.2	A	Signal	6.2	A	C	-3.0	NO
		PM		9.0	A		6.2	A	C	-2.8	NO
3	Main Street & Lenwood Road	AM	Signal	18.0	B	Signal	20.2	C	C	2.2	NO
		PM		18.8	B		21.3	C	C	2.5	NO
4	Lenwood Road & Sun Valley Drive	AM	One-Way Stop	11.5	B	*Intersection removed by BIG due to partial vacation of Sun Valley Drive between Lenwood Road and Sweeten Lane.*					
		PM		9.7	A						
5	Main Street & Holland Street	AM	Two-Way Stop	12.6	B	Two-Way Stop	13.9	B	C	1.3	NO
		PM		12.9	B		13.9	B	C	1.0	NO
6	Main Street & Hannan Street	AM	Two-Way Stop	12.6	B	Two-Way Stop	13.9	B	C	1.3	NO
		PM		15.9	C		17.9	C	C	2.0	NO
7	Main Street & Townsend Street	AM	Two-Way Stop	12.5	B	Two-Way Stop	13.8	B	C	1.3	NO
		PM		14.8	B		16.8	C	C	2.0	NO
8	Main Street & Woods Avenue	AM	Two-Way Stop	12.7	B	Two-Way Stop	13.8	B	C	1.1	NO
		PM		15.8	C		17.7	C	C	1.9	NO
9	Main Street & Frank Street	AM	Two-Way Stop	12.5	B	Two-Way Stop	13.9	B	C	1.4	NO
		PM		17.4	C		19.9	C	C	2.5	NO
10	Main Street & Paris Avenue	AM	One-Way Stop	10.6	B	One-Way Stop	11.0	B	C	0.4	NO
		PM		10.7	B		11.4	B	C	0.7	NO
11	Main Street & Ash Road	AM	One-Way Stop	11.0	B	One-Way Stop	11.5	B	C	0.5	NO
		PM		12.5	B		13.8	B	C	1.3	NO
12	Main Street & Birch Road	AM	One-Way Stop	9.9	A	One-Way Stop	10.2	B	C	0.3	NO
		PM		12.1	B		13.2	B	C	1.1	NO
13	Main Street & Western Drive	AM	One-Way Stop	9.7	A	One-Way Stop	9.9	A	C	0.2	NO
		PM		11.4	B		12.2	B	C	0.8	NO
14	Main Street & Pettit Road	AM	One-Way Stop	13.0	B	One-Way Stop	14.4	B	C	1.4	NO
		PM		16.9	C		22.5	C	C	5.6	NO
15	Main Street & SR 58 Eastbound Ramps	AM	Signal	7.6	A	Signal	8.1	A	D	0.5	NO
		PM		5.3	A		5.7	A	D	0.4	NO

Table 37: Study Area Intersection Operations – Opening Year 2028 Plus BIG											
Intersection		Peak Hour	Opening Year 2028 No BIG Baseline			Opening Year 2028 Plus BIG			LOS Threshold (c)	Difference (d)	Transportation Deficiency?
			Traffic Control	Delay (a)	LOS (b)	Traffic Control	Delay (a)	LOS (b)			
16	Main Street & SR 58 Westbound Ramps	AM	Signal	11.6	B	Signal	12.1	B	D	0.5	NO
		PM		13.4	B		14.4	B	D	1.0	NO
17	Lenwood Road & Love's Travel Stop Driveway	AM	Two-Way Stop	12.4	B	Two-Way Stop	17.0	C	C	4.6	NO
		PM		13.2	B		20.4	C	C	7.2	NO
18	Lenwood Road & High Desert Road	AM	Two-Way Stop	13.7	B	Two-Way Stop	17.8	C	C	4.1	NO
		PM		15.9	C		24.2	C	C	8.3	NO
19	Lenwood Rd & Chevron Driveway	AM	Two-Way Stop	13.4	B	Two-Way Stop	18.0	C	C	4.6	NO
		PM		14.7	B		19.4	C	C	4.7	NO
20	Lenwood Road & Commerce Parkway	AM	Signal	26.3	C	Signal	32.0	C	C	5.7	NO
		PM		27.5	C		27.8	C	C	0.3	NO
21	Lenwood Road & I-15 Southbound Ramp	AM	Signal	12.9	B	Signal	13.7	B	D	0.8	NO
		PM		15.0	B		15.6	B	D	0.6	NO
22	Lenwood Road & I-15 Northbound Ramp	AM	Signal	12.2	B	Signal	12.4	B	D	0.2	NO
		PM		13.2	B		14.0	B	D	0.8	NO
23	Lenwood Road & Jasper Road/Lenwood Road Driveway	AM	Two-Way Stop	13.9	B	Signal	14.5	B	C	0.6	NO
		PM		16.4	C		17.3	B	C	0.9	NO
24	Lenwood Road & Camino Del Sol	AM	One-Way Stop	13.2	B	One-Way Stop	15.6	C	C	2.4	NO
		PM		13.6	B		16.9	C	C	3.3	NO
25	Lenwood Road & Agate Road	AM	Two-Way Stop	9.1	A	Two-Way Stop	10.5	B	C	1.4	NO
		PM		9.9	A		11.9	B	C	2.0	NO
26	Lenwood Road & Community Blvd	AM	Two-Way Stop	9.7	A	Two-Way Stop	10.2	B	C	0.5	NO
		PM		10.4	B		11.4	B	C	1.0	NO
27	Lenwood Road & SR 58 Eastbound Ramps	AM	All-Way Stop	7.5	A	All-Way Stop	7.8	A	D	0.3	NO
		PM		7.9	A		8.2	A	D	0.3	NO
28	Lenwood Road & SR 58 Westbound Ramps	AM	All-Way Stop	7.2	A	All-Way Stop	7.3	A	D	0.1	NO
		PM		7.4	A		7.6	A	D	0.2	NO
29	Main Street & L Street	AM	Signal	13.3	B	Signal	13.6	B	D	0.3	NO
		PM		15.6	B		17.0	B	D	1.4	NO
30	Main Street & Avenue H	AM	Signal	6.7	A	Signal	6.8	A	D	0.1	NO
		PM		6.7	A		6.7	A	D	0.0	NO

Table 37: Study Area Intersection Operations – Opening Year 2028 Plus BIG											
Intersection		Peak Hour	Opening Year 2028 No BIG Baseline			Opening Year 2028 Plus BIG			LOS Threshold (c)	Difference (d)	Transportation Deficiency?
			Traffic Control	Delay (a)	LOS (b)	Traffic Control	Delay (a)	LOS (b)			
31	Main Stret & Avenue A	AM	Signal	4.7	A	Signal	4.8	A	D	0.1	NO
		PM		5.4	A		5.5	A	D	0.1	NO
32	Main Street & 1st Avenue	AM	Signal	18.0	B	Signal	18.5	B	D	0.5	NO
		PM		20.5	C		21.0	C	D	0.5	NO
33	Main Street & Barstow Road	AM	Signal	8.1	A	Signal	8.1	A	D	0.0	NO
		PM		10.1	B		10.2	B	D	0.1	NO
34	Barstow Road & Virginia Way	AM	Signal	12.2	B	Signal	12.5	B	C	0.3	NO
		PM		16.3	B		16.8	B	C	0.5	NO
35	Barstow Road & I-15 Southbound Ramps	AM	Signal	12.7	B	Signal	12.8	B	D	0.1	NO
		PM		16.5	B		19.7	B	D	3.2	NO
36	Barstow Road & I-15 Northbound Ramps	AM	Signal	15.0	B	Signal	20.8	C	D	5.8	NO
		PM		14.8	B		21.1	C	D	6.3	NO
37	Barstow Road & Armory Road	AM	Signal	12.5	B	Signal	13.1	B	C	0.6	NO
		PM		21.3	C		23.1	C	C	1.8	NO
38	Barstow Road & Rimrock Road	AM	Signal	6.5	A	Signal	6.6	A	C	0.1	NO
		PM		7.8	A		7.8	A	C	0.0	NO
39	Hinkley Road & Roadrunner Road	AM	-	-	-	One-Way Stop	10.0	B	C	N/A	NO
		PM		-	-		12.4	B	C	N/A	NO
40	Main Street & Elks Lane	AM	One-Way Stop	9.9	A	One-Way Stop	10.0	B	C	0.1	NO
		PM		9.7	A		10.7	B	C	1.0	NO
41	Hinkley Road & Jiggs Road / A Street	AM	-	-	-	Two-Way Stop	0.0	A	C	N/A	NO
		PM		-	-		0.0	A	C	N/A	NO
42	Hinkley Road & B Street	AM	-	-	-	One-Way Stop	0.0	A	C	N/A	NO
		PM		-	-		0.0	A	C	N/A	NO
43	Hinkley Road & C Street	AM	-	-	-	One-Way Stop	10.4	B	C	N/A	NO
		PM		-	-		12.8	B	C	N/A	NO
44	C Street & F Street	AM	-	-	-	One-Way Stop	9.0	A	C	N/A	NO
		PM		-	-		9.3	A	C	N/A	NO

Note:
Bold values indicate intersections operating below the LOS Threshold. **Bold and shaded** values indicate inconsistency with applicable LOS standards.
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement.

Table 37: Study Area Intersection Operations – Opening Year 2028 Plus BIG										
Intersection	Peak Hour	Opening Year 2028 No BIG Baseline			Opening Year 2028 Plus BIG			LOS Threshold (c)	Difference (d)	Transportation Deficiency?
		Traffic Control	Delay (a)	LOS (b)	Traffic Control	Delay (a)	LOS (b)			
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 7th Edition and performed using Synchro 12. (c) The LOS Threshold represents the acceptable LOS for the intersection. All City (non-downtown) and County intersections within the study area are considered to operate acceptably at LOS C or better, consistent with City LOS criteria and the County TIS Guidelines. All downtown City intersections are considered to operate acceptably at LOS D or better. All Caltrans intersections located at freeway interchanges are considered to operate acceptably at LOS D or better. (d) Change in delay due to addition of project traffic. (e) Intersection removed by BIG due to Hinkley Road vacation.									
Sources: *Author Compilation, 2025*										

Table 38: Study Area Roadway Segment Operations - Opening Year 2028 Plus BIG

Roadway	Segment	Jurisdiction	CMP[1]	Acceptable LOS Capacity[2]	Opening Year 2028 No BIG Baseline			Daily Project Traffic (PCE)	Opening Year 2028 Plus BIG			Acceptable LOS Threshold	Project Change in V/C	Exceeds V/C Threshold?[4]	Analysis Software	Roadway Arterial Analysis				Transportation Deficiency?[6]
																AM		PM		
					ADT (PCE)	V/C	LOS		ADT (PCE)	V/C	LOS					LOS - NB/EB	LOS - SB/WB	LOS - NB/EB	LOS - SB/WB	
Main Street	1. Vacated Hinkley Road to Country Club Drive	City/County[3]	-	14,300	6,263	0.438	C or Better	350	6,613	0.462	C or Better	D	0.024	No	-	-	-	-	-	No
	2. Country Club Drive to Lenwood Road	City	-	Baseline: 14,300 Plus BIG: 30,200	5,503	0.385	C or Better	3,078	8,581	0.284	C or Better	D	-0.101	No	-	-	-	-	-	No
	3. Lenwood Road to County/City Boundary	County	-	16,400	10,083	0.615	C or Better	1,370	11,452	0.698	C or Better	C	0.084	No	-	-	-	-	-	No
	4. County/City Boundary to SR 58 Eastbound Ramps	City	-	30,200	10,083	0.334	C or Better	1,370	11,452	0.379	C or Better	D	0.045	No	-	-	-	-	-	No
	5. SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	Caltrans	-	30,200	8,859	0.293	C or Better	2,204	11,062	0.366	C or Better	D	0.073	No	-	-	-	-	-	No
	6. SR 58 Westbound Ramps to L Street	City	-	30,200	8,027	0.266	C or Better	1,746	9,772	0.324	C or Better	D	0.058	No	-	-	-	-	-	No
	7. L Street to Avenue A	City	Yes	30,200	13,932	0.461	C or Better	872	14,804	0.490	C or Better	D	0.029	No	-	-	-	-	-	No
	8. Avenue A to Barstow Road	City	Yes	30,200	13,078	0.433	C or Better	700	13,777	0.456	C or Better	D	0.023	No	-	-	-	-	-	No
Barstow Road	9. Main Street to I-15 Southbound Ramps	City	Yes	22,300	12,372	0.555	D	436	12,807	0.574	D	D	0.020	No	-	-	-	-	-	No
	10. I-15 Southbound Ramps to I-15 Northbound Ramps	Caltrans	Yes	30,200	13,337	0.442	C or Better	519	13,855	0.459	C or Better	D	0.017	No	-	-	-	-	-	No
	11. I-15 Northbound ramps to Rimrock Road	City	Yes	30,200	14,455	0.479	C or Better	88	14,542	0.482	C or Better	D	0.003	No	-	-	-	-	-	No

Table 38: Study Area Roadway Segment Operations - Opening Year 2028 Plus BIG

Roadway	Segment	Jurisdiction	CMP[1]	Acceptable LOS Capacity[2]	Opening Year 2028 No BIG Baseline			Daily Project Traffic (PCE)	Opening Year 2028 Plus BIG			Acceptable LOS Threshold	Project Change in V/C	Exceeds V/C Threshold?[4]	Analysis Software	Roadway Arterial Analysis				Transportation Deficiency?[6]
																AM		PM		
					ADT (PCE)	V/C	LOS		ADT (PCE)	V/C	LOS					LOS - NB/EB	LOS - SB/WB	LOS - NB/EB	LOS - SB/WB	
Lenwood Road	12. SR 58 Westbound Ramps to Community Boulevard	County	-	7,000	1,497	0.214	C or Better	1,202	2,698	0.385	C or Better	C	0.172	No	-	-	-	-	-	No
	13. Community Boulevard to Agate Road	County	-	7,000	1,398	0.200	C or Better	1,812	3,209	0.458	C or Better	C	0.259	No	-	-	-	-	-	No
	14. Agate Road to Jasper Road	County	-	7,000	4,618	0.660	C or Better	2,773	7,390	1.056	**D**	C	0.396	Yes	HCS	C	B	C	C	No
	15. Jasper Road to Main Street	City	-	30,200	6,968	0.231	C or Better	5,926	12,893	0.427	C or Better	D	0.196	No	-	-	-	-	-	No
	16. Main Street to High Desert Road	City	-	14,300	7,280	0.509	D	4,559	11,838	0.828	D	D	0.319	No	-	-	-	-	-	No
	17. High Desert Road to I-15 Southbound Off Ramp	City	-	30,200	15,518	0.514	D	4,385	19,903	0.659	D	D	0.145	No	-	-	-	-	-	No
	18. I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	Caltrans	-	30,200	12,625	0.418	C or Better	1,800	14,424	0.478	C or Better	D	0.060	No	-	-	-	-	-	No
Hinkley Road	19. SR 58 Westbound Ramp to Jiggs Road	County	-	7,000	399	0.057	C or Better	67	466	0.067	C or Better	C	0.010	No	-	-	-	-	-	No
	20. Jiggs Road to Main Street	See note (5).																		
	21. East of Jiggs Road	City	-	30,200	-	-	-	70	70	0.002	C or Better	D	0.002	No	-	-	-	-	-	No
	22. East of Jiggs Road to West of B Street	City	-	30,200	-	-	-	2,985	2,985	0.099	C or Better	D	0.099	No	-	-	-	-	-	No
	23. West of B Street	City	-	30,200	-	-	-	4,403	4,403	0.146	C or Better	D	0.146	No	-	-	-	-	-	No
	24. Between B Street and C Street	City	-	30,200	-	-	-	5,373	5,373	0.178	C or Better	D	0.178	No	-	-	-	-	-	No
	25. C Street to Lenwood Road	City	-	30,200	-	-	-	7,383	7,383	0.244	C or Better	D	0.244	No	-	-	-	-	-	No

Table 38: Study Area Roadway Segment Operations - Opening Year 2028 Plus BIG

Roadway	Segment	Jurisdiction	CMP[1]	Acceptable LOS Capacity[2]	Opening Year 2028 No BIG Baseline			Daily Project Traffic (PCE)	Opening Year 2028 Plus BIG			Acceptable LOS Threshold	Project Change in V/C	Exceeds V/C Threshold?[4]	Analysis Software	Roadway Arterial Analysis				Transportation Deficiency?[6]
																AM		PM		
					ADT (PCE)	V/C	LOS		ADT (PCE)	V/C	LOS					LOS - NB/EB	LOS - SB/WB	LOS - NB/EB	LOS - SB/WB	
C Street	26. North of Hinkley Road to F Street	City	-	30,200	-	-	-	2,015	2,015	0.067	C or Better	D	0.067	No	-	-	-	-	-	No
F Street	27. East of C Street	City	-	30,200	-	-	-	1,344	1,344	0.045	C or Better	D	0.045	No	-	-	-	-	-	No

[1]Notes if the roadway segment is part of the San Bernardino Congestion Management Program (CMP) network. The CMP notes that for the CMP roadway system, the LOS standard shall be E.
[2]The Acceptable LOS Capacity represents the acceptable LOS for the roadway segment. All County roadway segments within the study area are considered to operate acceptably at LOS C or better, consistent with the County TIS Guidelines. All City roadway segments within the study area are considered to operate acceptably at LOS D or better, consistent with the recommendations in the City of Barstow proposed General Plan. All Caltrans roadway segments within the study area are considered to operate acceptably at LOS D or better.
[3]Roadway segment is currently under County jurisdiction. Roadway segment would be annexed into the City as part of the proposed specific plan and is analyzed according to City standards.
[4]Would the Project exceed the V/C threshold? The project would exceed the v/c threshold if the project causes the roadway segment to operate at an unacceptable LOS as determined by the appropriate jurisdictional standard.
[5]This segment of Hinkley Road would be closed upon completion of BIG
[6]Would the Project cause a transportation deficiency inconsistent with the relevant General Plan? The project would cause a transportation deficiency if the following criteria are met: if the project causes the roadway segment to operate at an unacceptable LOS and the roadway segment arterial analysis indicates travel speeds that result in LOS D or worse during the AM and PM peak hour conditions OR if the roadway segment operates unacceptably in the No BIG scenario and BIG would add traffic in excess of 5% of the roadway capacity and the roadway segment arterial analysis indicates travel speeds that result in LOS D or worse during the AM and PM peak hour conditions.
Bolded values indicate segment with LOS exceeding the acceptable LOS threshold.
Shaded values indicate Project transportation deficiencies.
ADT = average daily traffic
I = Interstate
LOS = level of service
SR = State Route
V/C = volume-to-capacity ratio

Sources:
- Author Compilation, 2025
- National Data & Surveying Services

Interim Year 2033 Plus BIG

Forecast BIG Interim Year 2033 trips were added to Interim Year 2033 No BIG Baseline traffic volumes to develop Interim Year 2033 Plus BIG conditions. LOS analysis was conducted for the study area intersections, freeway off-ramps, and roadway segments for Interim Year 2033 Plus BIG conditions to evaluate if BIG would cause any transportation deficiencies inconsistent with applicable LOS standards. Where LOS analysis determined deficiencies, transportation improvements were identified and incorporated as TMs. **Section 6.0 Plus BIG Transportation Modifications** discusses the proposed transportation improvements and modifications and the resulting LOS. BIG traffic assignment along freeway mainline segments is reported for informational purposes.

Intersection Operations

Forecast peak hour turning movements at study area intersections are illustrated in **Figure 51: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Interim Year 2033 Plus BIG**. **Table 39: Study Area Intersection Operations – Interim Year 2033 Plus BIG** and **Figure 52: Study Area Intersection Level of Service – Interim Year 2033 Plus BIG** summarize the study area intersection LOS analysis results and indicate all intersections are forecast to operate at acceptable LOS according to agency performance criteria or are not expected to experience an increase in delay large enough to cause a transportation deficiency for Interim Year 2033 Plus BIG conditions except the following:

- Intersection 14, Main Street & Pettit Road (PM Peak Hour: LOS D)
- Intersection 18, Lenwood Road & High Desert Road (PM Peak Hour: LOS D)
- Intersection 19, Lenwood Road & Chevron Driveway (PM Peak Hour: LOS D)

The intersections listed above are considered BIG-related transportation deficiencies inconsistent with applicable LOS standards under Interim Year 2033 Plus BIG conditions, based on transportation deficiency criteria (LOS and delay) detailed in **Section 3.5 Consistency with Applicable LOS Standards**. Detailed Synchro reports for intersection analysis are in **Appendix G: Synchro Analysis Worksheets**.

Roadway Segment Operations

Forecast roadway segment ADT volumes are illustrated in **Figure 53: Study Area Roadway Segment Volumes – Interim Year 2033 Plus BIG**. **Table 40: Study Area Roadway Segment Operations - Interim Year 2033 Plus BIG** and **Figure 54: Study Area Roadway Segment Level of Service – Interim Year 2033 Plus BIG** summarize the study area roadway segment LOS analysis results and indicate all Study Area roadway segments are forecast to operate at acceptable LOS according to agency performance criteria for Horizon Year Plus BIG conditions except the following:

- Roadway Segment 14, Lenwood Road between Agate Road and Jasper Road (LOS E)
- Roadway Segment 16, Lenwood Road between Main Street and High Desert Road (LOS F)

The roadway segments listed above were analyzed further to determine whether they would experience a transportation deficiency inconsistent with the relevant standards under Interim Year 2033 Plus BIG conditions, based on the transportation deficiency criteria detailed in **Section 3.5 Consistency with Applicable LOS Standards**.

Segments 14 and 16 features signalized intersections spaced more than two miles apart. As such, the segments operate more like uninterrupted-flow highways with isolated intersections. An analysis using HCS, based on HCM, Version 6.0, was performed. The HCS results show that both segments operate acceptably in both directions during the AM and PM peak hours under the Interim Year 2033 scenario. Therefore, no widening improvements are recommended for these segments. Detailed HCS analysis reports for arterial analysis are in **Appendix K: HCS Worksheets**.

1 Main St: 147 / 664 333 / 202	**2** Rail Yard Dwy: 6 / 6, 2 / 2, 172 / 167 Main St: 186 / 178, 187 / 639, 3 / 30 Country Club Dr: 6 / 6, 256 / 183, 0 / 20 2 / 2, 13 / 15	**3** Lenwood Rd: 83 / 137, 201 / 479, 157 / 267 Main St: 261 / 218, 134 / 237, 40 / 50 107 / 78, 196 / 152, 185 / 192 172 / 230, 416 / 265, 50 / 70	**4** Lenwood Rd: 8 / 17, 322 / 586 Sun Valley Dr: 18 / 9, 0 / 3 0 / 3, 543 / 488
5 Holland St: 0 / 4, 3 / 4 Main St: 380 / 531, 2 / 4 3 / 3, 339 / 452, 0 / 3 3 / 2, 5 / 4	**6** Hannan St: 4 / 3 Main St: 380 / 533, 2 / 2 2 / 2, 342 / 455, 1 / 0 Hannan St: 3 / 3	**7** Townsend St: 0 / 6, 4 / 3 Main St: 2 / 0, 377 / 529, 3 / 2 3 / 2, 339 / 454, 3 / 1 3 / 3	**8** Woods Ave: 3 / 4 Main St: 0 / 2, 370 / 531, 2 / 2 3 / 2, 354 / 454, 0 / 2 3 / 4
9 Frank St: 0 / 2, 3 / 3 Main St: 367 / 517, 5 / 22 3 / 3, 339 / 444, 7 / 20 12 / 26, 13 / 17	**10** Main St: 360 / 531, 16 / 18 352 / 455, 11 / 13 Paris Ave: 11 / 4, 18 / 9	**11** Main St: 360 / 517, 20 / 26 337 / 434, 34 / 26 Ash Rd: 16 / 28, 15 / 24	**12** Main St: 391 / 533, 11 / 59 343 / 454, 9 / 23 Birch Rd: 9 / 17, 35 / 27
13 Main St: 417 / 599, 9 / 25 355 / 482, 9 / 13 Western Dr: 5 / 8, 25 / 19	**14** Pettit Rd: 26 / 39, 106 / 145 Main St: 91 / 138, 405 / 615 24 / 45, 382 / 485	**15** SR 58 EB Ramp: 14 / 23, 4 / 12, 26 / 33 Main St: 481 / 739, 58 / 47 288 / 416, 207 / 220	**16** SR 58 WB Ramp: 33 / 50 Main St: 335 / 494 21 / 23, 299 / 432 198 / 270, 61 / 91
17 Lenwood Rd: 30 / 22, 298 / 571, 7 / 4 Love's Travel Stop Dwy: 0 / 4, 1 / 16 15 / 23, 3 / 0, 28 / 23 30 / 34, 539 / 470, 11 / 6	**18** Lenwood Rd: 13 / 27, 329 / 612 High Desert Rd 22 / 12, 134 / 115 81 / 97, 559 / 460	**19** Truck Freightliner Service Point Dwy: 10 / 8, 15 / 5 Lenwood Rd: 24 / 24, 638 / 649, 61 / 113 1 / 9, 437 / 703, 14 / 19 8 / 8, 98 / 60	**20** Commerce Pkwy: 20 / 17, 6 / 4, 142 / 170 Lenwood Rd: 107 / 125, 712 / 695, 59 / 70 18 / 17, 531 / 780, 14 / 19 8 / 18, 3 / 1, 54 / 88
21 I-15 SB Off Ramps: 357 / 416, 197 / 423 Lenwood Rd: 563 / 526 344 / 532	**22** High Point Pkwy: 220 / 309, 7 / 43 Lenwood Rd: 38 / 117, 417 / 699 I-15 NB Off Ramps 85 / 206, 226 / 485 434 / 367, 78 / 109, 217 / 217	**23** Lenwood Rd: 89 / 40, 293 / 424, 18 / 34 Jasper Rd: 55 / 59, 53 / 24, 30 / 29 Transload Warehouse Center Dwy 14 / 126, 10 / 68, 75 / 353 293 / 133, 450 / 379, 13 / 28	**24** Lenwood Rd: 365 / 449, 5 / 6 Cam del Sol: 6 / 5, 21 / 18 452 / 468, 16 / 33

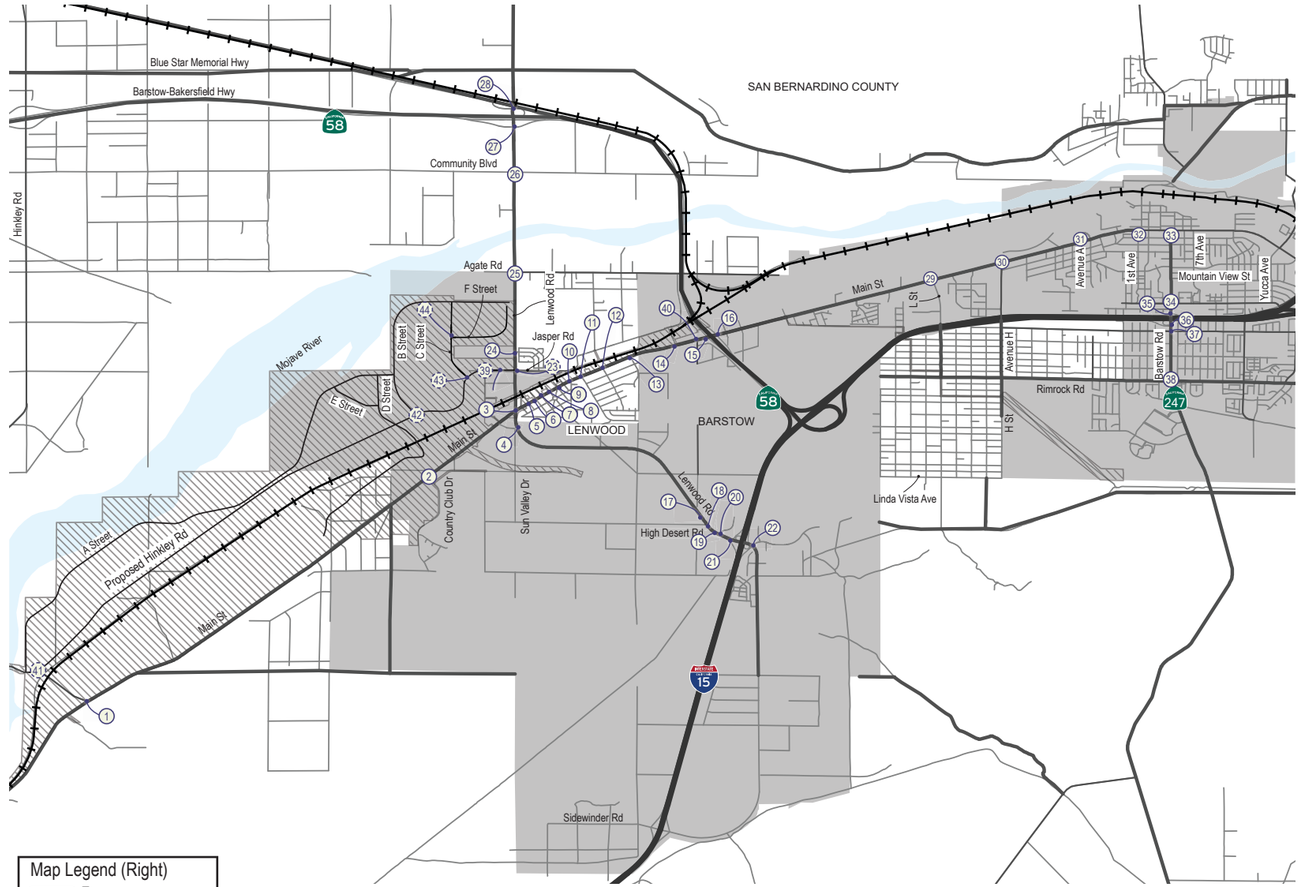


Figure 51: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Interim Year 2033 Plus BIG
(Page 1/2)

Source: Author Compilation, 2025

25

	140 / 134	
	0 / 12	
	Lenwood Rd	
		0 / 4
		77 / 66
		Agate Rd
3 / 0		
		1 / 0
		67 / 184
		64 / 104

26

	17 / 30	
	84 / 61	
	20 / 22	
	Lenwood Rd	
		16 / 19
		25 / 60
		42 / 27
		Community Blvd
18 / 43		
26 / 44		
7 / 4		
		3 / 7
		47 / 77
		19 / 48

27

	42 / 53	
	22 / 15	
	Lenwood Rd	
		SR 58 EB Ramps
8 / 7		
0 / 4		
81 / 68		
		67 / 119
		20 / 23

28

		15 / 30
		8 / 15
		SR 58 WB Ramps
10 / 36		
46 / 47		
Lenwood Rd		
	28 / 58	
	49 / 63	

29

	11 / 31	
	43 / 69	
	17 / 24	
	Arco Dwy	
		5 / 8
		222 / 276
		158 / 286
		Main St
13 / 22		
279 / 283		
141 / 182		
L St		
	127 / 196	
	25 / 51	
	196 / 222	

30

	14 / 13	
	4 / 6	
	30 / 15	
	Ave H	
		20 / 13
		373 / 539
		59 / 114
		Main St
22 / 11		
463 / 510		
45 / 93		
	75 / 76	
	5 / 3	
	107 / 104	

31

	1 / 8	
	0 / 3	
	4 / 9	
	Ave A	
		12 / 6
		482 / 620
		25 / 56
		Main St
9 / 3		
489 / 619		
106 / 100		
	75 / 105	
	6 / 0	
	30 / 55	

32

	182 / 230	
	55 / 44	
	173 / 218	
	1st Ave	
		119 / 151
		303 / 442
		25 / 21
		Main St
142 / 154		
347 / 480		
33 / 49		
	55 / 46	
	37 / 39	
	25 / 18	

33

		291 / 401
		54 / 112
		Main St
350 / 464		
140 / 208		
Barstow Rd		
	141 / 195	
	65 / 89	

34

	8 / 5	
	293 / 530	
	66 / 107	
	Barstow Rd	
		61 / 91
		37 / 47
		157 / 260
		Virginia Way
1 / 10		
42 / 67		
45 / 78		
	27 / 50	
	463 / 427	
	183 / 276	

35

	199 / 365	
	386 / 640	
		83 / 130
		76 / 217
I-15 SB On-Ramp		I-15 SB Off-Ramp
Barstow Rd		
	261 / 393	
	681 / 748	

36

	66 / 84	
	339 / 826	
	Barstow Rd	
		I-15 NB Ramps
291 / 232		
254 / 361		
Barstow Rd		
	125 / 102	
	733 / 950	

37

	15 / 46	
	473 / 809	
	196 / 393	
	Barstow Rd	
		262 / 368
		13 / 23
		36 / 87
		Armory Rd
59 / 102		
11 / 22		
21 / 32		
	10 /23	
	487 / 537	
	33 / 71	

38

	103 / 246	
	170 / 217	
	175 / 231	
	Barstow Rd	
		154 / 124
		195 / 228
		44 / 52
		Rimrock Rd
130 / 160		
120 / 260		
35 / 33		
	22 / 37	
	127 / 235	
	17 / 37	

39

		428 / 195
		1 / 1
		Hinkley Rd
93 / 530		
Roadrunner Rd		
	1 / 1	

40

		221 / 482
		4 / 17
		Main St
290 / 368		
4 / 0		
Elk Dr		
	2 / 5	
	4 / 19	

41

	A St	
		1 / 5
		Hinkley Rd
4 / 2		
Jiggs Rd		

42

	B St	
		255 / 116
		Hinkley Rd
56 / 316		

43

	25 /144	
	C St	
		117 / 53
		311 / 142
		Hinkley Rd
68 / 385		

44

	C St	
		17 / 97
		F St
		78 / 36

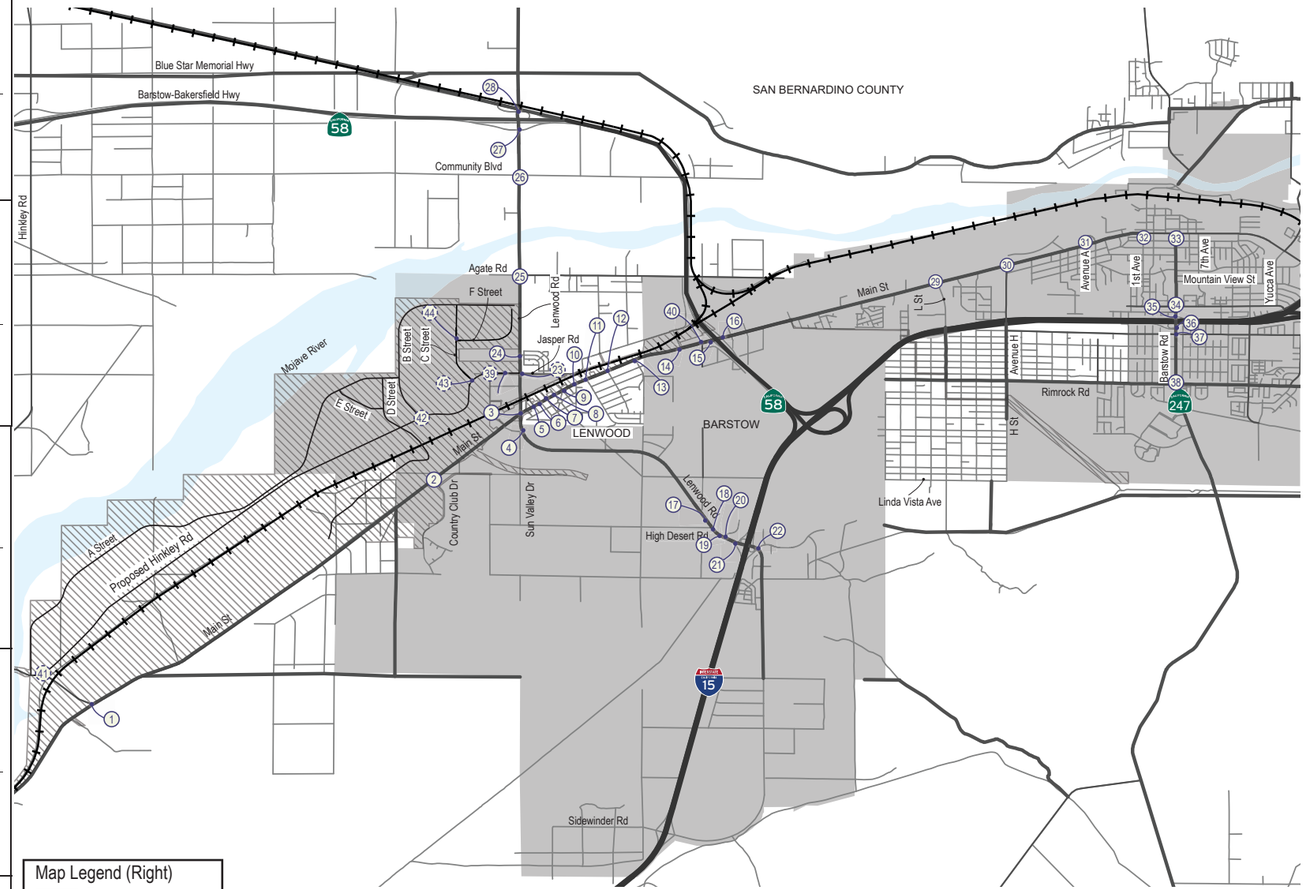


Figure 51: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Interim Year 2033 Plus BIG
(Page 2/2)

Source: Author Compilation, 2025

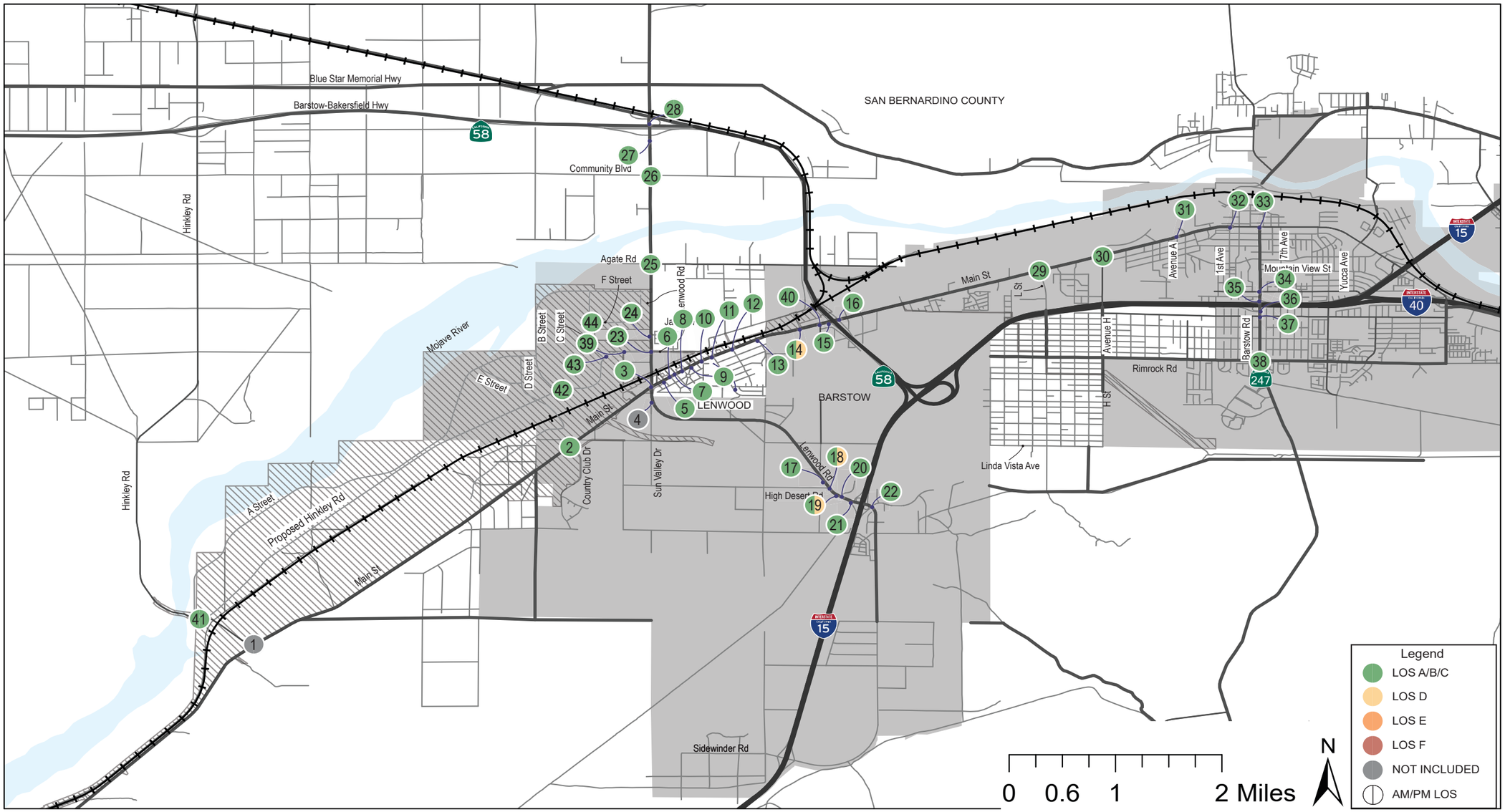


Figure 52: Study Area Intersection Level of Service – Interim Year 2033 Plus BIG

Source: Author Compilation, 2025

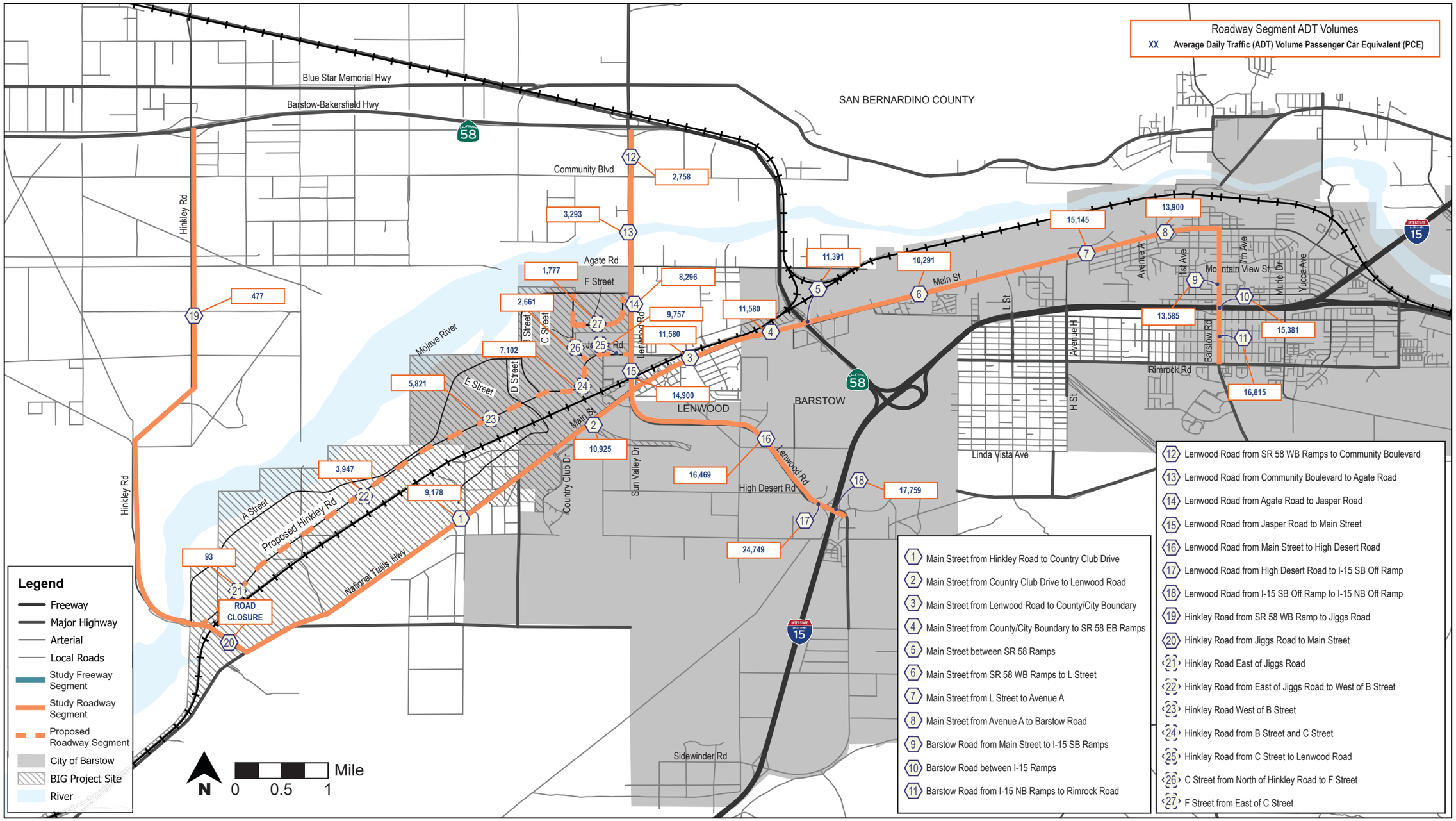


Figure 53: Study Area Roadway Segment Volumes – Interim Year 2033 Plus BIG

Source: Author Compilation, 2025

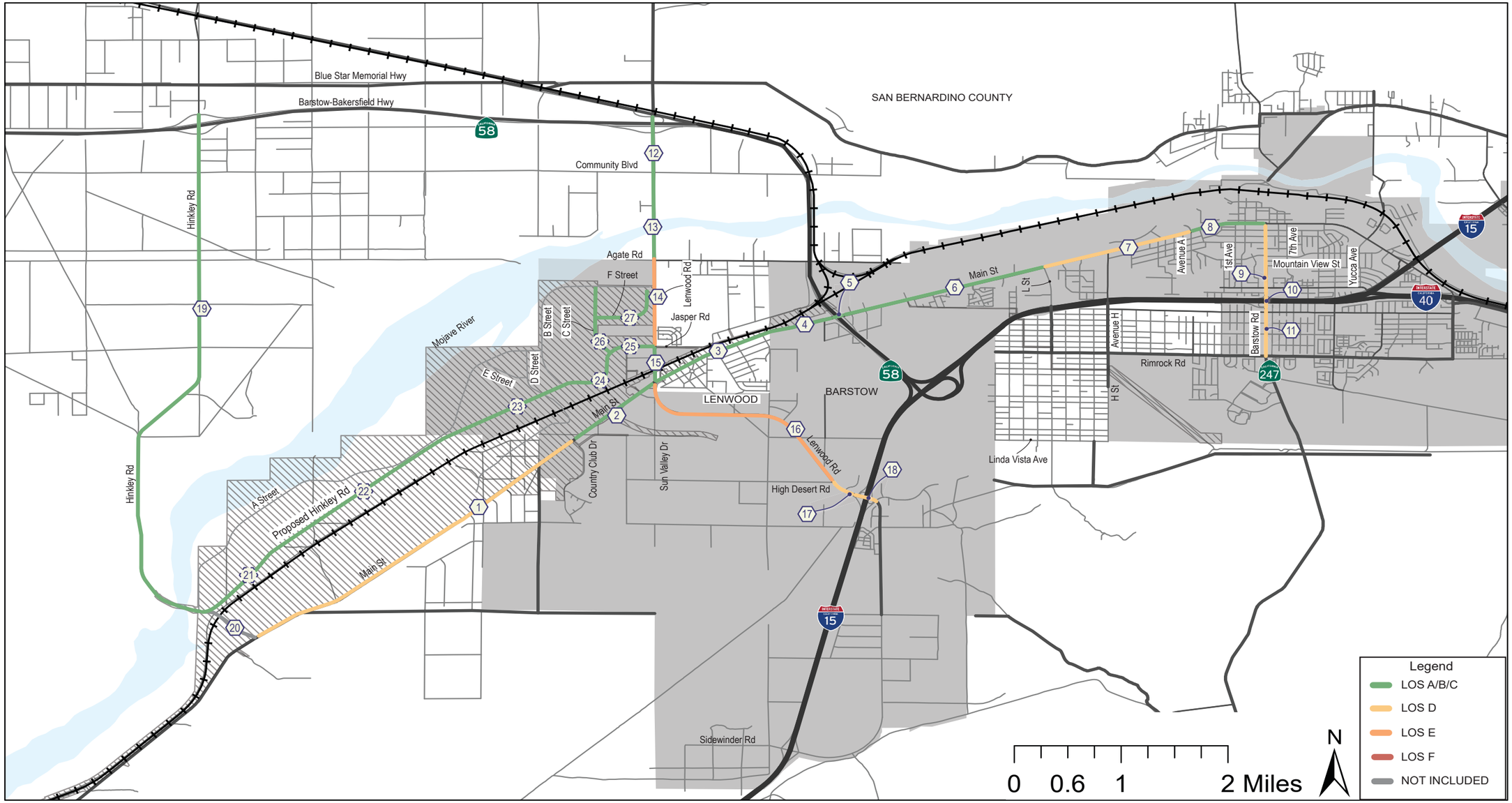


Figure 54: Study Area Roadway Segment Level of Service – Interim Year 2033 Plus BIG

Source: Author Compilation, 2025

Table 39: Study Area Intersection Operations – Interim Year 2033 Plus BIG

	Intersection	Peak Hour	Interim Year 2033 No BIG Baseline			Interim Year 2033 Plus BIG			LOS Threshold (c)	Difference (d)	Transportation Deficiency?
			Traffic Control	Delay (a)	LOS (b)	Traffic Control	Delay (a)	LOS (b)			
1	Main Street & Vacated Hinkley Road	AM	(e)								
		PM									
2	Main Street & Country Club Drive/Main Street Driveway	AM	One-Way Stop	9.6	A	Signal	6.3	A	C	-3.3	NO
		PM		9.3	A		6.5	A	C	-2.8	NO
3	Main Street & Lenwood Road	AM	Signal	18.8	B	Signal	21.4	C	C	2.6	NO
		PM		19.8	B		29.8	C	C	10.0	NO
4	Lenwood Road & Sun Valley Drive	AM	One-Way Stop	11.6	B	*Intersection removed by BIG due to partial vacation of Sun Valley Drive between Lenwood Road and Sweeten Lane.*					
		PM		9.7	A						
5	Main Street & Holland Street	AM	Two-Way Stop	12.6	B	Two-Way Stop	14.3	B	C	1.7	NO
		PM		13.0	B		14.3	B	C	1.3	NO
6	Main Street & Hannan Street	AM	Two-Way Stop	12.6	B	Two-Way Stop	14.2	B	C	1.6	NO
		PM		15.9	C		18.3	C	C	2.4	NO
7	Main Street & Townsend Street	AM	Two-Way Stop	12.6	B	Two-Way Stop	14.2	B	C	1.6	NO
		PM		14.9	B		17.5	C	C	2.6	NO
8	Main Street & Woods Avenue	AM	Two-Way Stop	12.7	B	Two-Way Stop	14.2	B	C	1.5	NO
		PM		15.9	C		18.3	C	C	2.4	NO
9	Main Street & Frank Street	AM	Two-Way Stop	12.6	B	Two-Way Stop	14.3	B	C	1.7	NO
		PM		17.6	C		20.7	C	C	3.1	NO
10	Main Street & Paris Avenue	AM	One-Way Stop	10.6	B	One-Way Stop	11.2	B	C	0.6	NO
		PM		11.0	B		11.9	B	C	0.9	NO
11	Main Street & Ash Road	AM	One-Way Stop	11.2	B	One-Way Stop	11.9	B	C	0.7	NO
		PM		12.8	B		14.5	B	C	1.7	NO
12	Main Street & Birch Road	AM	One-Way Stop	10.1	B	One-Way Stop	10.5	B	C	0.4	NO
		PM		12.6	B		14.1	B	C	1.5	NO
13	Main Street & Western Drive	AM	One-Way Stop	9.9	A	One-Way Stop	10.3	B	C	0.4	NO
		PM		11.6	B		12.6	B	C	1.0	NO
14	Main Street & Pettit Road	AM	One-Way Stop	13.1	B	One-Way Stop	15.0	C	C	1.9	NO
		PM		17.1	C		26.0	**D**	C	8.9	**YES**
15	Main Street & SR 58 Eastbound Ramps	AM	Signal	7.9	A	Signal	8.3	A	D	0.4	NO
		PM		5.5	A		6.1	A	D	0.6	NO
16	Main Street & SR 58 Westbound Ramps	AM	Signal	11.6	B	Signal	12.4	B	D	0.8	NO
		PM		13.4	B		14.5	B	D	1.1	NO
17	Lenwood Road & Love's Travel Stop Driveway	AM	Two-Way Stop	12.4	B	Two-Way Stop	18.5	C	C	6.1	NO
		PM		13.1	B		23.3	C	C	10.2	NO
18	Lenwood Road & High Desert Road	AM	Two-Way Stop	14.1	B	Two-Way Stop	20.7	C	C	6.6	NO
		PM		16.9	C		31.3	**D**	C	14.4	**YES**
19	Lenwood Rd & Chevron Driveway	AM	Two-Way Stop	15.4	C	Two-Way Stop	23.7	C	C	8.3	NO
		PM		17.0	C		25.4	**D**	C	8.4	**YES**

Table 39: Study Area Intersection Operations – Interim Year 2033 Plus BIG

Intersection		Peak Hour	Interim Year 2033 No BIG Baseline			Interim Year 2033 Plus BIG			LOS Threshold (c)	Difference (d)	Transportation Deficiency?
			Traffic Control	Delay (a)	LOS (b)	Traffic Control	Delay (a)	LOS (b)			
20	Lenwood Road & Commerce Parkway	AM	Signal	26.6	C	Signal	26.9	C	C	0.3	NO
		PM		28.5	C		29.8	C	C	1.3	NO
21	Lenwood Road & I-15 Southbound Ramp	AM	Signal	13.3	B	Signal	15.0	B	D	1.7	NO
		PM		16.4	B		18.4	B	D	2.0	NO
22	Lenwood Road & I-15 Northbound Ramp	AM	Signal	12.7	B	Signal	13.0	B	D	0.3	NO
		PM		14.0	B		15.4	B	D	1.4	NO
23	Lenwood Road & Jasper Road/Lenwood Road Driveway	AM	Two-Way Stop	13.9	B	Signal	15.1	B	C	1.2	NO
		PM		16.8	C		19.2	B	C	2.4	NO
24	Lenwood Road & Camino Del Sol	AM	One-Way Stop	13.1	B	One-Way Stop	15.9	C	C	2.8	NO
		PM		13.5	B		17.4	C	C	3.9	NO
25	Lenwood Road & Agate Road	AM	Two-Way Stop	9.2	A	Two-Way Stop	10.8	B	C	1.6	NO
		PM		10.0	A		12.5	B	C	2.5	NO
26	Lenwood Road & Community Blvd	AM	Two-Way Stop	9.8	A	Two-Way Stop	10.5	B	C	0.7	NO
		PM		10.5	B		11.8	B	C	1.3	NO
27	Lenwood Road & SR 58 Eastbound Ramps	AM	All-Way Stop	7.5	A	All-Way Stop	7.9	A	D	0.4	NO
		PM		7.8	A		8.3	A	D	0.5	NO
28	Lenwood Road & SR 58 Westbound Ramps	AM	All-Way Stop	7.2	A	All-Way Stop	7.3	A	D	0.1	NO
		PM		7.5	A		7.7	A	D	0.2	NO
29	Main Street & L Street	AM	Signal	13.7	B	Signal	14.2	B	D	0.5	NO
		PM		17.1	B		19.3	B	D	2.2	NO
30	Main Street & Avenue H	AM	Signal	6.9	A	Signal	7.0	A	D	0.1	NO
		PM		6.8	A		6.9	A	D	0.1	NO
31	Main Street & Avenue A	AM	Signal	4.8	A	Signal	5.0	A	D	0.2	NO
		PM		5.6	A		5.6	A	D	0.0	NO
32	Main Street & 1st Avenue	AM	Signal	18.9	B	Signal	19.7	B	D	0.8	NO
		PM		21.8	C		22.5	C	D	0.7	NO
33	Main Street & Barstow Road	AM	Signal	8.3	A	Signal	8.4	A	D	0.1	NO
		PM		10.5	B		10.7	B	D	0.2	NO
34	Barstow Road & Virginia Way	AM	Signal	12.7	B	Signal	13.1	B	C	0.4	NO
		PM		17.9	B		18.8	B	C	0.9	NO
35	Barstow Road & I-15 Southbound Ramps	AM	Signal	13.3	B	Signal	13.7	B	D	0.4	NO
		PM		18.7	B		22.5	C	D	3.8	NO
36	Barstow Road & I-15 Northbound Ramps	AM	Signal	15.2	B	Signal	21.3	C	D	6.1	NO
		PM		17.8	B		23.2	C	D	5.4	NO
37	Barstow Road & Armory Road	AM	Signal	13.6	B	Signal	14.5	B	C	0.9	NO
		PM		25.9	C		30.9	C	C	5.0	NO
38	Barstow Road & Rimrock Road	AM	Signal	6.9	A	Signal	7.1	A	C	0.2	NO
		PM		8.6	A		8.8	A	C	0.2	NO

Table 39: Study Area Intersection Operations – Interim Year 2033 Plus BIG

Intersection		Peak Hour	Interim Year 2033 No BIG Baseline			Interim Year 2033 Plus BIG			LOS Threshold (c)	Difference (d)	Transportation Deficiency?
			Traffic Control	Delay (a)	LOS (b)	Traffic Control	Delay (a)	LOS (b)			
39	Hinkley Road & Roadrunner Road	AM	-	-	-	One-Way Stop	10.6	B	C	N/A	NO
		PM		-	-		14.3	B	C	N/A	NO
40	Main Street & Elks Lane	AM	One-Way Stop	9.8	A	One-Way Stop	9.8	A	C	0.0	NO
		PM		10.2	B		10.2	B	C	0.0	NO
41	Hinkley Road & Jiggs Road / A Street	AM	-	-	-	Two-Way Stop	0.0	A	C	N/A	NO
		PM		-	-		0.0	A	C	N/A	NO
42	Hinkley Road & B Street	AM	-	-	-	One-Way Stop	0.0	A	C	N/A	NO
		PM		-	-		0.0	A	C	N/A	NO
43	Hinkley Road & C Street	AM	-	-	-	One-Way Stop	11.3	B	C	N/A	NO
		PM		-	-		15.9	C	C	N/A	NO
44	C Street & F Street	AM	-	-	-	One-Way Stop	9.1	A	C	N/A	NO
		PM		-	-		9.4	A	C	N/A	NO

Note:
Bold values indicate intersections operating below the LOS Threshold. **Bold and shaded** values indicate project significant impact.
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 7th Edition and performed using Synchro 12
(c) The LOS Threshold represents the acceptable LOS for the intersection. All City (non-downtown) and County intersections within the study area are considered to operate acceptably at LOS C or better, consistent with City LOS criteria and the County TIS Guidelines.
All downtown City intersections are considered to operate acceptably at LOS D or better. All Caltrans intersections located at freeway interchanges are considered to operate acceptably at LOS D or better.
(d) Change in delay due to addition of project traffic
(e) Intersection removed by BIG due to Hinkley Road vacation

Sources: *Author Compilation, 2025*

Table 40: Study Area Roadway Segment Operations - Interim Year 2033 Plus BIG

Roadway	Segment	Jurisdiction	CMP[2]	Acceptable LOS Capacity[4]	Interim Year 2033 No BIG Baseline			Daily Project Traffic (PCE)	Interim Year 2033 Plus BIG					Acceptable LOS Threshold	Project Change in V/C	Exceeds V/C Threshold?[1]	Analysis Software	Roadway Arterial Analysis				Transportation Deficiency?[6]
																		AM		PM		
					ADT (PCE)	V/C	LOS		Number of Lanes	Roadway Type	ADT (PCE)	V/C	LOS					LOS - NB/EB	LOS - SB/WB	LOS - NB/EB	LOS - SB/WB	
Main Street	1. Vacated Hinkley Road to Country Club Drive	City/County[3]	-	14,300	8,726	0.610	D	453	2	Arterial	9,178	0.642	D	D	0.032	No	-	-	-	-	-	No
	2. Country Club Drive to Lenwood Road	City	-	Baseline: 14,300 Plus BIG:	7,208	0.504	D	3,718	4	Arterial	10,925	0.362	C or Better	D	-0.142	No	-	-	-	-	-	No
	3. Lenwood Road to County/City Boundary	County	-	16,400	9,835	0.600	C or Better	1,745	4	N/A	11,580	0.706	C or Better	C	0.106	No	-	-	-	-	-	No
	4. County/City Boundary to SR 58 Eastbound Ramps	City	-	30,200	9,835	0.326	C or Better	1,745	4	Arterial	11,580	0.383	C or Better	D	0.058	No	-	-	-	-	-	No
	5. SR 58 Eastbound Off Ramps to SR 58	Caltrans	-	30,200	8,541	0.283	C or Better	2,851	4	Arterial	11,391	0.377	C or Better	D	0.094	No	-	-	-	-	-	No
	6. SR 58 Westbound Ramps to L Street	City	-	30,200	8,033	0.266	C or Better	2,259	4	Arterial	10,291	0.341	C or Better	D	0.075	No	-	-	-	-	-	No
	7. L Street to Avenue A	City	Yes	30,200	13,959	0.462	C or Better	1,186	4	Arterial	15,145	0.501	D	D	0.039	No	-	-	-	-	-	No
	8. Avenue A to Barstow Road	City	Yes	30,200	13,109	0.434	C or Better	792	4	Arterial	13,900	0.460	C or Better	D	0.026	No	-	-	-	-	-	No
Barstow Road	9. Main Street to I-15 Southbound Ramps	City	Yes	22,300	13,076	0.586	D	509	3	Arterial	13,585	0.609	D	D	0.023	No	-	-	-	-	-	No
	10. I-15 Southbound Ramps to I-15	Caltrans	Yes	30,200	14,731	0.488	C or Better	651	4	Arterial	15,381	0.509	D	D	0.022	No	-	-	-	-	-	No
	11. I-15 Northbound ramps to Rimrock	City	Yes	30,200	16,702	0.553	D	114	4	Arterial	16,815	0.557	D	D	0.004	No	-	-	-	-	-	No

Table 40: Study Area Roadway Segment Operations - Interim Year 2033 Plus BIG

Roadway	Segment	Jurisdiction	CMP[2]	Acceptable LOS Capacity[4]	Interim Year 2033 No BIG Baseline			Daily Project Traffic (PCE)	Interim Year 2033 Plus BIG					Acceptable LOS Threshold	Project Change in V/C	Exceeds V/C Threshold?[1]	Analysis Software	Roadway Arterial Analysis				Transportation Deficiency?[6]
																		AM		PM		
					ADT (PCE)	V/C	LOS		Number of Lanes	Roadway Type	ADT (PCE)	V/C	LOS					LOS - NB/EB	LOS - SB/WB	LOS - NB/EB	LOS - SB/WB	
Lenwood Road	12. SR 58 Westbound Ramps to	County	-	7,000	1,352	0.193	C or Better	1,407	2	N/A	2,758	0.394	C or Better	C	0.201	No	-	-	-	-	-	No
	13. Community Boulevard to Agate Road	County	-	7,000	1,153	0.165	C or Better	2,141	2	N/A	3,293	0.470	C or Better	C	0.306	No	-	-	-	-	-	No
	14. Agate Road to Jasper Road	County	-	7,000	4,971	0.710	C or Better	3,326	2	N/A	8,296	1.185	**E**	C	0.475	Yes	HCS	C	B	C	C	No
	15. Jasper Road to Main Street	City	-	30,200	7,044	0.233	C or Better	7,857	4	Arterial	14,900	0.493	C or Better	D	0.260	No	-	-	-	-	-	No
	16. Main Street to High Desert Road	City	-	14,300	10,289	0.720	D	6,180	2	Arterial	16,469	1.152	**E**	D	0.432	Yes	HCS	D	C	C	D	No
	17. High Desert Road to I-15 Southbound Off	City	-	30,200	19,246	0.637	D	5,504	4	Arterial	24,749	0.820	D	D	0.182	No	-	-	-	-	-	No
	18. I-15 Southbound Off Ramp to I-15	Caltrans	-	30,200	15,374	0.509	D	2,385	4	Arterial	17,759	0.588	D	D	0.079	No	-	-	-	-	-	No
Hinkley Road	19. SR 58 Westbound Ramp to Jiggs Road	County	-	7,000	384	0.055	C or Better	93	2	N/A	477	0.068	C or Better	C	0.013	No	-	-	-	-	-	No
	20. Jiggs Road to Main Street	See note (5).																				
	21. East of Jiggs Road	City	-	30,200	-	-	-	93	4	Arterial	93	0.003	C or Better	D	0.003	No	-	-	-	-	-	No
	22. East of Jiggs Road to West of B Street	City	-	30,200	-	-	-	3,947	4	Arterial	3,947	0.131	C or Better	D	0.131	No	-	-	-	-	-	No
	23. West of B Street	City	-	30,200	-	-	-	5,821	4	Arterial	5,821	0.193	C or Better	D	0.193	No	-	-	-	-	-	No
	24. Between B Street and C Street	City	-	30,200	-	-	-	7,102	4	Arterial	7,102	0.235	C or Better	D	0.235	No	-	-	-	-	-	No
	25. C Street to Lenwood Road	City	-	30,200	-	-	-	9,757	4	Arterial	9,757	0.323	C or Better	D	0.323	No	-	-	-	-	-	No

Table 40: Study Area Roadway Segment Operations - Interim Year 2033 Plus BIG

Roadway	Segment	Jurisdiction	CMP[2]	Acceptable LOS Capacity[4]	Interim Year 2033 No BIG Baseline			Daily Project Traffic (PCE)	Interim Year 2033 Plus BIG					Acceptable LOS Threshold	Project Change in V/C	Exceeds V/C Threshold?[1]	Analysis Software	Roadway Arterial Analysis				Transportation Deficiency?[6]
																		AM		PM		
					ADT (PCE)	V/C	LOS		Number of Lanes	Roadway Type	ADT (PCE)	V/C	LOS					LOS - NB/EB	LOS - SB/WB	LOS - NB/EB	LOS - SB/WB	
C Street	26. North of Hinkley Road to F Street	City	-	30,200	-	-	-	2,661	4	Arterial	2,661	0.088	C or Better	D	0.088	No	-	-	-	-	-	No
F Street	27. East of C Street	City	-	30,200	-	-	-	1,777	4	Arterial	1,777	0.059	C or Better	D	0.059	No	-	-	-	-	-	No

[1]Would the Project exceed the V/C threshold? The project would exceed the v/c threshold if the project causes the roadway segment to operate at an unacceptable LOS as determined by the appropriate jurisdictional standard.
[2]Notes if the roadway segment is part of the San Bernardino Congestion Management Program (CMP) network. The CMP notes that for the CMP roadway system, the LOS standard shall be E.
[3]Roadway segment is currently under County jurisdiction. Roadway segment would be annexed into the City as part of the proposed specific plan and is analyzed according to City standards.
[4]The Acceptable LOS Capacity represents the acceptable LOS for the roadway segment. All County roadway segments within the study area are considered to operate acceptably at LOS C or better, consistent with the County TIS Guidelines. All City roadway segments within the study area are considered to operate acceptably at LOS D or better, consistent with the recommendations included in the City of Barstow proposed General Plan. All Caltrans roadway segments within the study area are considered to operate acceptably at LOS D or better.
[5]This segment of Hinkley Road would be closed upon completion of BIG
[6]Would the Project cause a transportation deficiency inconsistent with the relevant General Plan? The project would cause a transportation deficiency if the following criteria are met: if the project causes the roadway segment to operate at an unacceptable LOS and the roadway segment arterial analysis indicates travel speeds that result in LOS D or worse during the AM and PM peak hour conditions OR if the roadway segment operates unacceptably in the No BIG scenario and BIG would add traffic in excess of 5% of the roadway capacity and the roadway segment arterial analysis indicates travel speeds that result in LOS D or worse during the AM and PM peak hour conditions.
Bolded values indicate segment with LOS exceeding the acceptable LOS threshold.
Shaded values indicate Project transportation deficiencies.
ADT = average daily traffic
I = Interstate
LOS = level of service
SR = State Route
V/C = volume-to-capacity ratio

Sources:
- *Author Compilation, 2025*
- *National Data & Surveying Services*

Horizon Year 2048 Plus BIG

Forecast BIG Horizon Year 2048 trips were added to Horizon Year 2048 No BIG Baseline traffic volumes to develop Horizon Year 2048 Plus BIG conditions. LOS analysis was conducted for the study area intersections, freeway off-ramps, and roadway segments for Horizon Year 2048 Plus BIG conditions to evaluate if BIG would cause any transportation deficiencies inconsistent with applicable LOS standards. Where LOS analysis determined deficiencies, transportation improvements were identified and incorporated as TMs. **Section 6.0 Plus BIG Transportation Modifications** discusses the proposed transportation improvements and modifications and the resulting LOS. BIG traffic assignment along freeway mainline segments is reported for informational purposes.

Intersection Operations

Forecast peak hour turning movements at study area intersections are illustrated in **Figure 55: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Horizon Year 2048 Plus BIG**. **Table 41: Study Area Intersection Operations - Horizon Year 2048 Plus BIG** and **Figure 56: Study Area Intersection Level of Service – Horizon Year 2048 Plus BIG** summarize the study area intersection LOS analysis results and indicate all intersections are forecast to operate at acceptable LOS according to agency performance criteria or are not expected to experience an increase in delay large enough to cause a transportation deficiency for Horizon Year 2048 Plus BIG conditions except the following:

- Intersection 3, Main Street & Lenwood Road (PM peak hour: LOS E)
- Intersection 14, Main Street & Pettit Road (PM peak hour: LOS E)
- Intersection 17, Lenwood Road & Love's Travel Stop Driveway (AM peak hour: LOS D, PM peak hour: LOS F)
- Intersection 18, Lenwood Road & High Desert Road (AM peak hour: LOS F, PM peak hour: LOS F)
- Intersection 19, Lenwood Road & Chevron Driveway (AM peak hour: LOS F, PM peak hour: LOS F)
- Intersection 20, Lenwood Road & Commerce Parkway (PM peak hour: LOS D)
- Intersection 37, Barstow Road & Armory Road (PM peak hour: LOS E)

The intersections listed above are considered BIG-related transportation deficiencies inconsistent with applicable LOS standards under Horizon Year 2048 Plus BIG conditions, based on transportation deficiency criteria (LOS and delay) detailed in **Section 3.5 Consistency with Applicable LOS Standards**. Detailed Synchro reports for intersection analysis are in **Appendix G: Synchro Analysis Worksheets**.

Roadway Segment Operations

Forecast roadway segment ADT volumes are illustrated in **Figure 57: Study Area Roadway and Freeway Mainline Segment Volumes – Horizon Year 2048 Plus BIG. Table 42: Study Area Roadway Segment Operations - Horizon Year 2048 Plus BIG** and **Figure 58: Study Area Roadway Segment Level of Service – Horizon Year 2048 Plus BIG** summarize the study area roadway segment LOS analysis results and indicate all Study Area roadway segments are forecast to operate at acceptable LOS according to agency performance criteria for Horizon Year Plus BIG conditions except the following:

- Roadway Segment 1, Main Street between Vacated Hinkley Road and Country Club Drive (LOS F)
- Roadway Segment 14, Lenwood Road between Agate Road and Jasper Road (LOS F)

- Roadway Segment 16, Lenwood Road between Main Street and High Desert Road (LOS F)
- Roadway Segment 17, Lenwood Road between High Desert Road and the I-15 southbound off-ramp (LOS F)

The roadway segments listed above were analyzed further to determine whether they would experience a transportation deficiency inconsistent with the relevant standards under Horizon Year 2048 Plus BIG conditions, based on the transportation deficiency criteria detailed in **Section 3.5 Consistency with Applicable LOS Standards**.

To more accurately assess arterial operations, a detailed arterial analysis using SimTraffic software was conducted for Segment 17. This segment functions as an arterial with interrupted flow since there are signalized intersections spaced less than two miles apart. The results indicate that the segment operates acceptably in both directions during AM and PM peak periods under the Horizon Year 2048 Plus BIG scenario. Therefore, no roadway widening is recommended for this segment.

In contrast, Segments 1, 14, and 16 features signalized intersections spaced more than two miles apart. As such, the segments operate more like uninterrupted-flow highways with isolated intersections. An analysis using HCS, based on HCM, Version 6.0, was performed. The HCS results show that these segments operate poorly in one or both directions during the AM and PM peak hours under the Horizon Year 2048 scenario. Therefore, Segments 1, 14, and 16 are considered BIG-related transportation deficiencies inconsistent with applicable LOS standards under Horizon Year 2048 Plus BIG conditions based on the transportation deficiency criteria (LOS and delay) detailed in **Section 3.5**: **Consistency with Applicable LOS Standards**. Detailed SimTraffic and HCS analysis reports for arterial analysis are in **Appendix G: Synchro Analysis Worksheets** and **Appendix K: HCS Worksheets**.

1

	276 / 1231	Main St
599 / 367		

2

7 / 7 2 / 2 198 / 190	Rail Yard Dwy	214 / 204 343 / 1151 5 / 28
7 / 7 433 / 310 0 / 34	Country Club Dr	2 / 2 13 / 16

Main St

3

91 / 134 212 / 514 158 / 267	Lenwood Rd	269 / 241 117 / 226 40 / 60
114 / 84 176 / 135 456 / 457		350 / 616 461 / 296 40 / 80

Main St

4

12 / 31 554 / 890	Lenwood Rd	
31 / 15 0 / 3	Sun Valley Dr	0 / 4 789 / 914

5

0 / 4 4 / 4	Holland St	393 / 539 4 / 5
4 / 3 345 / 468 0 / 3		3 / 4 7 / 5

Main St

6

3 / 3	Hannan St	393 / 541 3 / 4
4 / 4 349 / 471 3 / 0	Hannan St	3 / 3

Main St

7

0 / 7 3 / 3	Townsend St	3 / 0 390 / 537 3 / 3
3 / 4 346 / 470 4 / 3		3 / 3

Main St

8

3 / 5	Woods Ave	0 / 3 383 / 539 4 / 3
4 / 3 361 / 470 0 / 3		3 / 5

Main St

9

0 / 4 3 / 2	Frank St	379 / 519 8 / 30
4 / 4 344 / 458 8 / 26	Frank St	16 / 32 18 / 24

Main St

10

		372 / 536 21 / 23
355 / 467 13 / 19	Paris Ave	18 / 6 22 / 12

Main St

11

		372 / 519 27 / 35
341 / 448 45 / 35	Ash Rd	20 / 35 23 / 33

Main St

12

		401 / 535 13 / 74
347 / 468 13 / 34	Birch Rd	16 / 28 41 / 34

Main St

13

		430 / 604 11 / 34
358 / 493 12 / 15	Western Dr	10 / 16 30 / 21

Main St

14

42 / 69 128 / 168	Pettit Rd	103 / 171 417 / 619
42 / 68 388 / 501		

Main St

15

19 / 20 9 / 23 36 / 41	SR 58 EB Ramp	501 / 743 71 / 58
294 / 436 236 / 232		

Main St

16

SR 58 WB Ramp		52 / 79 351 / 504
21 / 21 305 / 452		203 / 273 91 / 144

Main St

17

35 / 22 519 / 874 9 / 2	Lenwood Rd	0 / 3 2 / 25
16 / 26 1 / 0 42 / 36		51 / 51 796 / 890 20 / 10

Love's Travel Stop Dwy

18

44 / 81 525 / 858	Lenwood Rd	
59 / 43 119 / 90		79 / 92 834 / 820

High Desert Rd

19

9 / 10 25 / 8	Truck Freightliner Service Point Dwy	31 / 34 827 / 938 90 / 160
2 / 11 635 / 948 11 / 18		8 / 10 139 / 82

Lenwood Rd

20

16 / 13 7 / 4 207 / 245	Commerce Pkwy	153 / 180 962 / 1035 90 / 108
15 / 13 816 / 1101 11 / 15		8 / 14 2 / 1 79 / 134

Lenwood Rd

21

499 / 590 255 / 588	I-15 SB Off Ramps	753 / 773
583 / 862		

Lenwood Rd

22

304 / 427 7 / 54	High Point Pkwy	48 / 149 729 / 1236
123 / 297 406 / 861	I-15 NB Off Ramps	509 / 461 89 / 124 308 / 297

Lenwood Rd

23

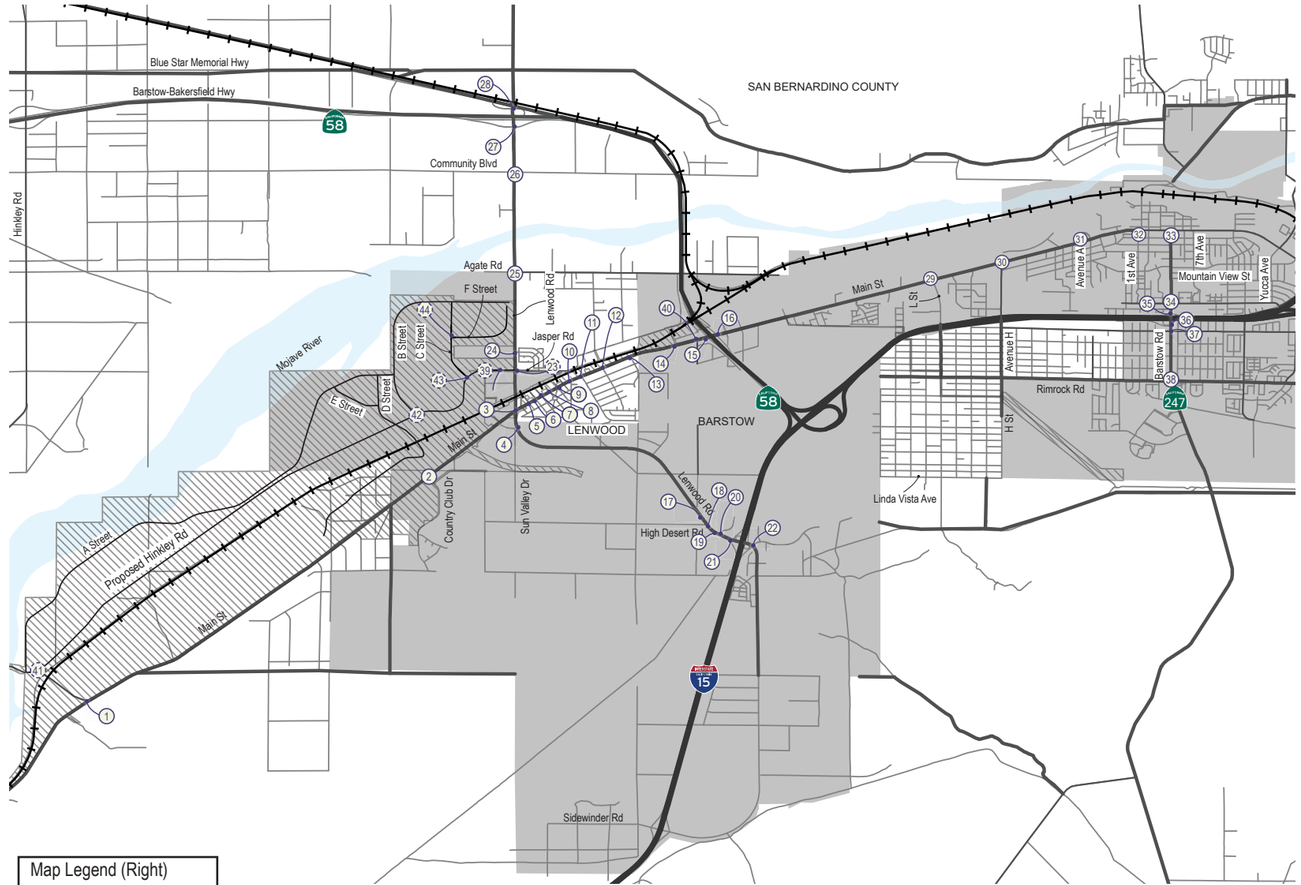
93 / 42 301 / 430 24 / 47	Lenwood Rd	71 / 72 61 / 27 30 / 29
15 / 133 13 / 78 87 / 419		347 / 159 456 / 384 13 / 28

Transload Warehouse Center Dwy — Jasper Rd

24

380 / 462 6 / 9	Lenwood Rd	8 / 8 28 / 24
		464 / 485 23 / 43

Cam del Sol



Map Legend (Right)
- Freeway
- Major Highway
- Arterial
- Local Roads
- City of Barstow
- BIG Project Site
- River
- Study Intersection

Intersection Legend (Left)
X / Y = AM / PM PEAK HOUR TURNING VOLUMES

N 0 0.5 1 Mile

NOT TO SCALE

Figure 55: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Horizon Year 2048 Plus BIG
(Page 1/2)

Source: Author Compilation, 2025

25 147 / 138 (Lenwood Rd) 0 / 12 0 / 4 92 / 121 (Agate Rd) 3 / 0 2 / 0 71 / 187 76 / 126	**26** 17 / 30 (Lenwood Rd) 90 / 65 20 / 22 16 / 19 (Community Blvd) 42 / 96 43 / 28 18 / 43 45 / 71 8 / 4 3 / 8 52 / 78 19 / 49	**27** 43 / 53 (Lenwood Rd) 25 / 19 SR 58 EB Ramps 11 / 11 0 / 14 84 / 71 72 / 121 28 / 24	**28** 25 / 50 (SR 58 WB Ramps) 8 / 15 Lenwood Rd 22 / 61 47 / 47 28 / 60 54 / 64
29 12 / 28 70 / 115 15 / 21 (Arco Dwy) 3 / 3 195 / 213 190 / 355 (Main St) L St 12 / 18 228 / 238 197 / 246 167 / 269 42 / 83 253 / 278	**30** 19 / 16 8 / 10 36 / 16 (Ave H) 25 / 13 321 / 470 77 / 147 (Main St) 29 / 12 409 / 445 61 / 129 107 / 107 8 / 7 135 / 133	**31** 2 / 7 0 / 5 9 / 11 (Ave A) 15 / 9 479 / 618 41 / 79 (Main St) 9 / 3 484 / 613 133 / 126 91 / 133 8 / 0 47 / 79	**32** 224 / 293 95 / 75 222 / 281 (1st Ave) 155 / 198 302 / 441 24 / 21 (Main St) 184 / 202 345 / 478 31 / 49 57 / 47 64 / 63 27 / 19
33 287 / 398 69 / 138 (Main St) Barstow Rd 349 / 460 156 / 233 157 / 220 80 / 110	**34** 9 / 6 340 / 618 77 / 124 (Barstow Rd) 71 / 107 44 / 54 180 / 301 (Virginia Way) 1 / 11 48 / 79 53 / 90 31 / 57 540 / 498 211 / 317	**35** 200 / 361 483 / 803 (Barstow Rd) 83 / 129 118 / 302 (I-15 SB Off-Ramp) I-15 SB On-Ramp 368 / 560 822 / 897	**36** 69 / 84 449 / 1099 (Barstow Rd) I-15 NB Ramps 327 / 233 371 / 528 190 / 170 997 / 1293
37 18 / 66 671 / 1149 264 / 524 (Barstow Rd) 344 / 499 18 / 29 46 / 110 (Armory Rd) 84 / 142 13 / 28 25 / 40 15 / 31 688 / 764 40 / 88	**38** 146 / 343 236 / 297 247 / 328 (Barstow Rd) 217 / 179 262 / 302 54 / 65 (Rimrock Rd) 186 / 229 154 / 342 43 / 41 27 / 44 170 / 320 21 / 46	**39** 494 / 226 1 / 1 (Hinkley Rd) 108 / 612 Roadrunner Rd 1 / 1	**40** 375 / 574 5 / 23 (Main St) 350 / 554 5 / 0 Elk Dr 4 / 9 5 / 22
41 A St 1 / 6 (Hinkley Rd) Jiggs Rd 5 / 2	**42** B St 294 / 135 (Hinkley Rd) 65 / 365	**43** 29 / 167 (C St) 135 / 62 360 / 164 (Hinkley Rd) 78 / 445	**44** C St 19 / 111 (F St) 90 / 41

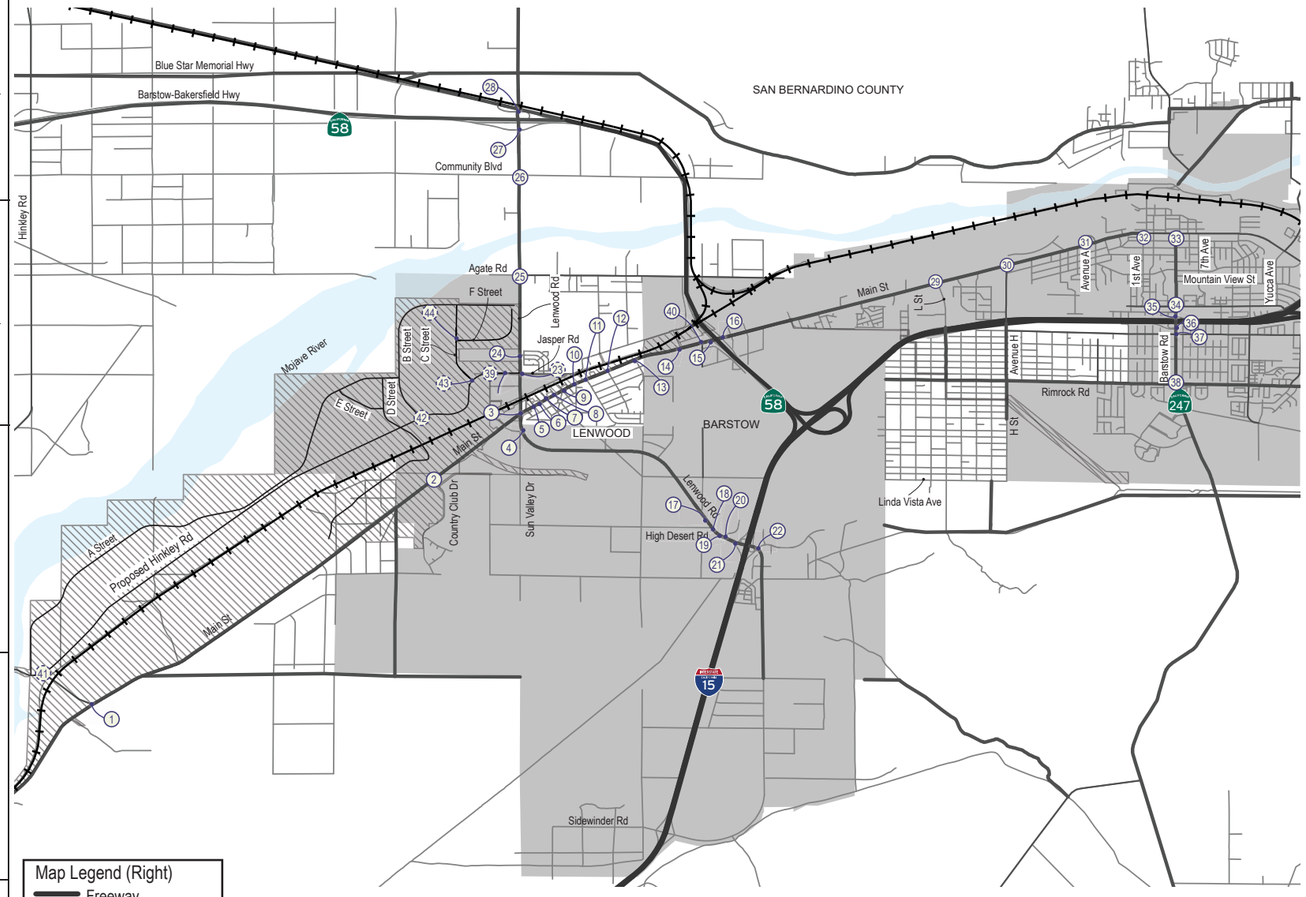


Figure 55: Study Area Intersection Peak Hour Turning Movement Volumes (PCE) – Horizon Year 2048 Plus BIG
(Page 2/2)

Source: Author Compilation, 2025

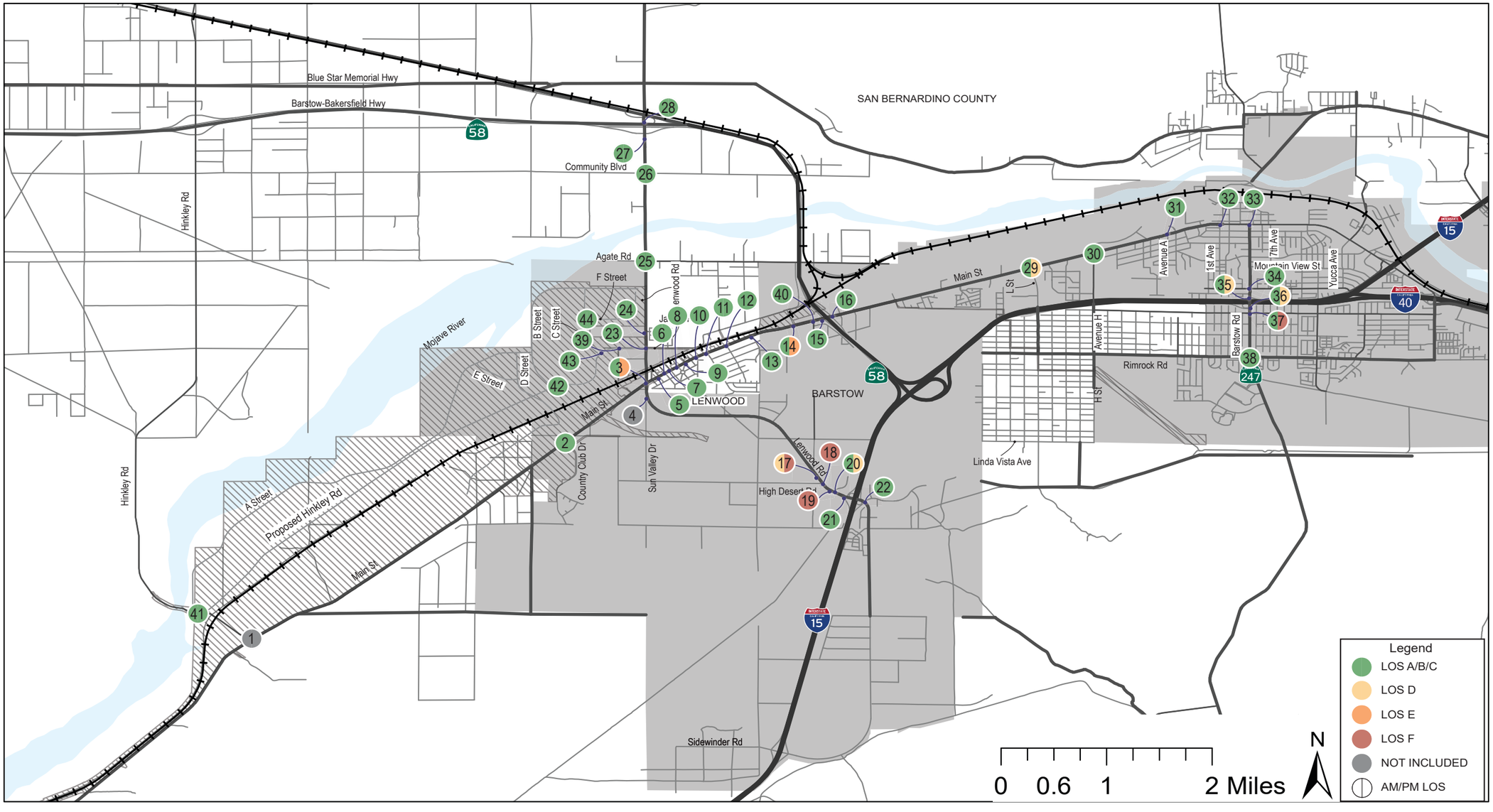


Figure 56: Study Area Intersection Level of Service – Horizon Year 2048 Plus BIG

Source: Author Compilation, 2025

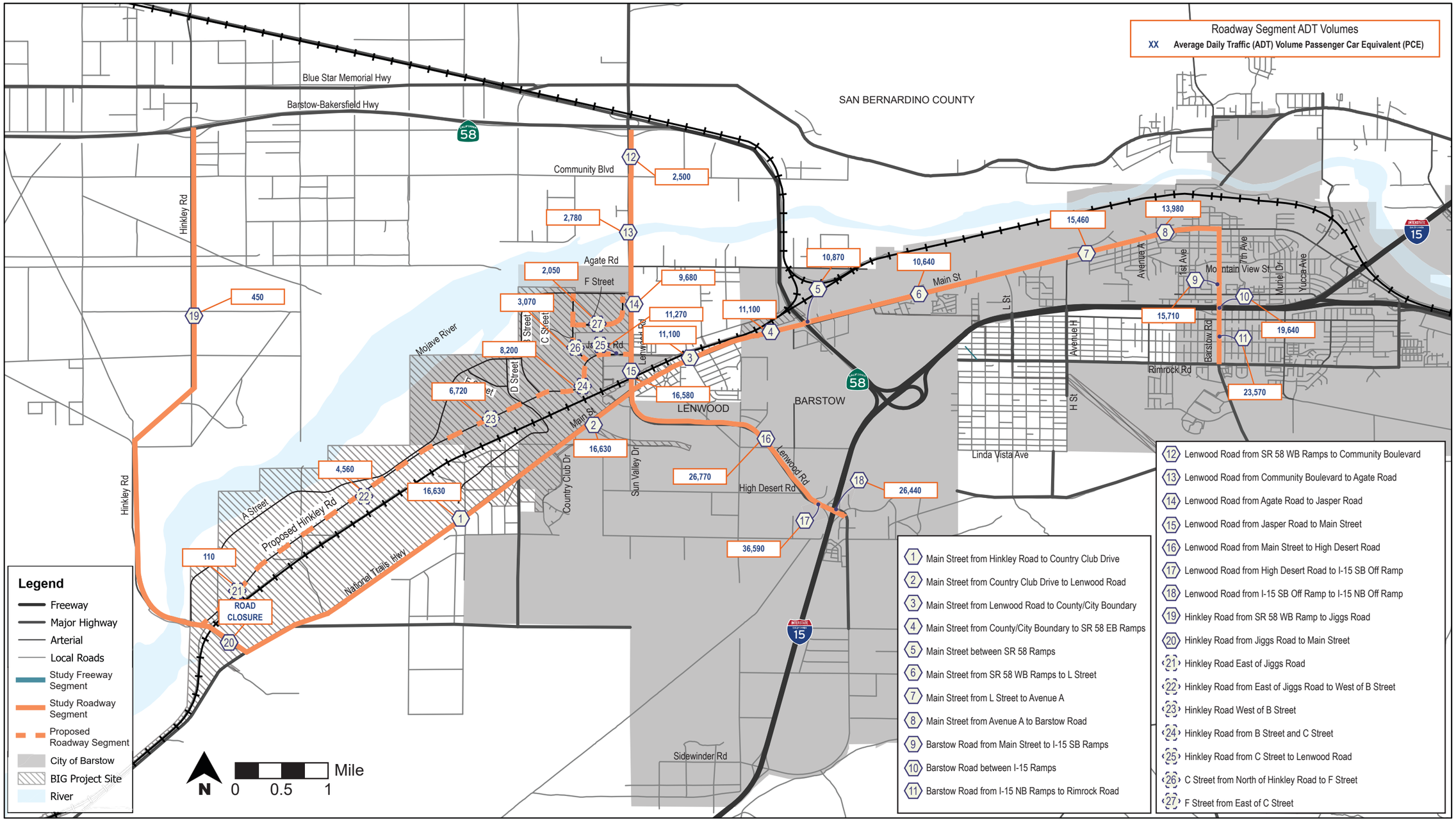


Figure 57: Study Area Roadway and Freeway Mainline Segment Volumes – Horizon Year 2048 Plus BIG

Source: Author Compilation, 2025

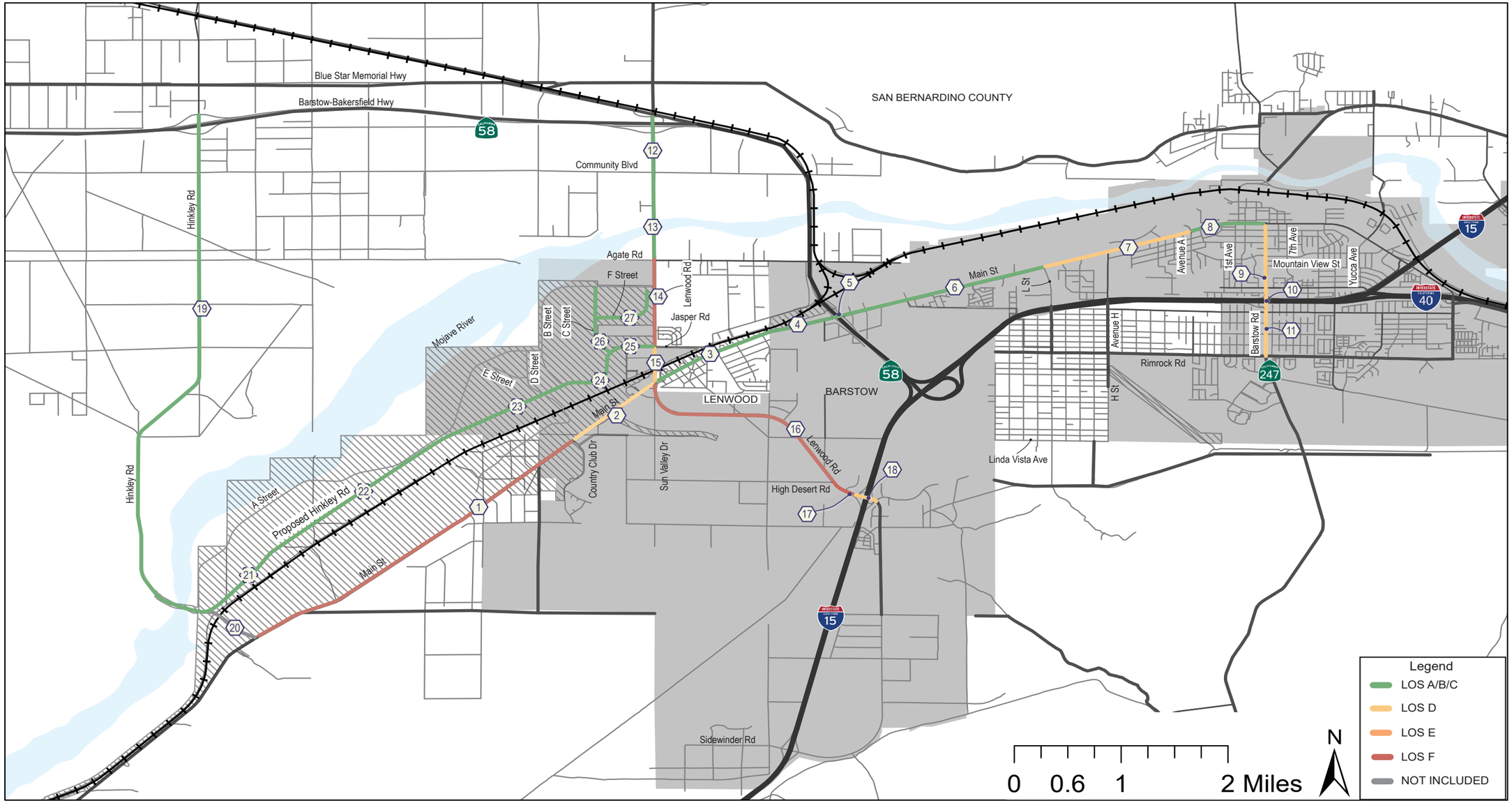


Figure 58: Study Area Roadway Segment Level of Service – Horizon Year 2048 Plus BIG

Source: Author Compilation, 2025

Table 41: Study Area Intersection Operations - Horizon Year 2048 Plus BIG											
Intersection		Peak Hour	Horizon Year 2048 No BIG Baseline			Horizon Year 2048 Plus BIG			LOS Threshold (c)	Difference (d)	Transportation Deficiency?
			Traffic Control	Delay (a)	LOS (b)	Traffic Control	Delay (a)	LOS (b)			
1	Main Street & Vacated Hinkley Road	AM	(e)								
		PM									
2	Main Street & Country Club Drive/Main Street Driveway	AM	One-Way Stop	10.8	B	Signal	6.3	A	C	-4.5	NO
		PM		10.2	B		15.5	B	C	5.3	NO
3	Main Street & Lenwood Road	AM	Signal	20.1	C	Signal	24.0	C	C	3.9	NO
		PM		25.5	C		73.3	**E**	C	47.8	**YES**
4	Lenwood Road & Sun Valley Drive	AM	One-Way Stop	16.8	C	*Intersection removed by BIG due to partial vacation of Sun Valley Drive between Lenwood Road and Sweeten Lane.*					
		PM		11.7	B						
5	Main Street & Holland Street	AM	Two-Way Stop	12.7	B	Two-Way Stop	14.7	B	C	2.0	NO
		PM		13.0	B		14.6	B	C	1.6	NO
6	Main Street & Hannan Street	AM	Two-Way Stop	12.7	B	Two-Way Stop	14.6	B	C	1.9	NO
		PM		16.1	C		18.9	C	C	2.8	NO
7	Main Street & Townsend Street	AM	Two-Way Stop	12.6	B	Two-Way Stop	14.5	B	C	1.9	NO
		PM		15.0	C		18.1	C	C	3.1	NO
8	Main Street & Woods Avenue	AM	Two-Way Stop	12.8	B	Two-Way Stop	14.6	B	C	1.8	NO
		PM		16.0	C		18.9	C	C	2.9	NO
9	Main Street & Frank Street	AM	Two-Way Stop	12.8	B	Two-Way Stop	14.8	B	C	2.0	NO
		PM		18.6	C		22.8	C	C	4.2	NO
10	Main Street & Paris Avenue	AM	One-Way Stop	11.0	B	One-Way Stop	11.8	B	C	0.8	NO
		PM		11.2	B		12.4	B	C	1.2	NO
11	Main Street & Ash Road	AM	One-Way Stop	11.2	B	One-Way Stop	12.1	B	C	0.9	NO
		PM		13.2	B		15.3	C	C	2.1	NO
12	Main Street & Birch Road	AM	One-Way Stop	10.5	B	One-Way Stop	11.1	B	C	0.6	NO
		PM		14.0	B		16.4	C	C	2.4	NO
13	Main Street & Western Drive	AM	One-Way Stop	10.3	B	One-Way Stop	10.9	B	C	0.6	NO
		PM		12.8	B		14.6	B	C	1.8	NO
14	Main Street & Pettit Road	AM	One-Way Stop	14.1	B	One-Way Stop	16.9	C	C	2.8	NO
		PM		19.3	C		37.2	**E**	C	17.9	**YES**
15	Main Street & SR 58 Eastbound Ramps	AM	Signal	8.9	A	Signal	9.0	A	D	0.1	NO
		PM		6.0	A		6.4	A	D	0.4	NO
16	Main Street & SR 58 Westbound Ramps	AM	Signal	12.0	B	Signal	13.1	B	D	1.1	NO
		PM		13.2	B		13.3	B	D	0.1	NO
17	Lenwood Road & Love's Travel Stop Driveway	AM	Two-Way Stop	19.1	C	Two-Way Stop	34.3	**D**	C	15.2	**YES**
		PM		30.1	D		132.6	**F**	C	>50.0	**YES**
18	Lenwood Road & High Desert Road	AM	Two-Way Stop	22.2	C	Two-Way Stop	52.4	**F**	C	30.2	**YES**
		PM		32.6	D		138.0	**F**	C	105.4	**YES**
19	Lenwood Rd & Chevron Driveway	AM	Two-Way Stop	30.7	D	Two-Way Stop	69.1	**F**	C	38.4	**YES**
		PM		40.9	E		91.2	**F**	C	>50.0	**YES**
20	Lenwood Road & Commerce Parkway	AM	Signal	26.4	C	Signal	29.4	C	C	3.0	NO
		PM		30.2	C		43.1	**D**	C	12.9	**YES**
21	Lenwood Road & I-15 Southbound Ramp	AM	Signal	16.4	B	Signal	25.6	C	D	9.2	NO
		PM		21.4	C		31.1	C	D	9.7	NO
22	Lenwood Road & I-15 Northbound Ramp	AM	Signal	13.8	B	Signal	14.9	B	D	1.1	NO
		PM		21.6	C		33.7	C	D	12.1	NO
23	Lenwood Road & Jasper Road/Lenwood Road Driveway	AM	Two-Way Stop	14.0	B	Signal	16.4	B	C	2.4	NO
		PM		17.9	C		19.7	B	C	1.8	NO
24	Lenwood Road & Camino Del Sol	AM	One-Way Stop	13.4	B	One-Way Stop	16.7	C	C	3.3	NO
		PM		13.8	B		18.3	C	C	4.5	NO
25	Lenwood Road & Agate Road	AM	Two-Way Stop	9.3	A	Two-Way Stop	11.2	B	C	1.9	NO
		PM		10.6	B		13.9	B	C	3.3	NO

Table 41: Study Area Intersection Operations - Horizon Year 2048 Plus BIG

Intersection		Peak Hour	Horizon Year 2048 No BIG Baseline			Horizon Year 2048 Plus BIG			LOS Threshold (c)	Difference (d)	Transportation Deficiency?
			Traffic Control	Delay (a)	LOS (b)	Traffic Control	Delay (a)	LOS (b)			
26	Lenwood Road & Community Blvd	AM	Two-Way Stop	10.0	B	Two-Way Stop	11.1	B	C	1.1	NO
		PM		11.0	B		12.6	B	C	1.6	NO
27	Lenwood Road & SR 58 Eastbound Ramps	AM	All-Way Stop	7.6	A	All-Way Stop	7.9	A	D	0.3	NO
		PM		7.9	A		8.4	A	D	0.5	NO
28	Lenwood Road & SR 58 Westbound Ramps	AM	All-Way Stop	7.3	A	All-Way Stop	7.4	A	D	0.1	NO
		PM		7.7	A		7.9	A	D	0.2	NO
29	Main Street & L Street	AM	Signal	15.8	B	Signal	16.0	B	D	0.2	NO
		PM		27.9	C		35.2	D	D	7.3	NO
30	Main Street & Avenue H	AM	Signal	7.5	A	Signal	7.6	A	D	0.1	NO
		PM		7.5	A		7.7	A	D	0.2	NO
31	Main Street & Avenue A	AM	Signal	5.2	A	Signal	5.4	A	D	0.2	NO
		PM		6.0	A		6.2	A	D	0.2	NO
32	Main Street & 1st Avenue	AM	Signal	22.7	C	Signal	23.4	C	D	0.7	NO
		PM		27.0	C		27.9	C	D	0.9	NO
33	Main Street & Barstow Road	AM	Signal	9.0	A	Signal	9.1	A	D	0.1	NO
		PM		11.8	B		12.0	B	D	0.2	NO
34	Barstow Road & Virginia Way	AM	Signal	15.6	B	Signal	16.4	B	C	0.8	NO
		PM		25.1	C		26.3	C	C	1.2	NO
35	Barstow Road & I-15 Southbound Ramps	AM	Signal	12.7	B	Signal	17.0	B	D	4.3	NO
		PM		41.3	D		42.2	D	D	0.9	NO
36	Barstow Road & I-15 Northbound Ramps	AM	Signal	18.4	B	Signal	26.9	C	D	8.5	NO
		PM		38.0	D		43.4	D	D	5.4	NO
37	Barstow Road & Armory Road	AM	Signal	23.6	C	Signal	25.8	C	C	2.2	NO
		PM		74.2	E		82.3	**F**	C	8.1	**YES**
38	Barstow Road & Rimrock Road	AM	Signal	8.8	A	Signal	9.6	A	C	0.8	NO
		PM		12.9	B		13.4	B	C	0.5	NO
39	Hinkley Road & Roadrunner Road	AM	-	-	-	One-Way Stop	7.4	A	C	N/A	NO
		PM		-	-		15.9	C	C	N/A	NO
40	Main Street & Elks Lane	AM	One-Way Stop	10.0	A	One-Way Stop	10.5	B	C	0.5	NO
		PM		10.5	B		11.7	B	C	1.2	NO
41	Hinkley Road & Jiggs Road / A Street	AM	-	-	-	Two-Way Stop	0.0	A	C	N/A	NO
		PM		-	-		0.0	A	C	N/A	NO
42	Hinkley Road & B Street	AM	-	-	-	One-Way Stop	0.0	A	C	N/A	NO
		PM		-	-		0.0	A	C	N/A	NO
43	Hinkley Road & C Street	AM	-	-	-	One-Way Stop	11.9	B	C	N/A	NO
		PM		-	-		19.4	C	C	N/A	NO
44	C Street & F Street	AM	-	-	-	One-Way Stop	9.1	A	C	N/A	NO
		PM		-	-		8.9	A	C	N/A	NO

Note:
Bold values indicate intersections operating below the LOS Threshold. **Bold and shaded** values indicate project significant impact.
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 7th Edition and performed using Synchro 12.
(c) The LOS Threshold represents the acceptable LOS for the intersection. All City (non-downtown) and County intersections within the study area are considered to operate acceptably at LOS C or better, consistent with City LOS criteria and the County TIS Guidelines.
All downtown City intersections are considered to operate acceptably at LOS D or better. All Caltrans intersections located at freeway interchanges are considered to operate acceptably at LOS D or better.
(d) Change in delay due to addition of project traffic.
(e) Intersection removed by BIG due to Hinkley Road vacation.

Sources: *Author Compilation, 2025*

Table 42: Study Area Roadway Segment Operations - Horizon Year 2048 Plus BIG

Roadway	Segment	Jurisdiction	CMP[2]	Acceptable LOS Capacity[4]	Horizon Year 2048 No BIG Baseline			Daily Project Traffic (PCE)	Horizon Year 2048 Plus BIG			Acceptable LOS Threshold	Project Change in V/C	Exceeds V/C Threshold?[1]	Analysis Software	Roadway Arterial Analysis				Transportation Deficiency?[6]
																AM		PM		
					ADT (PCE)	V/C	LOS		ADT (PCE)	V/C	LOS					LOS - NB/EB	LOS - SB/WB	LOS - NB/EB	LOS - SB/WB	
Main Street	1. Vacated Hinkley Road to Country Club Drive	City/County[3]	-	14,300	16,112	1.127	E	518	16,630	1.163	**F**	D	0.036	**Yes**	HCS	C	B	B	**E**	**Yes**
	2. Country Club Drive to Lenwood Road	City	-	Baseline: 14,300 Plus BIG:	12,315	0.861	D	4,315	16,630	0.551	D	D	-0.311	No	-	-	-	-	-	No
	3. Lenwood Road to County/City Boundary	County	-	16,400	9,093	0.554	C or Better	2,007	11,100	0.677	C or Better	C	0.122	No	-	-	-	-	-	No
	4. County/City Boundary to SR 58 Eastbound Ramps	City	-	30,200	9,093	0.301	C or Better	2,007	11,100	0.368	C or Better	D	0.066	No	-	-	-	-	-	No
	5. SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	Caltrans	-	30,200	7,588	0.251	C or Better	3,282	10,870	0.360	C or Better	D	0.109	No	-	-	-	-	-	No
	6. SR 58 Westbound Ramps to L Street	City	-	30,200	8,051	0.267	C or Better	2,589	10,640	0.352	C or Better	D	0.086	No	-	-	-	-	-	No
	7. L Street to Avenue A	City	Yes	30,200	14,036	0.465	C or Better	1,424	15,460	0.512	D	D	0.047	No	-	-	-	-	-	No
	8. Avenue A to Barstow Road	City	Yes	30,200	13,203	0.437	C or Better	777	13,980	0.463	C or Better	D	0.026	No	-	-	-	-	-	No
Barstow Road	9. Main Street to I-15 Southbound Ramps	City	Yes	22,300	15,192	0.681	D	518	15,710	0.704	D	D	0.023	No	-	-	-	-	-	No
	10. I-15 Southbound Ramps to I-15 Northbound Ramps	Caltrans	Yes	30,200	18,928	0.627	D	712	19,640	0.650	D	D	0.024	No	-	-	-	-	-	No
	11. I-15 Northbound ramps to Rimrock Road	City	Yes	30,200	23,441	0.776	D	129	23,570	0.780	D	D	0.004	No	-	-	-	-	-	No
Lenwood Road	12. SR 58 Westbound Ramps to Community Boulevard	County	-	7,000	919	0.131	C or Better	1,581	2,500	0.357	C or Better	C	0.226	No	-	-	-	-	-	No
	13. Community Boulevard to Agate Road	County	-	7,000	422	0.060	C or Better	2,358	2,780	0.397	C or Better	C	0.337	No	-	-	-	-	-	No
	14. Agate Road to Jasper Road	County	-	7,000	6,028	0.861	C or Better	3,652	9,680	1.383	**F**	C	0.522	**Yes**	HCS	C	B	**D**	C	**Yes**
	15. Jasper Road to Main Street	City	-	30,200	7,274	0.241	C or Better	9,306	16,580	0.549	D	D	0.308	No	-	-	-	-	-	No
	16. Main Street to High Desert Road	City	-	14,300	19,317	1.351	F	7,453	26,770	1.872	**F**	D	0.521	**Yes**	HCS	**E**	D	**E**	**E**	**Yes**
	17. High Desert Road to I-15 Southbound Off Ramp	City	-	30,200	30,431	1.008	E	6,159	36,590	1.212	**F**	D	0.204	**Yes**	SimTraffic	D	C	D	D	No
	18. I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	Caltrans	-	30,200	23,620	0.782	D	2,820	26,440	0.875	D	D	0.093	No	-	-	-	-	-	No

Table 42: Study Area Roadway Segment Operations - Horizon Year 2048 Plus BIG

Roadway	Segment	Jurisdiction	CMP[2]	Acceptable LOS Capacity[4]	Horizon Year 2048 No BIG Baseline			Daily Project Traffic (PCE)	Horizon Year 2048 Plus BIG			Acceptable LOS Threshold	Project Change in V/C	Exceeds V/C Threshold?[1]	Analysis Software	Roadway Arterial Analysis				Transportation Deficiency?[6]
																AM		PM		
					ADT (PCE)	V/C	LOS		ADT (PCE)	V/C	LOS					LOS - NB/EB	LOS - SB/WB	LOS - NB/EB	LOS - SB/WB	
Hinkley Road	19. SR 58 Westbound Ramp to Jiggs Road	County	-	7,000	344	0.049	C or Better	106	450	0.064	C or Better	C	0.015	No	-	-	-	-	-	No
	20. Jiggs Road to Main Street	See note (5).																		
	21. East of Jiggs Road	City	-	30,200	-	-	-	110	110	0.004	C or Better	D	0.004	No	-	-	-	-	-	No
	22. East of Jiggs Road to West of B Street	City	-	30,200	-	-	-	4,560	4,560	0.151	C or Better	D	0.151	No	-	-	-	-	-	No
	23. West of B Street	City	-	30,200	-	-	-	6,720	6,720	0.223	C or Better	D	0.223	No	-	-	-	-	-	No
	24. Between B Street and C Street	City	-	30,200	-	-	-	8,200	8,200	0.272	C or Better	D	0.272	No	-	-	-	-	-	No
	25. C Street to Lenwood Road	City	-	30,200	-	-	-	11,270	11,270	0.373	C or Better	D	0.373	No	-	-	-	-	-	No
C Street	26. North of Hinkley Road to F Street	City	-	30,200	-	-	-	3,070	3,070	0.102	C or Better	D	0.102	No	-	-	-	-	-	No
F Street	27. East of C Street	City	-	30,200	-	-	-	2,050	2,050	0.068	C or Better	D	0.068	No	-	-	-	-	-	No

[1]Would the Project exceed the V/C threshold? The project would exceed the v/c threshold if the project causes the roadway segment to operate at an unacceptable LOS as determined by the appropriate jurisdictional standard.
[2]Notes if the roadway segment is part of the San Bernardino Congestion Management Program (CMP) network. The CMP notes that for the CMP roadway system, the LOS standard shall be E.
[3]Roadway segment is currently under County jurisdiction. Roadway segment would be annexed into the City as part of the proposed specific plan and is analyzed according to City standards.
[4]The Acceptable LOS Capacity represents the acceptable LOS for the roadway segment. All County roadway segments within the study area are considered to operate acceptably at LOS C or better, consistent with the County TIS Guidelines. All City roadway segments within the study area are considered to operate acceptably at LOS D or better, consistent with the with recommendations included in the City of Barstow proposed General Plan. All Caltrans roadway segments within the study area are considered to operate acceptably at LOS D or better.
[5]This segment of Hinkley Road would be closed upon completion of BIG
[6]Would the Project cause a transportation deficiency inconsistent with the relevant General Plan? The project would cause a transportation deficiency if the following criteria are met: if the project causes the roadway segment to operate at an unacceptable LOS and the roadway segment arterial analysis indicates travel speeds that result in LOS D or worse during the AM and PM peak hour conditions OR if the roadway segment operates unacceptably in the No BIG scenario and BIG would add traffic in excess of 5% of the roadway capacity and the roadway segment arterial analysis indicates travel speeds that result in LOS D or worse during the AM and PM peak hour conditions.
Bolded values indicate segment with LOS exceeding the acceptable LOS threshold.
Shaded values indicate Project transportation deficiencies.
ADT = average daily traffic
I = Interstate
LOS = level of service
SR = State Route
V/C = volume-to-capacity ratio

Sources:
- *Author Compilation, 2025*
- *National Data & Surveying Services*

6.0 PLUS BIG TRANSPORTATION MODIFICATIONS

The following Transportation Modifications (TM) are proposed, as they have been identified as physically feasible and capable of lessening transportation deficiencies to a level consistent with applicable LOS standards. Thresholds for transportation deficiencies are described in **Section 3.5: Consistency with Applicable LOS Standards** of this report. As discussed in **Section 1.1: Introduction**, LOS-based transportation deficiencies are not considered impacts under CEQA. The following TMs are identified to avoid inconsistency with applicable LOS standards.

6.1 Opening Year 2028 Transportation Modifications

There are no Transportation Modifications recommended to off-site intersections and roadways under the Opening Year (2028) scenario since the addition of BIG traffic is not expected to result in LOS deficiencies at study area intersection and roadways.

6.2 Interim Year 2033 Transportation Modifications

The following transportation modifications are recommended under Interim Year (2033) Plus BIG conditions:

- **TM-1:** ***Improve the Intersection of Main Street & Petit Road (Intersection 14).*** Prior to the occupancy of the transload warehouse center exceeding 5,900 KSF total, BIG would install a traffic signal at intersection. This intersection would be improved in the AM Peak from LOS C to LOS A and in the PM peak from LOS D to LOS A with the installation of a traffic signal under Interim Year (2033) Plus BIG conditions. Signalization is warranted under Interim Year (2033) Plus BIG and Horizon Year (2048) Plus BIG conditions based on the CA MUTCD signal warrants. Traffic signal warrant analysis is included in **Appendix L: Traffic Signal Warrant Analysis.**
- **TM-2:** ***Improve the Intersection of Lenwood Road & High Desert Road (Intersection 18)*****.** Prior to the occupancy of the transload warehouse center exceeding 5,900 KSF, BIG would install a traffic signal at intersection and fiber optic interconnect system between High Desert Road (Intersection 18) and Commerce Parkway (Intersection 20). This intersection would be improved in the AM Peak from LOS C to LOS B and in the PM peak from LOS D to LOS C with the installation of a traffic signal and interconnect under Interim Year (2033) Plus BIG conditions. Signalization is not warranted under Interim Year (2033) Plus BIG conditions based on the CA MUTCD Traffic signal warrants, but meets the criteria for signalization under Horizon Year (2048) Plus BIG conditions. It is recommended that the intersection be signalized under 2033 conditions. Traffic signal warrant analysis is included in **Appendix L: Traffic Signal Warrant Analysis.**
- **TM-3: Improve the Intersection of Truck Freightliner Service Point Driveway & Lenwood Road (Intersection 19).** Prior to the occupancy of the transload warehouse center exceeding 5,900 KSF, BIG would install a traffic signal and cluster the intersection with the existing signal at Commerce Parkway so they function as an combined system with a single controller, and install fiber optic interconnect system between High Desert Road (Intersection 18) and Commerce Parkway (Intersection 20). This configuration is recommended due to the close proximity of the intersections, which supports synchronized signal operations and improved traffic flow. This intersection would experience reduction in delay during the AM Peak, but remain at LOS C. During the PM Peak, the

intersection would improve from LOS D to LOS C with the installation of a traffic signal and interconnect under Interim Year (2033) Plus BIG conditions. Signalization is not warranted under Interim Year (2033) Plus BIG conditions based on the CA MUTCD Traffic Signal warrants but meets the criteria for signalization under Horizon Year (2048) Plus BIG conditions. It is recommended that the intersection be signalized under 2033 conditions. Traffic signal warrant analysis is included in **Appendix L: Traffic Signal Warrant Analysis.**

Consistent with the preceding lists, **Table 43: Transportation Deficiencies and Proposed Transportation Modifications** summarizes the intersection operations under Interim Year 2033 Plus BIG conditions with the proposed TMs. No intersection operational deficiencies would remain with the proposed TMs under Interim Year 2033 Plus BIG conditions.

6.3 Horizon Year 2048 Transportation Modifications

Refer to the Interim Year 2033 Transportation Modifications for a description of the following transportation modifications:

- **TM-1:** ***Improve the Intersection of Main Street & Petit Road (Intersection 14).*** This intersection would be improved in the AM Peak from LOS C to LOS A and in the PM peak from LOS E to LOS B with the installation of a traffic signal under Horizon Year 2048 Plus BIG conditions.
- **TM-2:** ***Improve the Intersection of Lenwood Road & High Desert Road (Intersection 18)*****.** This intersection would be improved in the AM Peak from LOS D to LOS B and in the PM peak from LOS F to LOS C with the installation of a traffic signal and interconnect under Horizon Year 2048 Plus BIG conditions.
- **TM-3:** ***Improve the Intersection of Truck Freightliner Service Point Driveway & Lenwood Road (Intersection 19)*****.** This intersection would be improved in the AM Peak from LOS F to LOS B and in the PM peak from LOS F to LOS C with the installation of a traffic signal and interconnect under Horizon Year 2048 Plus BIG conditions.

In addition to TM-1 through TM-3, the following transportation modifications are recommended under Horizon Year 2048 Plus BIG conditions:

- **TM-4:** ***Improve the Intersection of Lenwood Road & Main Street (Intersection 3).*** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would restripe southbound approach to provide a second southbound left-turn lane; restripe southbound right-turn lane into a through-right lane; reconfigure traffic island to provide space for additional southbound through movement; restripe northbound approach to provide a second northbound left-turn lane. This intersection would remain at LOS C in the AM Peak and be improved in the PM peak from LOS E to LOS C with restriping, intersection upgrades, and signal modification under Horizon Year 2048 Plus BIG conditions.
- **TM-5:** ***Improve the Intersection of Lenwood Road & Love's Travel Stop Driveway/Truck Repair Driveway (Intersection 17)*****.** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would install a traffic signal at intersection and fiber optic interconnect system between Love's Travel Stop Driveway/Truck Repair Driveway (Intersection 17) and Commerce Parkway (Intersection 20). This intersection would be improved in the AM Peak from LOS D to LOS B and in the PM peak from LOS F to LOS C with the installation of a traffic signal and interconnect under Horizon Year (2048) Plus BIG conditions. Signalization is warranted under Horizon Year (2048)

conditions based on the CA MUTCD Traffic signal warrants. Traffic signal warrant analysis is included in **Appendix L: Traffic Signal Warrant Analysis.**

- **TM-6:** ***Improve the intersection of Lenwood Road and Commerce Parkway (Intersection 20).*** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would restripe existing southbound through-left lane to an exclusive through lane, add northbound and southbound protected left signal phases, and would install fiber optic interconnect system between Love's Travel Stop Driveway/Truck Repair Driveway (Intersection 17) and Commerce Parkway (Intersection 20). This intersection would remain at LOS C in the AM Peak and be improved in the PM peak from LOS D to LOS C with restriping, signal modification, and interconnect under Horizon Year (2048) Plus BIG conditions.
- **TM-7:** ***Improve the intersection of Barstow Road & Armory Road (Intersection 37).*** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would restripe westbound through-right lane to an exclusive through lane, add westbound right-turn overlap phase, and restrict southbound U-turns. This intersection would be improved in the AM Peak from LOS C to LOS B and in the PM peak from LOS F to LOS C with restriping and signal modification under Horizon Year (2048) Plus BIG conditions.
- **TM-8: Provide fair share for widening Main Street between Vacated Hinkley Road and Country Club Drive** ***(Segment 1).*** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would provide 4.04% fair share of the costs for widening the roadway to 4-lanes. This roadway segment would be improved from LOS F to LOS D with widening under Horizon Year (2048) Plus BIG conditions.
- **TM-9: Provide fair share for widening Lenwood Road between Agate Road to Jasper Road** ***(Segment 14).*** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would provide 35.59% fair share of the costs for widening the roadway to 4-lanes. This roadway segment would be improved from LOS F to LOS C or better with widening under Horizon Year (2048) Plus BIG conditions.
- **TM-10: Provide fair share for widening Lenwood Road between Main Street to High Desert Road** ***(Segment 16).*** Prior to the occupancy of the transload warehouse center exceeding 7,800 KSF, BIG would provide 33.13% fair share of the costs for widening the roadway to four lanes. This roadway segment would be improved from LOS F to LOS D with widening under Horizon Year (2048) Plus BIG conditions.

Consistent with the preceding lists, **Table 43: Transportation Deficiencies and Proposed Transportation Modifications** summarizes transportation deficiencies that BIG would contribute to and identifies TMs that are physically feasible and capable of lessening transportation deficiencies to a level that would be consistent with applicable LOS criteria. Calculations for estimating BIG's fair share contributions are in **Appendix M: Fair-Share Calculations**.

Table 43: Transportation Deficiencies and Proposed Transportation Modifications

Facility	Transportation Modification Number	ID	Location	Opening Year 2028 LOS						Interim Year 2033 LOS						Horizon Year 2048 LOS						Transportation Modification Recommendations
				Baseline		Plus Project		Plus Project + TMs		Baseline		Plus Project		Plus Project + TMs		Baseline		Plus Project		Plus Project + TMs		
				AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
Intersection	4	3	Main Street & Lenwood Road	No Transportation Deficiencies under this Scenario.						No Transportation Deficiencies under this Scenario.						C	C	C	**E**	C	C	*2028*: No improvements proposed. *2033*: No improvements proposed. ***2048*: Restripe southbound approach to provide a second southbound left-turn lane. Restripe southbound right turn lane into a through-right lane. Reconfigure traffic island to provide space for additional southbound through movement. Restripe northbound approach to include a second northbound left turn lane.**
Intersection	1	14	Main Street & Petit Road	No Transportation Deficiencies under this Scenario.						B	C	C	**D**	A	A	B	C	C	**E**	A	B	*2028*: No improvements proposed. ***2033*: Install Traffic Signal[1].** ***2048*: Same improvements as 2033.**
Intersection	5	17	Lenwood Rd & Love's Travel Stop Driveway	No Transportation Deficiencies under this Scenario.						No Transportation Deficiencies under this Scenario.						C	**D**	**D**	**F**	B	C	*2028:* No improvements proposed. *2033:* No improvements proposed. ***2048*: Install Traffic Signal[2]. Install fiber optic interconnect system between intersections 17-20 and optimize signal timing for corridor.**
Intersection	2	18	Lenwood Road & High Desert Road	No Transportation Deficiencies under this Scenario.						B	C	C	**D**	B	C	C	D	**F**	**F**	B	B	*2028*: No improvements proposed. ***2033*: Install Traffic Signal[3]. Install fiber optic interconnect system between intersections 18-20 and optimize signal timing for corridor.** ***2048*: Same improvements as 2033 and optimize signal timing for corridor under 2048 conditions.**
Intersection	3	19	Lenwood Road & Truck Freightliner Service Point Driveway	No Transportation Deficiencies under this Scenario.						C	C	C	**D**	C	C	D	**E**	**F**	**F**	B	C	*2028*: No improvements proposed. ***2033*: Install Traffic Signal[4] and cluster the intersection with the existing signal at Commerce Parkway so they function as an combined system with a single controller. This configuration is recommended due to the close proximity of the intersections, which supports synchronized signal operations and improved traffic flow. Install fiber optic interconnect system between intersections 18-20 and optimize signal timing for corridor.** **2048: Same improvements as 2033 and optimize signal timing for corridor under 2048 conditions.**
Intersection	6	20	Lenwood Road & Commerce Parkway	No Transportation Deficiencies under this Scenario.						No Transportation Deficiencies under this Scenario.						C	C	C	**D**	C	C	*2028*: No improvements proposed. *2033*: No improvements proposed. ***2048*: Restripe existing southbound middle through-left lane to an exclusive through lane. Add northbound and southbound protected left phase and northbound right turn overlap, restricting the westbound U-turn movement. Install fiber optic interconnect system between intersections 17-20 and optimize signal timing for corridor.**
Intersection	7	37	Barstow Road & Armory Road	No Transportation Deficiencies under this Scenario.						No Transportation Deficiencies under this Scenario.						C	E	C	**F**	B	C	*2028*: No improvements proposed. *2033*: No improvements proposed. ***2048*: Restripe westbound through-right lane to right turn only and add westbound right turn overlap phase (restrict southbound U-turns).**

Table 43: Transportation Deficiencies and Proposed Transportation Modifications

Facility	Transportation Modification Number	ID	Location	Opening Year 2028 LOS						Interim Year 2033 LOS						Horizon Year 2048 LOS						Transportation Modification Recommendations
				Baseline		Plus Project		Plus Project + TMs		Baseline		Plus Project		Plus Project + TMs		Baseline		Plus Project		Plus Project + TMs		
				AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
Roadway Segment	8	1	Main Street between Vacated Hinkley Road and Country Club Drive	No Transportation Deficiencies under this Scenario.						No Transportation Deficiencies under this Scenario.						**E**		**F**		D		2048 Arterial Results: AM= LOS C/B (EB/WB); PM= LOS B/**E** (EB/WB) **2048: Provide 4.04% fair-share cost for widening the roadway to 4-lanes.**
Roadway Segment	9	14	Lenwood Road between Agate Road to Jasper Road	C or Better		**D**		-		C or Better		**E**		-		C or Better		**F**		C or Better		2028 Arterial Results: AM= LOS C/B (NB/SB); PM= LOS C/C (NB/SB) 2033 Arterial Results: AM= LOS C/B (NB/SB); PM= LOS C/C (NB/SB) 2048 Arterial Results: AM= LOS C/C (NB/SB); PM= LOS **D**/C (NB/SB) **2048: Provide 35.59% fair-share cost for widening the roadway to 4-lanes.**
Roadway Segment	10	16	Lenwood Road between Main Street and High Desert Road	No Transportation Deficiencies under this Scenario.						D		**E**		-		**F**		**F**		D		2033 Arterial Results: AM= LOS D/C (NB/SB); PM= LOS C/D (NB/SB) 2048 Arterial Results: AM= LOS D/C (NB/SB); PM= LOS **E**/**E** (NB/SB) **2048: Provide 33.13% fair-share cost for widening the roadway to 4-lanes.**
Roadway Segment	-	17	Lenwood Road between High Desert Road and the I-15 SB off-ramp	No Transportation Deficiencies under this Scenario.						No Transportation Deficiencies under this Scenario.		**E**		**F**		D						No improvements proposed. Intersection LOS and arterial acceptable. 2048 Arterial Results: AM= LOS D/C (NB/SB); PM= LOS D/D (NB/SB)

Notes:
1 - Signalization is warranted under Interim Year (2033) and Horizon Year (2048) conditions based on the CA MUTCD Traffic Signal Warrant 1 (Eight-Hour Vehicular Volumes) and Warrant 2 (Four-Hour Vehicular Volume). The intersection meets Warrant 3 (Peak Hour). However, the CA MUTCD states that "this signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time". Therefore, this warrant would not apply to this off-site intersection.
2 - Signalization is warranted under Horizon Year (2048) conditions based on the CA MUTCD Traffic Signal Warrant 1 (Eight-Hour Vehicular Volume) and Warrant 2 (Four-Hour Vehicular Volume). The intersection meets Warrant 3 (Peak Hour); however, this warrant would not apply to this off-site intersection.
3 - Signalization is not warranted under Interim Year (2033) conditions based on the CA MUTCD Traffic Signal Warrant (Eight-Hour Vehicular Volume) and Warrant 2 (Four-Hour Vehicular Volume). The intersection also does not meet Warrant 3, Peak Hour (not applicable to location). Signalization is warranted under Horizon Year (2048) conditions based on the CA MUTCD Traffic Signal Warrant 1 (Eight-Hour Vehicular Volume) and Warrant 2 (Four-Hour Vehicular Volume). The intersection meets Warrant 3 (Peak Hour); however, this warrant would not apply to this off-site intersection. The City should determine whether signalization should be implemented by the project under 2033 conditions, as recommended.
4 - Signalization is not warranted under Interim Year (2033) conditions based on the CA MUTCD Traffic Signal Warrant (Eight-Hour Vehicular Volume) and Warrant 2 (Four-Hour Vehicular Volume). The intersection also does not meet Warrant 3, Peak Hour (not applicable to location). Signalization is warranted under Horizon Year (2048) conditions based on the CA MUTCD Warrant 2 (Four-Hour Vehicular Volume). The intersection meets Warrant 3 (Peak Hour); however, this warrant would not apply to this off-site intersection. The City should determine whether signalization should be implemented by the project under 2033 conditions, as recommended.

7.0 FREEWAY OFF-RAMP QUEUEING ANALYSIS

Freeway off-ramp queueing analysis was conducted under the Plus BIG transportation conditions to assess potential safety concerns at interchange locations. Vehicle queues at these locations can create hazards by backing up into the freeway mainline or encroaching into the off-ramp deceleration zones. The analysis focused on Caltrans off-ramps and utilized SimTraffic outputs from Synchro 12, applying the HCM 7th Edition methodology to determine 95th percentile queue lengths. This percentile reflects the length that is exceeded only 5-percent of the time during the analysis period. Available ramp storage was calculated by subtracting a 750-foot Stopping Sight Distance, based on 70 mph design speed, from the total off-ramp length. Any queueing that exceeds this available storage, either extending into the deceleration area or backing onto the freeway mainline, is considered a queueing deficiency.

7.1 Opening Year 2028 Plus BIG

Table 44: Study Area Freeway Ramp Operations – Opening Year 2028 Plus BIG summarizes the freeway off-ramp queueing results, which show that the 95th percentile queues are less than the available ramp storage length at all Caltrans off-ramps. BIG is not expected to cause queueing that would result in safety hazards by backing up onto the freeway mainline or encroaching within the off-ramp deceleration areas. Detailed SimTraffic and HCS analysis reports for queueing analysis are in **Appendix G: Synchro Analysis Worksheets.**

7.2 Interim Year 2033 Plus BIG

Table 45: Study Area Freeway Ramp Operations – Interim Year 2033 Plus BIG summarizes the freeway off-ramp queueing results, which show that the 95th percentile queues are less than the available ramp storage length at all Caltrans off-ramps. BIG is not expected to cause queueing that would result in safety hazards by backing up onto the freeway mainline or encroaching within the off-ramp deceleration areas. Detailed SimTraffic and HCS analysis reports for queueing analysis are in **Appendix G: Synchro Analysis Worksheets**.

7.3 Horizon Year 2048 Plus BIG

Table 46: Study Area Freeway Ramp Operations – Horizon Year 2048 Plus BIG summarizes the freeway off-ramp queueing results, which show that the 95th percentile queues are less than the available ramp storage length at all Caltrans off-ramps. While the queue exceeds the available storage within the southbound right-turn pocket at Intersection 21, the queue is expected to fit within the available ramp storage length. Therefore, BIG is not expected to cause queueing that would result in safety hazards by backing up onto the freeway mainline or encroaching within the off-ramp deceleration areas. Detailed SimTraffic and HCS analysis reports for queueing analysis are in **Appendix G: Synchro Analysis Worksheets**.

Table 44: Study Area Freeway Ramp Operations – Opening Year 2028 Plus BIG								
Off-Ramp	Turning Movement	Movement Storage Length[1]	Peak Period	Calculated Queue[2] (feet)		Available Ramp Storage (feet)[3]	Exceeds Available Movement Storage Length?	Exceeds Available Ramp Storage Length?
				50th Percentile	95th Percentile			
Intersection 15: SR 58 Eastbound at Main Street	SBL	860	AM	< 25	< 25	860	No	No
			PM	< 25	< 25		No	No
	SBLT	200	AM	< 25	45		No	No
			PM	< 25	57		No	No
Intersection 16: SR 58 Westbound at Main Street	NBLT	800	AM	71	121	800	No	No
			PM	99	157		No	No
Intersection 21: I-15 Southbound at Lenwood Road	SBL	675	AM	59	95	675	No	No
			PM	82	140		No	No
	SBR	180	AM	< 25	< 25		No	No
			PM	< 25	38		No	No
Intersection 22: I-15 Northbound at Lenwood Road	NBL	835	AM	104	156	835	No	No
			PM	99	154		No	No
	NBLT	835	AM	72	126		No	No
			PM	82	139		No	No
	NBR	300	AM	< 25	< 25		No	No
			PM	< 25	< 25		No	No
Intersection 27: SR 58 Eastbound at Lenwood Road	EBL	1,440	AM	< 25	< 25	1,440	No	No
			PM	< 25	< 25		No	No
	EBTR	1,440	AM	< 25	< 25		No	No
			PM	< 25	< 25		No	No
Intersection 28: SR 58 Westbound at Lenwood Road	WBL	1,000	AM	< 25	< 25	1,670	No	No
			PM	< 25	31		No	No
	WBT	1,670	AM	< 25	34		No	No
			PM	< 25	37		No	No
Intersection 35: I-15 Southbound at Barstow Road	WBLT	990	AM	35	71	990	No	No
			PM	85	146		No	No
	WBR	990	AM	30	54		No	No
			PM	37	60		No	No
Intersection 36: I-15 Northbound at Barstow Road	EBL	810	AM	155	246	840	No	No
			PM	127	208		No	No
	EBR	840	AM	50	83		No	No
			PM	99	183		No	No

Source: Author Compilation, 2025
1 – Based on length of existing turn pocket storage, as modeled in Synchro.
2 - Average and 95th Percentile Queues calculated from SimTraffic results for 5 runs in Synchro 12 using HCM 7th Edition Methodology
EBTR = eastbound through-right
3 – Calculated by subtracting a 750-foot Stopping Sight Distance, based on 70 mph design speed, from the total off-ramp length.
NBL = northbound left
NBLT = northbound left-through
SBLT = southbound left-through

Table 45: Study Area Freeway Ramp Operations – Interim Year 2033 Plus BIG								
Off-Ramp	Turning Movement	Movement Storage Length[1]	Peak Period	Calculated Queue[2] (feet)		Available Ramp Storage (feet)[3]	Exceeds Available Movement Storage Length?	Exceeds Available Ramp Storage Length?
				50th Percentile	95th Percentile			
Intersection 15: SR 58 Eastbound at Main Street	SBL	860	AM	< 25	< 25	860	No	No
			PM	< 25	< 25		No	No
	SBLT	200	AM	< 25	51		No	No
			PM	29	61		No	No
Intersection 16: SR 58 Westbound at Main Street	NBLT	800	AM	79	133	800	No	No
			PM	97	153		No	No
Intersection 21: I-15 Southbound at Lenwood Road	SBL	675	AM	56	99	675	No	No
			PM	96	159		No	No
	SBR	180	AM	< 25	62		No	No
			PM	< 25	97		No	No
Intersection 22: I-15 Northbound at Lenwood Road	NBL	835	AM	110	161	835	No	No
			PM	107	162		No	No
	NBLT	835	AM	82	145		No	No
			PM	89	142		No	No
	NBR	300	AM	< 25	< 25		No	No
			PM	< 25	< 25		No	No
Intersection 27: SR 58 Eastbound at Lenwood Road	EBL	1,440	AM	< 25	27	1,440	No	No
			PM	< 25	31		No	No
	EBTR	1,440	AM	< 25	< 25		No	No
			PM	< 25	35		No	No
Intersection 28: SR 58 Westbound at Lenwood Road	WBL	1,000	AM	< 25	< 25	1,670	No	No
			PM	< 25	31		No	No
	WBT	1,670	AM	< 25	33		No	No
			PM	< 25	41		No	No
Intersection 35: I-15 Southbound at Barstow Road	WBLT	990	AM	43	81	990	No	No
			PM	92	156		No	No
	WBR	990	AM	30	54		No	No
			PM	39	65		No	No
Intersection 36: I-15 Northbound at Barstow Road	EBL	810	AM	161	253	840	No	No
			PM	122	199		No	No
	EBR	840	AM	65	110		No	No
			PM	138	250		No	No

Source: Author Compilation, 2025
1 – Based on length of existing turn pocket storage, as modeled in Synchro.
2 - Average and 95th Percentile Queues calculated from SimTraffic results for 5 runs in Synchro 12 using HCM 7th Edition Methodology
EBTR = eastbound through-right
3 – Calculated by subtracting a 750-foot Stopping Sight Distance, based on 70 mph design speed, from the total off-ramp length.
NBL = northbound left
NBLT = northbound left-through
SBLT = southbound left-through

Table 46: Study Area Freeway Ramp Operations – Horizon Year 2048 Plus BIG								
Off-Ramp	Turning Movement	Movement Storage Length[1]	Peak Period	Calculated Queue[2] (feet)		Available Ramp Storage (feet)[3]	Exceeds Available Movement Storage Length?	Exceeds Available Ramp Storage Length?
				50th Percentile	95th Percentile			
Intersection 15: SR 58 Eastbound at Main Street	SBL	860	AM	2	12	860	No	No
			PM	2	14		No	No
	SBLT	200	AM	30	63		No	No
			PM	42	77		No	No
Intersection 16: SR 58 Westbound at Main Street	NBLT	800	AM	84	139	800	No	No
			PM	102	159		No	No
Intersection 21: I-15 Southbound at Lenwood Road	SBL	675	AM	66	110	675	No	No
			PM	140	230		No	No
	SBR	180	AM	32	130		No	No
			PM	94	248		**Yes**	No
Intersection 22: I-15 Northbound at Lenwood Road	NBL	835	AM	176	289	835	No	No
			PM	230	389		No	No
	NBLT	835	AM	158	283		No	No
			PM	224	405		No	No
	NBR	300	AM	12	113		No	No
			PM	63	270		No	No
Intersection 27: SR 58 Eastbound at Lenwood Road	EBL	1,440	AM	10	33	1,440	No	No
			PM	10	34		No	No
	EBTR	1,440	AM	1	11		No	No
			PM	14	42		No	No
Intersection 28: SR 58 Westbound at Lenwood Road	WBL	1,000	AM	5	22	1,670	No	No
			PM	9	29		No	No
	WBT	1,670	AM	16	38		No	No
			PM	23	41		No	No
Intersection 35: I-15 Southbound at Barstow Road	WBLT	990	AM	61	108	990	No	No
			PM	219	345		No	No
	WBR	990	AM	28	53		No	No
			PM	45	95		No	No
Intersection 36: I-15 Northbound at Barstow Road	EBL	810	AM	169	267	840	No	No
			PM	151	295		No	No
	EBR	840	AM	96	169		No	No
			PM	357	642		No	No

Source: Author Compilation, 2025
1 – Based on length of existing turn pocket storage, as modeled in Synchro.
2 - Average and 95th Percentile Queues calculated from SimTraffic results for 5 runs in Synchro 12 using HCM 7th Edition Methodology
EBTR = eastbound through-right
3 – Calculated by subtracting a 750-foot Stopping Sight Distance, based on 70 mph design speed, from the total off-ramp length.
NBL = northbound left
NBLT = northbound left-through
SBLT = southbound left-through

8.0 REFERENCES

Association of Environmental Professionals. (2023). *2023 California Environmental Quality Act (CEQA) Statute and Guidelines.* Retrieved June 2023 from: https://www.califaep.org/docs/CEQA_Handbook_2023_final.pdf

Caltrans. (2020). *Vehicle Miles Traveled-Focused Transportation Impact Study Guide*. Retrieved September 2025 from: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf

Caltrans. (2022). *Traffic Census Program*. Retrieved June 2023 from: https://dot.ca.gov/programs/traffic-operations/census

Caltrans. (2024). *Local Development Review (LDR) Safety Review Practitioner's Guidance*. Retrieved September 2024 from: https://dot.ca.gov/-/media/dot-media/district-4/documents/d4-transportation-planning-local-assistance/ldr/202402-ldr-safety-review-practitioners-guidance-002-a11y.pdf

City of Barstow. (2014). *Traffic Study for Barstow 2014 General Plan Amendment*. Retrieved in November 2021 from: https://www.barstowca.org/home/showpublisheddocument/2932/635525287529170000

City of Barstow. (2015). *General Plan – Circulation Element.* Retrieved November 2021 from: https://www.barstowca.org/home/showpublisheddocument/5363/636607004817830000

County of San Bernardino. (2016). *San Bernardino County Congestion Management Program.* Retrieved August 2023 from: https://www.gosbcta.com/wp-content/uploads/2019/10/2016-Congestion-Management-Plan-.pdf

County of San Bernardino (2017). *San Bernardino Countywide Plan Transportation Existing Conditions Report.* Retrieved August 2023 from: https://countywideplan.sbcounty.gov/wp-content/uploads/sites/125/2021/02/Trans_CWP_221_77_ExCon_FinalDraft_032917.pdf

County of San Bernardino. (2019). *Transportation Impact Study Guidelines*. Retrieved November 2021 from: https://www.sbcounty.gov/uploads/DPW/docs/Traffic-Study-Guidelines.pdf

County of San Bernardino. (2022). *San Bernardino Countywide Plan – County Policy Plan September 2022.* Retrieved August 2023 from: https://countywideplan.sbcounty.gov/wp-content/uploads/sites/125/2021/01/CWP_PolicyPlan_HardCopy_MainText_Tables_2022_Sept_Adopted.pdf

County of San Bernardino (undated). *San Bernardino Transportation Analysis Model (SBTAM).* Retrieved from: https://www.gosbcta.com/plan/san-bernardino-transportation-analysis-model/

Fehr & Peers. (2025). *Transportation Study for the Barstow Proposed General Plan*.

Institute of Transportation Engineers. (2021). *Trip Generation Manual, 11th Edition.* Retrieved November 2021 from: https://www.ite.org/technical-resources/topics/trip-and-parking-generation/

Kimley-Horn and Associates, Inc. (2025a). *Appendix 5.15-1: CEQA Assessment – Transportation Analysis*.

Kimley-Horn and Associates, Inc. (2025b). *BNSF Barstow International Gateway Project – Traffic Study Scoping*.

San Bernardino County Transportation Authority. (2016). *San Bernardino County CMP, 2016 Update*. Retrieved September 2025 from: https://www.gosbcta.com/wp-content/uploads/2019/10/2016-Congestion-Management-Plan-.pdf

San Bernardino County Transportation Authority. (2022). *Travel Patterns*.

Transportation Research Board. (1982). *National Cooperative Highway Research Program Report 255, Highway Traffic Data for Urbanized Area Project Planning and Design.* Retrieved November 2022 from: https://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_255.pdf

Transportation Research Board. (2000). *Highway Capacity Manual 2000*. Retrieved for internal use March 2024.

Transportation Research Board. (2022). *Highway Capacity Manual 7th Edition.* Retrieved for internal use September 2022.

United States Census Bureau. (2020). *OnTheMap*. Retrieved from: https://onthemap.ces.census.gov/

9.0 PREPARER QUALIFICATIONS

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APPENDICES

Appendix A: Transportation Study Scoping

MEMORANDUM

To:	City of Barstow
From:	Naomi Germain, PE, TE Joe Shultz, PE, TE, PTOE Kimley-Horn and Associates, Inc.
Date:	May 13, 2025
Subject:	BNSF Barstow International Gateway Project – Transportation Study Scoping

This memorandum was prepared to scope the transportation study for the proposed BNSF Railway Company (BNSF) Barstow International Gateway ("BIG") project in accordance with the San Bernardino County Transportation Impact Study Guidelines (San Bernardino County, 2019), referred to as the "County TIS Guidelines" in this document. While the BIG transportation study area includes facilities in the City of Barstow (City), unincorporated San Bernardino County (County), and California Department of Transportation (Caltrans) right-of-way, the County TIS Guidelines were used as the basis of methodology in BIG's transportation assessment because the City and Caltrans do not provide guidance for the preparation of Level of Service (LOS) assessments.

A **LOS Assessment** will be prepared to assess the consistency with planning-level LOS criteria that will be outlined in the City of Barstow General Plan Update Transportation Study (to be released), County TIS Guidelines, and the San Bernardino Congestion Management Program ("CMP") 2016 Update (SANBAG, 2016). To meet California Environmental Quality Act (CEQA) requirements, and pursuant to the County TIS Guidelines and the City of Barstow VMT Resolution ("City VMT Resolution") (Barstow, 2020), a **CEQA Assessment** will be prepared to analyze Vehicle Miles Traveled (VMT), circulation system conflicts, transportation hazards, and emergency access. The purpose of the scoping memorandum is to outline the methodology to be used for the LOS and CEQA Assessments.

It is noted that automobile delay, as described by LOS or similar measures of vehicular capacity and traffic congestion, is not considered a significant impact on the environment under CEQA. Therefore, the LOS Assessment and CEQA Assessment will be performed separately following this transportation study scoping memorandum, which was prepared based on guidance provided by the City of Barstow at the pre-application meeting on June 8, 2023.

The following memorandum outlines the assumptions relevant to the non-CEQA LOS Assessment and to the CEQA Assessment. As identified in each section heading, Section 1 (Project Description), Section 2 (Trip Generation), and Section 7 (Project Design Features) are relevant to both the LOS assessment and the CEQA Assessment. Section 11 (VMT Analysis) and Section 12 (Consistency Analysis) are related to the CEQA Assessment only. The remaining sections are related to the LOS Assessment only.

Consistent with the County TIS Guidelines, the transportation assessment will analyze the following scenarios:

- Existing No BIG Baseline – Represents existing traffic conditions without BIG in 2023, the baseline analysis year
- Opening Year 2028 No BIG Baseline – Represents year 2028 traffic conditions without BIG
- Opening Year 2028 Plus BIG – Represents opening year 2028 conditions with the addition of BIG's initial phase of operations
- Interim Year 2033 No BIG Baseline – Represents the interim year 2033 traffic conditions without BIG
- Interim Year 2033 Plus BIG – Represents the interim year 2033 traffic conditions with the addition of BIG's second phase of operations
- Horizon Year 2048 No BIG Baseline – Represents horizon year 2048 traffic conditions without BIG
- Horizon Year 2048 Plus BIG – Represents horizon year 2048 conditions with the addition of BIG operations

1 PROJECT DESCRIPTION (CEQA ASSESSMENT AND LOS ASSESSMENT)

The following project description overview is tentative and subject to modification. The final project description will be provided as part of the formal application submittal. BNSF proposes the Barstow International Gateway Specific Plan in the City and in unincorporated territory in the County. BIG consists of a rail yard with an intermodal facility (IMF)[1] and a "block swap" yard,[2] and a transload warehouse center,[3] as defined below. Like other rail yards, the BIG rail yard would operate 24 hours per day, 365 days per year. Additionally, to serve the proposed rail yard and transload warehouse center, BNSF proposes offsite rail improvements (including lead track extensions), and offsite non-rail improvements (including stormwater drainage, utilities, and circulation/roadways). BIG's proposed land uses are depicted in **Figure 1** and described below.

RAIL YARD – INTERMODAL FACILITY

The IMF is proposed at the BIG Specific Plan area's southern extent. The IMF's primary purpose would be its cross-dock intermodal operations: to handle international containers arriving at the IMF by rail from the Port of Long Beach and Port of Los Angeles (Ports). BIG's IMF would primarily transfer containers between rail cars and electric hostlers[4] for cross-dock movements at the onsite proposed transload warehouse center, and vice versa, though a small portion would arrive by

[1] "Intermodal facility" or "IMF" refers to a rail yard where intermodal containers are transferred between trains and heavy-duty trucks. Heavy-duty trucks arrive to either pick up containers from arriving trains or deliver containers for departing trains. However, unlike traditional intermodal facilities, most containers at BIG would arrive by train and be transferred to and from electric hostlers.

[2] "Block swap" refers to transferring a block of intermodal train cars between trains. In effect, the entire block of cars remains coupled together and is moved en masse to another train.

[3] "Transload" refers to the transfer of goods from one container to another. In this document, it specifically refers to the transfer of goods from international containers to domestic containers. The transload warehouse center at the BIG would primarily serve goods transported to and from the BIG intermodal facility by rail.

[4] Electric hostlers are trucks driven by workers used for moving trailers and containers short distances within freight terminals, rail yards, and warehouses. Electric holsters would not use public roadways outside of the BIG footprint.

heavy-duty truck. The electric hostlers would be used to transport containers within the rail yard, and between the rail yard and the transload warehouse center. Electric hostler movement between the IMF and transload warehouse center would occur within an onsite "closed loop" private road. BIG's IMF would operate differently than typical IMFs since most of the containers processed at the BIG IMF would not arrive externally by heavy-duty[5] trucks, but instead would be handled by rail. This differs from the operations at a traditional IMF, where the facility relies on external heavy-duty trucks to accomplish the supply chain's cross-docking function.

The IMF's secondary/other purpose would be to operate as a traditional IMF. A small percentage (approximately 3 percent) of containers arriving at the IMF would do so via heavy-duty trucks since this mode would reduce the travel distance and/or travel time for a small percentage of the potential service locations. All containers arriving at the IMF via heavy-duty trucks would be transferred from a heavy-duty truck to a rail car and transported by rail to their destinations (and/or vice versa).

RAIL YARD – BLOCK SWAP

The block swap yard is proposed within the middle portion of the BIG Specific Plan area. The block swap yard would allow for the transfer of multiple railcars, or "blocks" of intermodal rail cars between trains.[6] This would permit the reassembling of trains into optimal lengths and the synchronizing of blocks to their destinations, improving train efficiency eastbound and westbound.

TRANSLOAD WAREHOUSE CENTER

The transload warehouse center is proposed at the BIG Specific Plan area's northern extent. The transload warehouse center would include approximately nine million square feet of transload warehouses, which would be primarily dedicated to processing the contents of containers received at BIG's IMF through its cross-dock intermodal operations, as described above. Additionally, a small percentage of containers processed at the transload warehouse center would arrive/leave by heavy-duty trucks. Freight processed at the transload warehouse center would then be transferred to the IMF by electric hostlers via the onsite "closed loop" private road. The transload warehouse center would be fully built during construction, but operations would gradually increase as customers relocate to BIG. Transload warehouse center operations are forecasted to include approximately 2,785 employees in Opening Year 2028, 3,682 employees in Interim Year 2033, and 4,248 employees in Horizon Year 2048.

2 TRIP GENERATION (CEQA ASSESSMENT AND LOS ASSESSMENT)

Trip generation for a future project is often estimated based on data from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, which is a standard reference used by jurisdictions nationally to estimate trip generation for a proposed project. The *ITE Trip Generation Manual* defines a trip as a single or one-directional vehicle movement with either the origin or destination at a project site and presents a summary of trip generation data that has been

[5] "Heavy-duty" trucks are conventional highway trucks that travel on public roads and carry containers intra- and inter-state.

[6] A block is defined as rail cars of a similar type moving to a similar destination that are already connected and can be combined with other blocks intended for the similar destinations to produce more efficient train movements.

voluntarily collected and submitted to ITE. ITE processes the data to develop trip generation rates, which represent the average number of vehicle trips per unit of related independent variable (i.e., building square footage, number of employees, number of dwelling units, etc.). If it is available, however, more specific site operations data should be used instead to forecast a project's trip generation, since it is likely to be more accurate than ITE's national averages. Therefore, BIG's trip generation was estimated based on a combination of data from the ITE Trip Generation Manual, *11th Edition* (ITE 2021) and site-specific operations data provided by BNSF.

TRIP GENERATION METHODOLOGY

BIG's trip generation was estimated through consideration of employment and heavy vehicles, outlined below.

Step 1 – Estimate Employee (Passenger Car) Trip Generation

Rail Yard Employee Trips

The rail yard employee trip generation was calculated based on estimated employee counts provided by BNSF. The rail yard employee count includes IMF, block swap, and general rail yard function employees. The rail yard employee trip generation assumes 2.5 trips per day per employee, which includes one trip in, one trip out, and a few additional trips for appointments, lunch out, etc. that could occur over the course of a week. Most rail yard employees are expected to stay on-site for their full shift, based on employee behavior at BNSF's Hobart/Commerce Yard IMFs.

BIG's rail yard would operate 24 hours a day and would therefore require continuous staffing. Rail yard operations would utilize three equal, 8-hour employee shifts in a 24-hour period, in accordance with forecast operations and the shift data provided by BNSF from the Hobart/Commerce Yard IMFs. While exact start times are subject to local and system craft agreements, production demand, and employee availability, employee shifts are forecast to have staggered start and end times spread out over a 2-hour period, such as the following pattern: first shift starts between 06:00-08:00, second shift starts between 14:00-16:00, and third shift starts between 22:00-23:59.

Since exact shift times may vary, the analysis assumes that shift changes would occur during both AM and PM peak hours. To calculate the number of employee trips that would occur during a peak hour, the analysis assumes one-third of employees would arrive and one-third of employees would depart during the shift change. Because the shift change would occur over two hours, it is assumed that half of these trips would occur during the peak hour. This value is divided by the average number of trips per employee per day, 2.5, to calculate the percentage of total rail yard employee trips would occur during the peak hour. To account for potential shift timing variations and other trips that may occur in the peak hours outside of typical operations, such as vendors or appointments, the percentage of total rail yard employee trips would occur during the peak hour is rounded up to 15 percent of the daily employee trips. Equation 1 provides an example calculation for the AM peak hour. A similar equation applies to the PM peak hour.

Equation 1: Equation for Percentage of Rail Yard Daily Employee Trips Occurring in AM Peak Hour

$$\%\ \boldsymbol{employee\ trips\ in\ AM\ peak\ hour} = \frac{(\%\ employees\ arriving\ for\ first\ shift + \%\ employees\ departing\ at\ first\ shift) * \frac{peak\ hour\ duration}{shift\ change\ duration}}{average\ number\ of\ trips\ per\ employee\ per\ day}$$

$$\mathbf{13.3\%} = \frac{(33.3\% + 33.3\%) * \frac{1\ hour}{2\ hours}}{2.5} \rightarrow \boldsymbol{Round\ up\ to}\ \mathbf{15\%}$$

Table 1 summarizes BIG rail yard employee trip generation assumptions.

Table 1: Rail Yard – Employee Trip Generation Assumptions

Variable	Value	Unit	Notes
Working days per year	365	days / year	Provided by BNSF.
Total 7-day employee count (2028)	857	employees / week	Provided by BNSF. Includes employees for the IMF, block swap, and other rail yard activities (train crews, maintenance employees, electric hostler drivers, shuttles etc.) required over a 7-day working week.
Total 7-day employee count (2033)	1,010	employees / week	
Total 7-day employee count (2048)	1,125	employees / week	
Daily employee count (2028)	706	employees / day	Provided by BNSF. Includes employees for the IMF, block swap, and other rail yard activities (train crews, maintenance employees, electric hostler drivers, shuttles etc.) required for a typical workday. This number of employees is used for purposes of estimating employee trip generation and analysis of the project's transportation effects. An additional 24, 27 and 30 employees are added to daily counts for 2028, 2033 and 2048 to account for instances when increased maintenance operations at the yard are necessary.
Daily employee count (2033)	834	employees / day	
Daily employee count (2048)	930	employees / day	
Trips per employee per day	2.5	trips / day	Includes one trip in, one trip out, and a small number of additional trips for appointments, lunch out, etc. Most employees are expected to stay on-site for their full shift.
Percent of employee trips in AM and PM peak hours	15%	peak trips / daily trips	Provided by BNSF. Analysis assumes three equal shifts per day, with each of the shift's start/end times staggered over a 2-hour period, as discussed above.

Transload Warehouse Center Employee Trips

Transload warehouse center employee trip generation is estimated using *ITE Trip Generation Manual 11th Edition* (ITE 2021) Land Use Code 154: High Cube Transload and Short-Term Storage Warehouse. **Appendix A** contains the ITE land use description and accompanying memo High-Cube Warehouse Vehicle Trip Generation Analysis (ITE October 2016), which were referenced to confirm the land use selection. The average trip rate was used for analysis, which provides daily trips per thousand square feet (KSF) of transload facility. ITE also provides an estimate of the number of heavy-duty truck trips per KSF of transload facility. These truck trips were subtracted from the average trip generation rate to determine the passenger car employee trip generation rate. **Table 2** summarizes the transload warehouse center employee trip generation assumptions.

Table 2: Transload Warehouse Center – Employee Trip Generation Assumptions

Variable	Value	Unit	Notes
Working days per year	365	days / year	Provided by BNSF.
Transload Warehouse Center occupied size (2028)	5,900	KSF	Provided by BNSF. Assumes that all 9,000 KSF will be built in 2028, but only a portion of that floor space will be operational. The operational warehouse size is adjusted proportionally based on the number of containers served in 2028 compared to 2048.
Transload Warehouse Center occupied size (2033)	7,800	KSF	Provided by BNSF. Assumes that all 9,000 KSF will be built in 2028, but only a portion of that floor space will be operational. The operational warehouse size is adjusted proportionally based on the number of containers served in 2033 compared to 2048.
Transload Warehouse Center occupied size (2048)	9,000	KSF	Provided by BNSF. Assumes all 9,000 KSF will be operational in 2048.
ITE Transload Warehouse Center vehicle trip generation rate	1.40	daily trips / KSF	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse) average trip generation rate.
ITE Transload Warehouse Center heavy-duty truck trip generation rate (average)	0.22	daily trips / KSF	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse) average heavy-duty truck trip generation rate.
Estimated transload facility employee trip generation rate	1.18	daily trips / KSF	Analysis assumes ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse) average trip generation rate less heavy-duty truck trip generation rate.
Approximate number of employees (2028)	2,785	employees / day	Based on 2.5 trips per employee per day.
Approximate number of employees (2033)	3,682	employees / day	Based on 2.5 trips per employee per day.
Approximate number of employees (2048)	4,248	employees / day	Based on 2.5 trips per employee per day.
Percent of employee trips in AM peak hour	5.1%	peak trips / daily trips	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse). 86% in and 14% out in AM peak hour. Peak percentage and inbound / outbound splits calculated based on average trip generation rates less heavy-duty truck trip generation rate.
Percent of employee trips in PM peak hour	7.6%	peak trips / daily trips	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse). 26% in and 74% out in PM peak hour. Peak percentage and inbound / outbound splits calculated based on average trip generation rates less heavy-duty truck trip generation rate.
Notes: KSF = thousand square feet			

Step 2 – Estimate Truck Trip Generation

As discussed above, most of the containers arriving at BIG's IMF would do so by train via its unique cross-dock intermodal operation. Because of this cross-dock intermodal operation and the use of internal electric hostlers, the IMF would generate very few heavy-duty trucks compared to a traditional IMF. A small percentage of containers arriving at the IMF would do so via heavy-duty trucks since this mode would reduce the travel distance and/or travel time for a small percentage of the potential service locations. For example, under current conditions, a container coming from Las Vegas today would travel by heavy-duty truck through Barstow to BNSF's San Bernardino or Hobart/Commerce Yard IMFs, then be transferred to a train for transport by rail to its destination.

With BIG, that container would stop short at the BIG IMF rather than continuing to the San Bernardino or Hobart/Commerce IMFs. Like operations at a traditional IMF, containers arriving at the BIG IMF via heavy-duty trucks would be transferred from a heavy-duty truck to a rail car and transported by rail to their destinations (and vice versa).

BIG's IMF heavy-duty truck trip generation is based on data provided by BNSF that considers market conditions, market forecasts, and the BIG IMF's processing capacity. It is assumed that in its secondary/other function (i.e., non-cross-dock function), the BIG IMF would only process intermodal freight which under current conditions is being processed at BNSF's San Bernardino or Hobart/Commerce rail yards or is not currently using an intermodal facility to reach its destination. These heavy-duty truck trips already exist within the broader Southern California roadway network, but they would be rerouted to BIG; therefore, they are included in BIG's trip generation. Based on existing market data, it is assumed that most containers processed at BIG's IMF under its secondary/other IMF operations would originate at/be destined for the Central Valley, Las Vegas, and High Desert areas.

Table 3 summarizes the assumptions for the IMF heavy-duty truck trip generation.

Table 3: Rail Yard – Heavy-Duty Truck Trip Generation Assumptions

Variable	Value	Unit	Notes
Working days per year	365	days / year	Provided by BNSF.
Monthly variation surcharge (increase in IMF heavy-duty truck trips)	13.0%	Increase in truck trips	Analysis assumes containers processed are spread evenly throughout the year, then apply a 13% surcharge to the daily units to account for potential seasonal surges. This is the most conservative assumption based on BNSF data from four southern California hubs.
Domestic revenue containers delivered by heavy-duty truck originating from/destined to all destinations (2028)	43,000	containers / year	Provided by BNSF
• *Domestic revenue containers originating from/destined to regional destinations (2028)*	*25,000*	*containers / year*	
• *Domestic revenue containers originating from/destined to the Victorville area (2028)*	*10,000*	*containers / year*	
• *Domestic revenue containers originating from/destined to the Central Valley (2028)*	*3,000*	*containers / year*	
• *Domestic revenue containers originating from/destined to Las Vegas and Arizona (2028)*	*5,000*	*containers / year*	
Domestic revenue containers delivered by heavy-duty truck originating from/destined to all destinations (2033)	53,400	containers / year	
• *Domestic revenue containers originating from/destined to regional destinations (2033)*	*33,100*	*containers / year*	
• *Domestic revenue containers originating from/destined to the Victorville area (2033)*	*11,300*	*containers / year*	
• *Domestic revenue containers originating from/destined to the Central Valley (2033)*	*3,400*	*containers / year*	
• *Domestic revenue containers originating from/destined to Las Vegas and Arizona (2033)*	*5,600*	*containers / year*	
Domestic revenue containers delivered by heavy-duty truck originating from/destined to all destinations (2048)	67,900	containers / year	

Variable	Value	Unit	Notes
• *Domestic revenue containers originating from/destined to regional destinations (2048)*	*38,400*	*containers / year*	
• *Domestic revenue containers originating from/destined to the Victorville area (2048)*	*16,400*	*containers / year*	
• *Domestic revenue containers originating from/destined to the Central Valley (2048)*	*4,900*	*containers / year*	
• *Domestic revenue containers originating from/destined to Las Vegas and Arizona (2048)*	*8,200*	*containers / year*	
Heavy-Duty truck trips per revenue container	3	trips / container	Analysis assumes 3 heavy-duty truck trips per unit to account for balancing empties – about 50% of trucks will leave with a container after they drop off a container.
Percent of heavy-duty truck trips in AM peak hour	5.0%	peak trips / daily trips	Values were determined based on data provided by BNSF, observed Hobart/Commerce Yard IMF heavy-duty truck activity, and ITE Land Use Code 150 (Warehousing) trip generation data. It is assumed that more heavy-duty trucks would access the BIG site during peak hours than currently access the Hobart/Commerce Yard IMF (approximately 2-3%) due to the rural location and Los Angeles basin traffic conditions. Therefore, a higher percentage of trips is assumed in the peak hours than is observed at the Hobart/Commerce Yard IMFs. Additionally, 60% in and 40% out is assumed during both peak hours based on ITE Land Use Code 150 (Warehousing) trip generation data.
Percent of heavy-duty truck trips in PM peak hour	4.0%	peak trips / daily trips	
Passenger car equivalent	2.5	PCE	Intermodal facility heavy-duty truck trips are converted to passenger car equivalents (PCE) per County TIS Guidelines and the PCE values noted in the San Bernardino County Congestion Management Program 2016 Update ("CMP") (SANBAG, 2016). Analysis assumes an equal mix of three-axle (PCE=2.0) and four-axle (PCE=3.0) trucks based on observed Hobart/Commerce Yard IMF data. See **Appendix B**.

The transload warehouse center heavy-duty truck trip generation is similar to the IMF's heavy-duty truck trip generation in that the center's truck trips are far less than those of a traditional transload warehouse, it is also based on data provided by BNSF, and it considers market conditions and forecasts. Most of the containers processed at the transload warehouses will arrive/depart via rail and be transported to/from the transload warehouses by electric hostlers on private roadways, never utilizing a heavy-duty truck or public roadway. As such, the trips

associated with the electric hostlers are not included in the trip generation for the transload warehouse center. A small percentage of heavy-duty trucks would access the transload warehouse center to deliver containers to/from the Ports, Inland Empire, and surrounding areas. These trips are the source of the truck trip generation for the transload warehouse center.

Table 4 summarizes the transload warehouse center truck trip generation data.

Table 4: Transload Warehouse Center – Heavy-Duty Truck Trip Generation Assumptions

Variable	Value	Unit	Notes
Working days per year	365	days / year	Provided by BNSF.
Transload 20-foot and 40-foot international containers delivered by truck (2028)	1,000	containers / year	Provided by BNSF.
Transload 20-foot and 40-foot international containers delivered by truck (2033)	1,300	containers / year	Provided by BNSF.
Transload 20-foot and 40-foot international containers delivered by truck (2048)	1,500	containers / year	Provided by BNSF.
Transload 53-foot domestic containers delivered by truck (2028)	20,000	containers / year	Provided by BNSF.
Transload 53-foot domestic containers delivered by truck (2033)	26,500	containers / year	Provided by BNSF.
Transload 53-foot domestic containers delivered by truck (2048)	30,700	containers / year	Provided by BNSF.
Truck trips per revenue container	3.0	trips / container	Analysis assumes 3 truck trips per container – approximately 50% of trucks would leave with a container after they drop off a container.
Percent of truck trips in AM peak hour	9.1%	peak trips / daily trips	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse). 49% in and 51% out in AM peak hour.
Percent of truck trips in PM peak hour	4.5%	peak trips / daily trips	ITE Land Use Code 154 (High Cube Transload and Short-Term Storage Warehouse). 47% in and 53% out in PM peak hour.
Truck Seasonal Volume Surcharge	13.0%	N/A	Analysis assumes containers processed are spread evenly throughout the year, then apply a 13% surcharge to the daily units to account for potential seasonal surges. This is the most conservative assumption based on BNSF data from four southern California hubs.
Passenger car equivalent	2.5	PCE	Analysis assumes an equal mix of three-axle (PCE=2.0) and four-axle (PCE=3.0) trucks based on observed Hobart/Commerce Yard IMF data. See **Appendix B**.

Step 3 – Convert Truck Trips to Passenger Car Equivalents

The intermodal facility heavy truck activity is anticipated to be approximately 50 percent 3-axle trucks and 50 percent 4-axle trucks, based on data collected at the Hobart/Commerce Yard IMFs, included in **Appendix B**. The San Bernardino County CMP lists PCE factors of 2.0 for 3-axle trucks and 3.0 for 4-axle trucks, which generates a 2.5 PCE factor for the intermodal facility truck activity.

Step 4 – Removed Land Use Trip Credits

While BIG would remove various existing land uses within the BIG footprint (i.e., residential, commercial, and industrial), BIG 's trip generation does not take credit for the trips associated with the removed land uses. This approach was selected to provide a more conservative analysis and since the occupancy of the existing land uses was unknown when the traffic counts were collected.

Step 5 – Total Trip Generation

BIG's total trip generation was estimated by adding employee trips and PCE truck trips. **Table 5**, **Table 6**, and **Table 7** summarize BIG trip generation for 2028, 2033, and 2048, respectively. **Appendix C** contains a trip generation table with rates, calculations, and assumptions.

Table 5: BIG Trip Generation – Opening Year 2028 Total

Land Use	Trip Type	ADT[1]	AM Peak Hour[2] Trips			PM Peak Hour[3] Trips		
			In	Out	Total	In	Out	Total
Transload Warehouse Center	Employee Trips	6,962	306	48	354	137	394	531
	Heavy Truck Trips	195	9	9	18	4	5	9
	Truck Trips (PCE[4])	*488*	*23*	*23*	*45*	*10*	*13*	*23*
Rail Yard (i.e., Intermodal Facility & Block Swap Yard)	Employee Trips	1,765	133	132	265	133	132	265
	Heavy Truck Trips	*399*	12	8	20	10	6	16
	Truck Trips (PCE)	*998*	*30*	*20*	*50*	*25*	*15*	*40*
	2028 Total BIG Trips (PCE)	**10,213**	**492**	**223**	**714**	**305**	**554**	**859**

Notes:
[1]ADT = Average Daily Traffic
[2]AM Peak Hour = hour of highest traffic between 7am and 9am
[3]PM Peak Hour = hour of highest traffic between 4pm and 6pm
PCE = passenger car equivalent

Sources:
- *ITE Land Use 154 (High Cube Transload and Short-Term Storage Warehouse)*
- *BNSF, 2025*
- *Author Compilation, 2025*

Table 6: BIG Trip Generation – Interim Year 2033 Total

Land Use	Trip Type	ADT[1]	AM Peak Hour[2] Trips			PM Peak Hour[3] Trips		
			In	Out	Total	In	Out	Total
Transload Warehouse Center	Employee Trips	9,204	404	64	468	182	520	702
	Heavy Truck Trips	258	11	12	23	6	6	12
	Truck Trips (PCE[4])	645	28	30	58	15	15	30
Rail Yard (i.e., Intermodal Facility & Block Swap Yard)	Employee Trips	2,085	157	156	313	157	156	313
	Heavy Truck Trips	495	15	10	25	12	8	20
	Truck Trips (PCE)	1,238	38	25	63	30	20	50
	2033 Total BIG Trips (PCE)	**13,172**	**627**	**275**	**902**	**384**	**711**	**1,095**

Notes:
[1]ADT = Average Daily Traffic
[2]AM Peak Hour = hour of highest traffic between 7am and 9am
[3]PM Peak Hour = hour of highest traffic between 4pm and 6pm
PCE = passenger car equivalent

Sources:
- *ITE Land Use 154 (High Cube Transload and Short-Term Storage Warehouse)*
- *BNSF, 2025*
- *Author Compilation, 2025*

Table 7: BIG Trip Generation – Horizon Year 2048 Total

Land Use	Trip Type	ADT[1]	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
Transload Warehouse Center	Employee Trips	10,620	466	74	540	210	600	810
	Heavy Truck Trips	299	13	14	27	7	7	14
	Truck Trips (PCE[2])	748	33	35	68	18	18	35
Rail Yard (Intermodal Facility & Block Swap Yard)	Employee Trips	2,325	175	174	349	175	174	349
	Heavy Truck Trips	630	19	13	32	15	10	25
	Truck Trips (PCE)	1,575	48	33	80	38	25	63
	2048 Total BIG Trips (PCE)	**15,268**	**722**	**316**	**1,037**	**441**	**817**	**1,257**

Notes:
[1]ADT = Average Daily Traffic
[2]AM Peak Hour = hour of highest traffic between 7am and 9am
[3]PM Peak Hour = hour of highest traffic between 4pm and 6pm
[4]PCE = passenger car equivalent

Sources:
- *ITE Land Use 154 (High Cube Transload and Short-Term Storage Warehouse)*
- *BNSF, 2025*
- *Author Compilation, 2025*

3 STUDY AREA (NON-CEQA LOS ASSESSMENT)

Per the County TIS Guidelines, at a minimum, the following types of facilities should be included in the LOS assessment study area:

- Site Access Driveways
- Roadway(s) adjacent to the project (per County staff request)
- Intersections in immediate vicinity of the project site
- Any intersection on which the project adds 50 or more peak hour trips

Freeway mainline LOS analysis is not required since freeway widening is not consistent with State policies and goals. Therefore, analysis of freeway segments is not included. An evaluation of LOS and queueing at the freeway ramp terminals intersections will be provided. Project trip assignments along freeway segments will be included for informational purposes.

The LOS assessment study area comprises the following transportation facilities:

- Intersections and roadway segments immediately adjacent to the BIG Specific Plan area.
- Intersections where BIG operations are expected to generate an increase of 50 or more directional trips in the peak hour.
    - Intersection 33 and 34 along Barstow Road do not meet the 50 trip criteria but are included since they are considered key study intersections.
- Roadway segments that are between study area intersections (it is noted, roadway segments with similar characteristics and volumes may be grouped together to simplify analysis).
    - Hinkley Road does not fit this criterion, however; it will be analyzed since BIG proposes realignment and significant improvements.
- Freeway off-ramps that intersect with study area intersections where BIG is expected to generate an increase in trips. Freeway off-ramp queueing analysis is included in the LOS analysis to meet Caltrans guidance.

The study area transportation facilities were selected by applying the Trip Generation (Section 2) to the Trip Distribution (Section 4) to develop the Trip Assignment (Section 5). The proposed study area consists of 39 intersections (16 signalized, 23 unsignalized) and 22 roadway segments. Trip assignment is also provided for 18 freeway segments (9 freeway sections with one segment in each direction) for informational purposes.

Table 8 summarizes the study intersections, and their respective control, jurisdiction, and LOS thresholds for planning-level LOS criteria consistency per their respective jurisdictions' standards. **Table 9** summarizes the study roadway segments, and their respective capacities, jurisdiction, and LOS thresholds for planning-level LOS criteria consistency per their respective jurisdictions' standards.

Table 10 summarizes the study freeway off-ramps and their respective controls. **Table 11** summarizes the freeway segments with trip assignments provided for informational purposes.

Figure 2 illustrates BIG's transportation resource study area. **Figure 3** illustrates the study area's current intersection lane geometries and traffic controls.

Table 8: Study Intersections

ID	Intersection	Existing Traffic Control	Jurisdiction	LOS Threshold[1]	CMP[2]
1	Main Street & Hinkley Road	One-Way Stop	City-County[3]	C	-
2	Main Street & Country Club Drive/Main Street Driveway	One-Way Stop	City	C	-
3	Main Street & Lenwood Road	Signal	Both City/County[4]	C	-
4	Lenwood Road & Sun Valley Drive	One-Way Stop	City	C	-
5	Main Street & Holland Street	Two-Way Stop	County	C	-
6	Main Street & Hannan Street	Two-Way Stop	County	C	-
7	Main Street & Townsend Street	Two-Way Stop	County	C	-
8	Main Street & Woods Avenue	Two-Way Stop	County	C	-
9	Main Street & Frank Street	Two-Way Stop	County	C	-
10	Main Street & Paris Avenue	One-Way Stop	County	C	-
11	Main Street & Ash Road	One-Way Stop	County	C	-
12	Main Street & Birch Road	One-Way Stop	County	C	-
13	Main Street & Western Drive	One-Way Stop	County	C	-
14	Main Street & Pettit Road	One-Way Stop	City	C	-
15	Main Street & SR 58 Eastbound Ramps	Signal	Caltrans	D	-
16	Main Street & SR 58 Westbound Ramps	Signal	Caltrans	D	-
17	Lenwood Road & Love's Travel Stop Driveway	Two-Way Stop	City	C	-
18	Lenwood Road & High Desert Road	Two-Way Stop	City	C	-
19	Lenwood Rd & Chevron Driveway	Two-Way Stop	City	C	-
20	Lenwood Road & Commerce Parkway	Signal	City	C	-
21	Lenwood Road & I-15 Southbound Ramp	Signal	Caltrans	D	-
22	Lenwood Road & I-15 Northbound Ramp	Signal	Caltrans	D	-
23	Lenwood Road & Jasper Road/Lenwood Road Driveway	Two-Way Stop	Both City/County	C	-
24	Lenwood Road & Camino Del Sol	One-Way Stop	Both City/County	C	-
25	Lenwood Road & Agate Road	Two-Way Stop	Both City/County	C	-
26	Lenwood Road & Community Blvd	Two-Way Stop	County	C	-
27	Lenwood Road & SR 58 Eastbound Ramps	All-Way Stop	Caltrans	D	-
28	Lenwood Road & SR 58 Westbound Ramps	All-Way Stop	Caltrans	D	-

ID	Intersection	Existing Traffic Control	Jurisdiction	LOS Threshold[1]	CMP[2]
29	Main Street & L Street	Signal	City	C	Yes
30	Main Street & Avenue H	Signal	City	C	Yes
31	Main Street & Avenue A	Signal	City	C	Yes
32	Main Street & 1st Avenue	Signal	City (Downtown)	D	Yes
33	Main Street & Barstow Road	Signal	City (Downtown)	D	Yes
34	Barstow Road & Virginia Way	Signal	City	C	Yes
35	Barstow Road & I-15 Southbound Ramps	Signal	Caltrans	D	Yes
36	Barstow Road & I-15 Northbound Ramps	Signal	Caltrans	D	Yes
37	Barstow Road & Armory Road	Signal	City	C	Yes
38	Barstow Road & Rimrock Road	Signal	City	C	Yes
39	Proposed Hinkley Road & Proposed Jasper Road	Proposed Intersection	City	C	No
40	Main Street & Elks Lane	Two-Way Stop	City	C	No

Notes:

[1] LOS – Level of Service; The LOS Threshold represents the acceptable LOS for the intersection. All City (non-downtown) and County intersections within the study area are considered to operate acceptably at LOS C or better, consistent with City LOS criteria and the County TIS Guidelines. All downtown City intersections along Main Street, between Otis Avenue to 7th Avenue, are considered to operate acceptably at LOS D or better. All Caltrans intersections located at freeway interchanges are considered to operate acceptably at LOS D or better.

[2] Notes if the intersection is part of the CMP network, per the San Bernardino County Congestion Management Program 2016 Update (SANBAG, 2016). The CMP states that for the CMP roadway system, intersections are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP intersections located within the Downtown area of City and LOS C is considered acceptable for CMP intersections outside the Downtown area.

[3] City-County indicates the Main Street & Hinkley Road intersection is currently under County jurisdiction but would be annexed into the City as part of the proposed General Plan, thus, is analyzed according to City standards.

[4] Both City/County indicates the intersection is located under both City and County jurisdiction (i.e., a portion of the intersection is in City right-of-way and a portion is in County right-of-way).

Table 9: Study Roadway Segments

Roadway	ID	Segment	Jurisdiction	LOS Threshold[1]	Acceptable LOS Capacity[1]	CMP[1]
Main Street	1	Hinkley Road to Country Club Drive	City-County[2]	D	14,300	-
	2	Country Club Drive to Lenwood Road	City	D	14,300 Ex. 30,200 Fut.	-
	3	Lenwood Road to County/City Boundary	County	C	16,400	-
	4	County/City Boundary to SR 58 Eastbound Ramps	City	D	30,200	-
	5	SR 58 Eastbound Ramps to SR 58 Westbound Ramps	Caltrans	D	30,200	-
	6	SR 58 Westbound Ramps to L Street	City	D	30,200	-
	7	L Street to Avenue A	City	D	30,200	Yes

Roadway	ID	Segment	Jurisdiction	LOS Threshold[1]	Acceptable LOS Capacity[1]	CMP[1]
	8	Avenue A to Barstow Road	City	D	30,200	Yes
Barstow Road	9	Main Street to I-15 Southbound Ramps	City	D	22,300	Yes
	10	I-15 Southbound Ramps to I-15 Northbound Ramps	Caltrans	D	30,200	Yes
	11	I-15 Northbound Ramps to Rimrock Road	City	D	30,200	Yes
Lenwood Road	12	SR 58 Westbound Ramps to Community Boulevard	County	C	7,000	-
	13	Community Boulevard to Agate Road	County	C	7,000	-
	14	Agate Road to Jasper Road	County	C	7,000	-
	15	Jasper Road to Main Street	City	D	30,200	-
	16	Main Street to High Desert Road	City	D	14,300	-
	17	High Desert Road to I-15 Southbound Off Ramp	City	D	30,200	-
	18	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	Caltrans	D	30,200	-
Hinkley Road	19	SR 58 Westbound Ramp to Project Driveway	County	C	7,000	-
	20	Project Driveway to Main Street [3]	County	C	7,000	-
	21	Western Project Driveway to Western Warehouse Center	City	D	30,200 Fut.	-
	22	Western Warehouse Center to Jasper Road	City	D	30,200 Fut.	-
	23	Jasper Road to Eastern Warehouse Center	City	D	30,200 Fut.	-
Proposed Jasper Road	24	Lenwood Road to Proposed Hinkley Road	City	D	30,200 Fut.	-

Notes:

[1] LOS – Level of Service; The LOS Threshold represents the acceptable LOS for the roadway segment. All County roadway segments within the study area are considered to operate acceptably at LOS C or better, consistent with the County TIS Guidelines. All City roadway segments within the study area are considered to operate acceptably at LOS D or better, consistent with the with recommendations that will be included in the City of Barstow General Plan Update (to be released). All Caltrans roadway segments within the study area are considered to operate acceptably at LOS D or better.

[2] City-County indicates the roadway segment is currently under County jurisdiction but would be annexed into the City as part of the proposed General Plan, thus, is analyzed according to City standards.

[3] Roadway segment proposed to be vacated as a BIG feature.

[4] Notes if the roadway segment is part of the CMP network, per the San Bernardino County Congestion Management Program 2016 Update (SANBAG, 2016). The CMP states that for the CMP roadway system, roadway segments are considered to operate acceptably at LOS E or better. However, for purposes of this analysis, LOS D or better is considered acceptable for the CMP roadways segments located within the City, consistent with non-CMP roadway segments located within the City.

*Table 10: **Study Freeway Off-Ramps***

Intersection ID	Off-Ramp	Existing Traffic Control
15	SR 58 Eastbound Off-Ramp at Main Street	Signal
16	SR 58 Westbound Off-Ramp at Main Street	Signal
21	I-15 Southbound Off-Ramp at Lenwood Road	Signal
22	I-15 Northbound Off-Ramp at Lenwood Road	Signal
27	SR 58 Eastbound Off-Ramp at Lenwood Road	All-Way Stop
28	SR58 Westbound Off-Ramp at Lenwood Road	All-Way Stop
35	I-15 Southbound Off-Ramp at Barstow Road	Signal
36	I-15 Northbound Off-Ramp at Barstow Road	Signal

Table 11: Freeway Segments for Informational Purposes

Freeway	ID	Segment
I-15	1	City of Victorville to Sidewinder Road
	2	Sidewinder Road to Lenwood Road
	3	Lenwood Road to SR 58
	4	SR 58 to L Street
	5	L Street to SR 247
SR-58	6	Kramer Junction to Hinkley Road
	7	Hinkley Road to Lenwood Road
	8	Lenwood Road to Main Street
	9	Main Street to I-15

4 TRIP DISTRIBUTION (NON-CEQA LOS ASSESSMENT)

OVERALL TRIP DISTRIBUTION

Figures 4, 5, 6, and 7 illustrate overall employee and truck trip distributions for Opening Year 2028 Plus BIG, Interim Year 2033 Plus BIG, and Horizon Year 2048 Plus BIG Scenarios. A more detailed discussion on employee and truck trip distributions is provided below.

EMPLOYEE TRIP DISTRIBUTION

Employee trip distribution is anticipated to be similar for both the rail yard and transload warehouse center and was developed using the San Bernardino Transportation Analysis Model Plus (SBTAM Plus). SBTAM Plus maintains two analysis years; a base year of 2023 (referred to as “2023 SBTAM Plus”) and a future year of 2050 (referred to as “2050 SBTAM Plus”). 2023 SBTAM Plus represents existing roadway and land use conditions. 2050 SBTAM Plus includes City roadway condition updates such as the following BIG Project Design Features (PDFs), which are described in further detail in Section 7: BIG driveways, Hinkley Road vacation and extension, Jasper Road extension, and Main Street widening improvements. The first page of **Appendix D**

depicts the City's SOI traffic analysis zones (TAZs), which include the City limits, Lenwood, and adjacent areas.

To assess employee traffic patterns to and from the BIG Specific Plan area, SBTAM "select zone model runs" were conducted that included only passenger car traffic traveling to the TAZs occupied by BIG. This process effectively filtered out all non-BIG traffic and isolated only traffic related to BIG employees. These BIG-specific model runs were used to develop BIG employee traffic distributions. The 2023 SBTAM Plus scenario does not include BIG, so the land uses in the parcels occupied by BIG in the "select zone model runs" were altered to match BIG in the model runs that were used to develop Opening Year 2028 BIG employee distributions. The 2050 SBTAM Plus was used to develop Horizon Year 2048 BIG employee distributions. Interim Year 2033 employee distributions were estimated by selecting the midpoint between the 2028 and 2048 employee distributions. The model-based distributions were refined based on the population areas, freeway access, roadway configurations, travel-time estimates, and expected travel patterns from the most populated surrounding areas. Plots of the SBTAM Plus distributions, calculations, and notes related to distribution refinements are included in **Appendix D**. More substantial distribution changes were made near the project site are a result of the following site access patterns, which are not reflected in SBTAM; rail yard employees would access the yard from the proposed Main Street driveway, and transload warehouse center employees would access the center from the proposed Lenwood Road driveway and proposed Hinkley Road driveway.

The forecast Opening Year 2028, Interim Year 2033, and Horizon Year 2048 employee trip distributions are presented in **Table 12.**

Table 12: Employee Trip Distribution

Major Roadway/Freeway	Opening Year 2028 Distributions	Interim Year 2033 Distributions	Horizon Year 2048 Distributions
State Route 58	2%	1.5%	1%
Interstate 15 South of Barstow	21%	19%	17%
State Route 247	1%	1%	1%
Interstate 40	3%	3%	3%
Interstate 15 East of Barstow	4%	3.5%	3%
Main St West of Site	4%	4%	4%
Lenwood Road North of Barstow	5%	4.5%	4%
Barstow/Local Roadway Network	60%	63.5%	67%
TOTALS	***100%***	***100%***	***100%***
	Sources: San Bernardino Transportation Analysis Model Plus (SBTAM Plus), Author Compilation		

Figures 8, ***9,*** and ***10*** illustrate the employee trip distributions for Opening Year 2028 Plus BIG, Interim Year 2033 Plus BIG, and Horizon Year 2048 Plus BIG scenarios, respectively.

TRUCK TRIP DISTRIBUTION

As discussed above, a small portion of the proposed IMF would operate similar to a traditional IMF in that it would process domestic intermodal containers arriving by truck, which without BIG, would be processed at BNSF's San Bernardino or Hobart/Commerce Yard IMFs or would be trucked to the Ports without being processed by an IMF at all. Origin/destination data from the Hobart/Commerce Yard IMFs was analyzed, and a trip distribution pattern was developed for the portion of the IMF that would receive containers by truck, accounting for the roadway system serving the study area. Transload warehouse center truck trip distribution was determined based on data provided by BNSF. All containers arriving at the BIG transload warehouse center via heavy-duty truck trips (i.e., those not arriving by rail/electric hostlers) are anticipated to originate at or be destined for the Ports.

Table 13 summarizes the truck trip distribution for the Plus BIG scenarios. **Figure 11** illustrates the truck trip distributions.

Table 13: ***Truck Trip Distribution (2028, 2033, and 2048)***

Major Roadway/Freeway	Rail Yard Distribution	Transload Distribution
From I-15 South of BIG	23%	100%
From I-40/I-15 East of BIG	11%	0%
From SR 58 West of BIG	66%	0%
Total	**100%**	**100%**

5 TRIP ASSIGNMENT (NON-CEQA LOS ASSESSMENT)

BIG trip distribution percentages were applied to BIG trip generation to determine BIG trip assignments.

Figure 12 illustrates BIG trip assignments for the Opening Year 2028 Plus BIG scenario, including employees, trucks, and total project trips (PCE).

Figure 13 illustrates BIG trip assignments for the Interim Year 2033 Plus BIG scenario, including employees, trucks, and total project trips (PCE).

Figure 14 illustrates BIG trip assignments for the Horizon Year 2048 Plus BIG scenario, including employees, trucks, and total BIG trips (PCE).

6 TRAFFIC VOLUMES (NON-CEQA LOS ASSESSMENT)

EXISTING NO BIG BASELINE TRAFFIC VOLUMES

The Existing No BIG Baseline scenario represents transportation conditions in the BIG study area in 2023, when traffic data was last collected.

Intersection turning movement counts were collected on weekdays during AM peak hours (7:00 to 9:00 AM) and PM peak hours (4:00 to 6:00 PM) in August 2021, December 2021, November 2022, and April 2023. Original counts were taken in August 2021. Select intersections showed

irregular count patterns; therefore, counts were retaken at intersections 27 and 28 in December 2021 and at intersection 3 in November 2022 to replace and/or verify previous count data. The study area was expanded in 2023 to include intersections 29 through 38, with counts taken in April 2023 for these intersections.

Roadway segment daily traffic counts were collected in August 2021 and March 2023, including vehicular classification data. Original counts were taken in August 2021. The study area was later expanded in 2023 to include roadway segments east of SR 58, with counts taken in April 2023 for these new roadway segments, as well as select segments that had previously been counted.

As available, 2021, 2022, and 2023 traffic volumes were compared and were noted to be similar. Therefore, the traffic counts noted above are assumed to reasonably reflect Existing No BIG Baseline conditions. The intersection and roadway segment traffic count data collection can be found in **Appendix E**.

Existing traffic volumes for Caltrans freeway ramps use the same data source as intersection turning movement counts discussed above, as all freeway ramps are connected to study area intersections.

It is assumed that the traffic count data noted above reflect Existing No BIG Baseline conditions.

Traffic counts conducted at 22 roadway segments over a 7-day period in 2021 were evaluated and showed a substantial reduction of the daily and AM/PM peak hour traffic during the weekend when compared to weekday traffic. Therefore, an analysis of weekend traffic operations will not be included.

METHODOLOGY FOR DEVELOPING OPENING YEAR 2028 AND INTERIM YEAR 2033 NO BIG BASELINE TRAFFIC VOLUMES

The Opening Year 2028 and Interim Year 2033 No BIG Baseline scenarios represent year 2028 and 2033 traffic conditions without BIG. Opening Year 2028 and Interim Year 2033 No BIG Baseline conditions traffic volumes were developed using SBTAM Plus data growth rates to proportionally increase the Existing No BIG Baseline traffic volumes based on the estimated increase of average daily traffic volumes on each intersection leg.

As discussed above, the 2023 SBTAM Plus represents existing (2023) land-use and employment conditions within the City's SOI without BIG. To understand forecast traffic growth in the study area excluding BIG traffic, a "2050 No BIG Baseline SBTAM Plus" was developed. This model replaces the forecast BIG land use and employment data within the BIG TAZs with the data from the 2023 SBTAM Plus scenario. The 2023 and 2050 SBTAM Plus No BIG Baseline outputs estimated and forecast daily and peak hour traffic volumes, without BIG, for years 2023 and 2050, respectively. SBTAM Plus plots are included in **Appendix D**.

For each roadway segment, the difference between these values was noted as the "forecast growth volume." This forecast growth volume was compared to the Existing No BIG Baseline Traffic Volume (grown to the SBTAM baseline year 2023 at a rate of one percent per year as applicable), to estimate the compound annual growth rates for each study area roadway

segments. This approach captures the growth reflected in SBTAM between the years 2023 and 2050 while still being calibrated to observed traffic data. Annual growth rates were applied to Existing No BIG Baseline roadway segment volumes to develop Opening Year 2028 and Interim Year 2033 No BIG Baseline volumes.

Opening Year 2028 and Interim Year 2033 No BIG Baseline intersection turning movement volumes were developed by increasing the Existing No BIG Baseline intersection turning movement volumes proportionally based on the estimated increase of average daily traffic volumes on each of the intersection legs. Each respective movement was derived using an iterative approach that balances the inflows and outflows for each approach. The input values include the exiting turning movement volumes and future year peak hour approach and departure volumes along each leg of the intersection. The future Peak-Hour approach volumes were estimated by applying the existing peak-hour factor (K-factor) and directional distributional percentage (D-factor) to the future ADT volumes along each approach. A detailed description of this methodology used to forecast turning movement volumes is contained in the National Cooperative Highway Research Program (NCHRP) 255 Highway Traffic Data for Urbanized Area Project Planning and Design, Chapter 8.

Additionally, cumulative traffic volumes associated with the Electrical Vehicle Charging Station and Logistics Facility project were added to the study area for Opening Year 2028 and Interim Year 2033. This project proposes to develop an electric vehicle charging hub and 3 warehouse buildings, which are estimated to generate 7,466 daily PCE trips, 581 AM peak hour PCE trips, and 623 PM peak hour PCE trips. The site is proposed along the east side of Lenwood Road, between Agate Road and Jasper Road. This project is not included in the 2023 SBTAM Plus model, but it is included in the 2050 No BIG Baseline SBTAM Plus model. Since the project has an opening year of 2028, full cumulative traffic volumes are expected to occur in the Opening Year 2028 and Interim Year 2033 scenarios. Although some cumulative traffic volumes are included in the growth rates between 2023 SBTAM Plus and 2050 No BIG Baseline SBTAM Plus, the full trip assignment volumes of the cumulative traffic volumes associated with the project were added to the Opening Year 2028 and Interim Year 2033 No BIG Baseline scenarios.

An example of the No BIG Baseline traffic volume growth calculations is included in **Appendix F**. **Appendix G** contains detailed information and calculations related to the development of cumulative traffic volumes, including documentation of trip generation/distribution/assignment assumptions.

METHODOLOGY FOR DEVELOPING HORIZON YEAR 2048 BASELINE TRAFFIC VOLUMES

The Horizon Year 2048 No BIG Baseline scenario represents horizon year 2048 traffic conditions without BIG. It was developed following the same methodology as Opening Year 2028 and Interim Year 2033 No BIG Baseline conditions. However, cumulative traffic volumes associated with the Electrical Vehicle Charging Station and Logistics Facility project were not added to the study area for the Horizon Year 2048 No BIG Baseline scenario since it was determined that the traffic volumes generated by this project would be mostly captured by the background growth rates determined using the 2050 No BIG Baseline SBTAM Plus model and forecasting to year 2048.

PLUS BIG TRAFFIC VOLUMES

The Opening Year 2028 No BIG Baseline, Interim Year 2033 No BIG Baseline, and Horizon Year 2048 No BIG Baseline traffic volumes discussed above will be considered Baseline Conditions. BIG volumes will be developed based on the methodologies discussed in the Trip Generation, Trip Distribution and Trip Assignment sections. BIG volumes will be added to Opening Year 2028 No BIG Baseline, Interim Year 2033 No BIG Baseline, and Horizon Year 2048 No BIG Baseline scenarios to respectively create the Opening Year 2028 Plus BIG, Interim Year 2033 Plus BIG, and Horizon Year 2048 Plus BIG scenarios, respectively.

HEAVY VEHICLES AT INTERSECTIONS

For both No BIG Baseline and Plus BIG scenarios, PCE volumes will be used instead of heavy vehicle percentages for the intersection analysis. Truck trips will be converted to PCE per the County TIS Guidelines and the PCE values noted in the Congestion Management Program, and heavy vehicle percentage will be set to zero percent in the traffic model. Minor side streets without classification data will be adjusted based on an assumption of 2% heavy vehicles with a PCE of 2.0. PCE calculations for intersections are included in **Appendix H.**

7 PROJECT DESIGN FEATURES (CEQA ASSESSMENT AND LOS ASSESSMENT)

BIG proposes to construct the following transportation improvements (i.e., PDFs); therefore, these are included in the analysis of Plus BIG conditions:

- **Hinkley Road.** BIG would vacate Hinkley Road between Jiggs Road and Main Street, terminating the existing at-grade rail crossing. BIG proposes to realign Hinkley Road to run east-west through the transload warehouse center from Jiggs Road to Jasper Road. The existing Hinkley Road bridge over the Mojave River would be reconstructed to conform to current federal and State standards.
- **Jasper Road Extension/Lenwood Road Driveway.** Transload warehouse center employees and heavy-duty trucks would enter BIG from the intersection of Jasper Road with Lenwood Road. On BIG's eastern portion, BIG proposes to extend Jasper Road parallel to the mainline tracks. The extension would cross Lenwood Channel with a bridge. To facilitate access to the proposed transload warehouse center, BIG proposes to install a traffic signal, roadway widening, and restriping at the intersection of Jasper Road with Lenwood Road.
- **Main Street Driveway.** Rail yard employees and heavy-duty trucks would access the rail yard from a new driveway proposed on Main Street across from Country Club Road. Rail yard employees would turn right to enter an employee parking lot near the proposed administrative buildings. Heavy-duty trucks dropping off or picking up containers at the IMF would enter through a gate system into the IMF. To facilitate access to the proposed rail yard, BIG proposes to install a traffic signal, roadway widening, and restriping at the driveway.

8 CONSISTENCY WITH PLANNING-LEVEL LEVEL OF SERVICE STANDARDS (NON-CEQA LOS ASSESSMENT)

The LOS Assessment will define transportation deficiencies based on the thresholds noted in the following documents:

- City of Barstow General Plan Update (to be released)
- San Bernardino County Transportation Impact Study Guidelines (San Bernardino County, 2019)
- San Bernardino Congestion Management Program 2016 Update (SANBAG, 2016)

If a relevant threshold is exceeded for signalized or unsignalized intersections, BIG is considered to create a transportation deficiency inconsistent with planning-level LOS standards, and transportation modifications to improve operations should be considered.

For roadway segments, if relevant V/C thresholds are exceeded, additional analysis will be performed to determine if BIG is considered to create a transportation deficiency. Additional analysis will be performed because the capacities used in V/C analysis are based on a road that experiences "typical" AM and PM peak hour traffic. In contrast, the roadway segments near the proposed site have traffic patterns that are distributed more evenly throughout the day without significant increases during AM and PM peak hours. This indicates that the roadway segments near the proposed site can accommodate higher daily traffic volumes than what V/C analysis conveys. Therefore, roadway segments with uninterrupted flow, which is assumed to be roadway segments with traffic control devices spaced at greater than 1 mile, will be analyzed using Highway Capacity Software (HCS) to further evaluate the LOS conditions. For roadway segments with interrupted flow, which is assumed to be roadway segments with traffic control devices spaced at less than or equal to one mile, Synchro arterial analysis will be performed to further evaluate LOS conditions.

9 SUMMARY OF PROPOSED OPERATIONAL PHASE LOS THRESHOLDS (NON-CEQA LOS ASSESSMENT)

The City of Barstow's proposed General Plan Draft Policy states:

> CM-1.1: Strive to maintain a citywide level of service (LOS) standard not exceeding LOS D for roadways and LOS C for City-controlled intersections for weekday peak. Allow LOS D for intersections in the downtown in recognition of the built-out nature and desire for lower speeds for safety (motorist, bicyclist, or pedestrian), and greater business exposure.
>
> CM-2/5: Enhance the public realm to create a pedestrian- and transit-friendly environment along and connecting to Main Street between Otis and 7th Avenues.

BIG would be considered to cause a transportation deficiency inconsistent with planning-level LOS standards if the following occurs:

- For signalized intersections, if the Plus BIG condition operates at LOS of D or worse and BIG increases the average traffic delay by 5 seconds or more over the No BIG Baseline condition, except the following:

  - For signalized intersections located at freeway interchanges within Caltrans right-of-way, if the Plus BIG condition operates at LOS E or worse and BIG increases the average traffic delay by 5 seconds or more over the No BIG Baseline condition.
  - For signalized intersections located within the City's downtown area, if the Plus BIG condition operates at LOS E or worse and BIG increases the average traffic delay by 5 seconds or more over the No BIG Baseline condition.

  The assumed 5 second threshold is consistent with the County TIS Guidelines.

- For unsignalized intersections, if the Plus BIG condition operates at LOS of D or worse and BIG increases the traffic delay by 5 seconds or more (measured as average delay for all-way stop or worst-movement delay for a side-street-stop intersection) over the No BIG Baseline condition, except the following:
  - For unsignalized intersections located at freeway interchanges within Caltrans right-of-way, if the Plus BIG condition operates at LOS E or worse and BIG increases the average traffic delay by 5 seconds or more over the No BIG Baseline condition.
  - For unsignalized intersections located within the City's downtown area, if the Plus BIG condition operates at LOS E or worse and BIG increases the average traffic delay by 5 seconds or more over the No BIG Baseline condition.

  The assumed 5 second threshold is consistent with the County TIS Guidelines.

- For roadway segments with uninterrupted flow, if the Plus BIG condition operates at LOS of E or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and HCS analysis indicates vehicle density that results in LOS E or worse during the AM and PM peak hour conditions, except the following:
  - For segments with uninterrupted flow within unincorporated County right-of-way, if the Plus BIG condition operates at LOS D or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and HCS analysis indicates vehicle density that results in LOS D or worse during the AM and PM peak hour conditions.

  The assumed 0.05 threshold is consistent with the County TIS Guidelines.

- For roadway segments with interrupted flow, if the Plus BIG condition operates at LOS of E or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and roadway segment arterial analysis indicates travel speeds that result in LOS E or worse during the AM and PM peak hour conditions, except the following:
  - For roadway segments with interrupted flow conditions within unincorporated County right-of-way, if the Plus BIG condition operates at LOS D or worse and BIG increases the roadway segment's V/C ratio by 0.05 or more over the No BIG Baseline condition, and the roadway segment arterial analysis indicates travel speeds that result in LOS D or worse during the AM and PM peak hour conditions.
- For freeway off-ramps, if the Plus BIG condition creates an increase in queuing that would cause the off-ramp queues to exceed the ramp facility's functional storage capacity. The exit ramp functional storage capacity is based on ramp length minus stopping sight distance.

Table 8: Study Intersections and **Table 9: Study Roadway Segments** list the LOS thresholds from planning-level LOS standards for each study area intersection and roadway segment.

10 ADDITIONAL LOS ASSESSMENT TOPICS (NON-CEQA LOS ASSESSMENT)

The following topics will also be included in the LOS Assessment:

- Site Access Analysis
- On Site Circulation

11 VMT ASSESSMENT (CEQA ASSESSMENT)

The City of Barstow Vehicle Miles Traveled Threshold of Significance for Purposes of Analyzing Transportation Impacts Under the California Environmental Quality Act ("City VMT Guidelines") (Barstow, 2020), included in **Appendix I**, was adopted in 2020 and establishes the City's preferred methodology to measure VMT and analyze a project's VMT impact, and VMT thresholds of significance. **Table 14** outlines the relevant sections addressing transportation applicable to BIG.

Table 14: City of Barstow VMT Resolution - Transportation

Section	Standard
Section 1	
Section 1.1	Utilizing the San Bernardino County Travel Demand Model Plus (SBTAM Plus) as its preferred methodology to measure VMT.
Section 1.2	Utilizing the San Bernardino County Travel Demand Model Plus (SBTAM Plus) as its preferred method to analyze a project's VMT impact.
Exhibit A: Table 1 VMT Impact Thresholds (Land Use Plans)	
VMT analysis using SBTAM Plus	Project Threshold: A significant impact would occur if the project VMT per Service Population (VMT/SP) exceeds the [Countywide/Citywide] average under proposed General Plan Buildout Conditions. Cumulative Threshold: A significant impact would occur if the project caused total daily VMT within the City to be higher than the no project alternative under cumulative conditions.

Source: City of Barstow (2020). *A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BARSTOW ADOPTING "VEHICLE MILES TRAVELED" THRESHOLDS OF SIGNIFICANCE FOR PURPOSES OF ANALYZING TRANSPORTATION IMPACTS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (City of Barstow VMT Resolution).*

The CEQA Assessment VMT analysis will use the horizon year SBTAM Plus (provided by the City) to measure BIG-induced and cumulative changes in VMT. Per coordination with City staff, it was determined that for the "Project Threshold" the "Home Based Work VMT per Worker" metric should be used as the preferred interpretation of the "Total VMT per Service Population" since this metric excludes truck trips and is more applicable for an industrial-related land use plan. Therefore, a significant project impact would occur if BIG's Home Based Work VMT per Worker is greater than the City's average Home Based Work VMT per Worker under the horizon year SBTAM Plus conditions.

Per coordination with City staff, it was determined that for the "Cumulative Threshold" the "Total Daily VMT per Service Population" metric should be used in lieu of the "Total Daily VMT" since

VMT per service population is a better measure of VMT efficiency. While any new land use project in the City would increase total daily VMT within the City, the better measure of efficiency and overall impacts is VMT per service population. Therefore, a significant cumulative impact would occur if the addition of the BIG project causes the total daily VMT per service population within the City to be higher than the no project alternative under the horizon year SBTAM Plus conditions using the 'boundary' method (also referred to as 'project effect' method).

A separate discussion about truck miles traveled will be provided for informational purposes and to inform other relevant BIG analyses. BIG is anticipated to reduce truck miles traveled by 1) increasing the use of trains for cargo transportation; and 2) providing an IMF closer to container origin than currently exists.

OPR guidance does not address VMT analysis related to construction. Additionally, the County TIS and City VMT Resolution does not include construction VMT requirements. Therefore, a separate construction period VMT analysis will not be included as part of the CEQA Assessment.

12 CONSISTENCY ANALYSIS (CEQA ASSESSMENT)

The CEQA Assessment will also include an analysis of BIG's compliance and consistency with adopted policies, plans, or programs regarding active transportation and public transit facilities for compliance with the State CEQA Guidelines on impacts on non-automotive facilities. Additionally, the CEQA Assessment will include a discussion on emergency access and roadway hazards consistent with the State CEQA Guidelines.

Consistent with the Caltrans *Local Development Review (LDR) Safety Review Practitioner's Guidance* (Caltrans 2024), the CEQA Assessment will also obtain and review the following data:

- The most recent available five years of collision data at interchanges within the Project study area
- Caltrans average crash ratios for similar interchange facilities (through Caltrans Traffic Accident Surveillance and Analysis System)
- Freeway off-ramp queueing analysis

SA separate report will be submitted for the CEQA Assessment, which will include the following:

- Vehicle Miles Traveled (VMT) Analysis
- Active Transportation and Public Transit Analysis
- Discussion on emergency access and roadway hazards
- Consistency with County Plans and Policies
- Circulation system conflict and consistency evaluation
- Caltrans interchange collision review
- Construction period effects

Figures

Figure 1: BIG Conceptual Site Plan
Figure 2: BIG Project Transportation Resource Study Area
Figure 3: Existing Lane Configuration and Traffic Control
Figure 4: BIG Overall Trip Distribution (Employee) – Opening Year 2028
Figure 5: BIG Overall Trip Distribution (Employee) – Interim Year 2033
Figure 6: BIG Overall Trip Distribution (Employee) – Horizon Year 2048
Figure 7: BIG Overall Trip Distribution (Truck)
Figure 8: BIG Employee Intersection Trip Distribution – Opening Year 2028
Figure 9: BIG Employee Intersection Trip Distribution – Interim Year 2033
Figure 10: BIG Employee Intersection Trip Distribution – Horizon Year 2048
Figure 11: BIG Truck Intersection Trip Distribution
Figure 12: Trip Assignment – Opening Year 2028
Figure 13: Trip Assignment – Interim Year 2033
Figure 14: Trip Assignment – Horizon Year 2048

Appendices

Appendix A – ITE Land Use Description and Memo for High-Cube Warehouse Vehicle Trip Generation Analysis
Appendix B – Hobart/Commerce Yard IMFs Trip Data and San Bernardino CMP PCE Guidelines
Appendix C – Trip Generation Table
Appendix D – SBTAM Plus City of Barstow Traffic Analysis Zones, Trip Distribution Plots, and Volume Plots
Appendix E – Intersection Turning Movement Counts and Roadway Segment Average Daily Traffic Counts
Appendix F – Roadway Segment Growth Calculations and Intersection Growth Calculation Examples
Appendix G – Cumulative Projects Near Term Volumes
Appendix H – PCE Conversion Calculations
Appendix I – City of Barstow VMT Thresholds

Outlook

RE: BNSF BIG Traffic Scoping Letter - Final

From Chris Heldreth <cheldreth@barstowca.org>
Date Thu 5/15/2025 12:45 PM
To Shultz, Joe <Joe.Shultz@kimley-horn.com>; mteague@placeworks.com <mteague@placeworks.com>; Genesis Crank <gcrank@barstowca.org>; Matthew Summers <msummers@chwlaw.us>; Taylor M. Anderson <tanderson@chwlaw.us>; Jeanette Hayhurst <jethayhurst@gmail.com>
Cc Thomas, James <James.Thomas@kimley-horn.com>; Harry, Jennifer <Jennifer.Harry@kimley-horn.com>; Germain, Naomi (Willis) <naomi.Germain@kimley-horn.com>; Rowe, Josh <Josh.Rowe@kimley-horn.com>; 'David.Rankin' <david.rankin@bnsf.com>

Good afternoon, Joe,

After discussing it with Matthew, the city accepts the traffic scoping agreement as written. The document did not have a signature line. If this email will suffice, please let it be used for our acceptance.

Community Development Director

City of Barstow
Chris Heldreth
760-255-5169
cheldreth@barstowca.org

220 East Mountain View St.
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Barstow, CA 92311

www.barstowca.org

Learn why Barstow is the perfect place to relocate. Download our marketing materials at
www.barstowca.org/government/city-manager/economic-development

From: Shultz, Joe <Joe.Shultz@kimley-horn.com>
Sent: Thursday, May 15, 2025 9:42 AM
To: mteague@placeworks.com; Genesis Crank <gcrank@barstowca.org>; Chris Heldreth <cheldreth@barstowca.org>
Cc: Thomas, James <James.Thomas@kimley-horn.com>; Harry, Jennifer <Jennifer.Harry@kimley-horn.com>; Germain, Naomi (Willis) <naomi.Germain@kimley-horn.com>; Rowe, Josh <Josh.Rowe@kimley-horn.com>; 'David.Rankin' <david.rankin@bnsf.com>
Subject: BNSF BIG Traffic Scoping Letter - Final

[NOTICE: THIS IS AN EXTERNAL EMAIL]
Do not open any suspicious attachments or links. Do not reply to any requests for sensitive information. If in doubt, call the sender to confirm!

Caution! This message was sent from outside your organization.

Genesis,

Below is a link to download the revised Transportation Scoping Letter for the BNSF Barstow International Gateway project. I've also included a comment response letter that details how each comment was addressed or explains the rationale for not incorporating certain comments.

https://kimley-horn.securevdr.com/d-saad1abd46572419bb20227da90a675cc

Please distribute to Matthew, Chris, and Taylor for approval.

Regards,

Joe Shultz, PE, TE, PTOE

Kimley-Horn | 401 B Street, Suite 600, San Diego, CA 92101
Direct: 619-272-7194

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Appendix B: Signal Timing Data

9/15/15

B233

INTERSECTION:
Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street Name: Lenwood Rd
E/W Street Name: Main St

Last Database Change:

Change Record

Change	By	Date	Change	By	Date

Notes:

Manual Plan
0 = Automatic
1-8 = Plan 1-8
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Drop Number		<C/0+0+0>
Zone Number		<C/0+0+1>
Area Number		<C/0+0+2>
Area Address		<C/0+0+3>
QuicNet Channel		(QuicNet)

Communication Addresses

Manual Plan	14	<C/0+A+1>
Manual Offset		<C/0+B+1>

Manual Selection

Flash Start	5	<F/1+0+E>
Red Revert	5	<F/1+0+F>
All Red Start	5	<F/1+C+0>

Start / Revert Times

Exclusive Walk		<F/1+0+0>
Exclusive FDW		<F/1+0+1>
All Red Clear		<F/1+0+2>

Exclusive Ped Phase
(Outputs specified in Assignable Outputs at E/127+A+E & F)

Phase Timing - Bank 1 <C+0+F=1>

Row	Column Numbers →	Phase 1	2	3	4	5	6	7	8
	Phase Names →	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBT
502	Ped Walk	0	4	0	4	0	4	0	4
503	Ped FDW	0	29	0	29	0	29	0	29
504	Min Green	4	10	4	10	4	10	4	10
505	Type 3 Disconnect								
506	Added per Vehicle	0	0	0	0	0	0	0	0
507	Veh Extension	1.5	3	1.5	3	1.5	3	1.5	3
508	Max Gap	1.5	5	1.5	5	1.5	5	1.5	5
509	Min Gap	1.5	3	1.5	3	1.5	3	1.5	3
510	Max Limit	20	40	15	40	20	40	15	40
511	Max Limit 2	20	40	15	40	20	40	15	40
512	Adv. / Delay Walk								
513	PE Min Ped FDW		29		29		29		29
514	Cond-Serv Check								
515	Reduce Every								
516	Yellow Change	3	4.3	3	5	3	4.3	3	5
517	Red Clear	1	1	1	1.5	1	1	1	1.5

Alternate Timing <C+0+F=1>

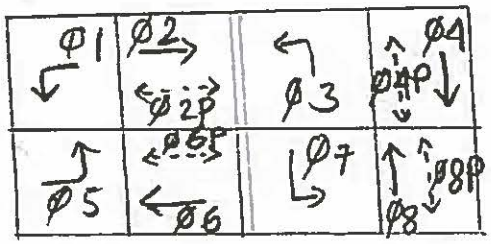
	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Preempt Timing

	E	
RR-1 Delay		
RR-1 Clear		
EV-A Delay		
EV-A Clear	1	*
EV-B Delay		
EV-B Clear	1	*
EV-C Delay		
EV-C Clear	1	*
EV-D Delay		
EV-D Clear	1	*
RR-2 Delay		
RR-2 Clear		
View EV Delay	--	
View EV Clear	--	
View RR Delay	--	
View RR Clear	--	

Phase Functions <C+0+F=1>

Row	FFO	F	
501	Permit	1 2 3 4 5 6 7 8	*
502	Red Lock		
503	Yellow Lock		
504	Min Recall	2 6	*
505	Ped Recall		
506	View Set Peds	.....	
507	Rest In Walk		
508	Red Rest		
509	Dual Entry	4 8	*
510	Max Recall		
511	Soft Recall		
512	Max 2		
513	Cond. Service	1 5	*
514	Man Cntrl Calls		
515	Yellow Start	4 8	*
516	First Phases	2 6	*



Timing Sheet Version: 233 RV2.B

Revision: 30828 - Stand Alone

Row	Column Numbers → / Overlap Name →	Overlap 1	2	3	4	5	6	7	8
02	Load Switch Number								
03	Veh Set 1 - Phases								
04	Veh Set 2 - Phases								
05	Veh Set 3 - Phases								
06	Neg Veh Phases								
07	Neg Ped Phases								
08	Green Omit Phases								
09	Green Clear Omit Phs.								
0A									
0B									
0C									
0D									
0E	Green Clear								
0F	Yellow Change								
10	Red Clear								

Overlap Assignments <C+0+E=29>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = Solid FDW on EV
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = ClubNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Row		Col 1
05	EV-A	
06	EV-B	
07	EV-C	
08	EV-D	
09	RR-1 *	---
0A	RR-2 *	---
0B	SE-1	
0C	SE-2	

Preempt Priority <C+0+E=125>
(* RR-1 is always Highest, and RR-2 is always Second Highest)

Row	Column Numbers →	1
02	Exclusive Phases	
03	RR-1 Clear Phases	
04	RR-2 Clear Phases	
05	RR-2 Limited Service	
06	Prot / Perm Phases	
07	Flash to PE Circuits	
08	Flash Entry Phases	
09	Disable Yellow Range	
0A	Disable Ovp Yel Range	
0B	Overlap Yellow Flash	
0C	EV-A Phases	2 5 X
0D	EV-B Phases	4 7 X
0E	EV-C Phases	1 6 X
0F	EV-D Phases	3 8 X
10	Extra 1 Config. Bits	1 3 X
11	IC Select (Interconnect)	X

Configuration <C+0+E=125>

	1
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	X
Ped for 2P Output	2 X
Ped for 6P Output	6 X
Ped for 4P Output	4 X
Ped for 8P Output	8 X
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	

Configuration <C+0+E=125>

	1
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	X
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	1 2 3 4 5 6 7 8
Start-up Ped Calls	2 4 6 8

Specials <C+0+F=2>

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Row		Col 1
02	Phase 1	
03	Phase 2	
04	Phase 3	
05	Phase 4	
06	Phase 5	
07	Phase 6	
08	Phase 7	
09	Phase 8	

Coordination Transition Minimums <C+0+C=5>

INTERSECTION:

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street Name: **Commerce Pkwy**
E/W Street Name: **Lenwood Rd**

Last Database Change: **2/6/2015**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number		<C+0+0>
Zone Number		<C+0+1>
Area Number		<C+0+2>
Area Address		<C+0+3>
QuicNet Channel		(QuicNet)

Communication Addresses

Manual Plan		<C+A+1>
Manual Offset		<C+B+1>

Manual Selection

Max Initial		<F+0+E>
Red Revert		<F+0+F>
All Red Start		<F+C+0>

Start / Revert Times

Sequence
Ph 1 + Ph 5
Ph 2 + Ph 6
Ph 4
Ph 8

Row	Column Numbers --->	Phase 1	2	3	4	5	6	7	8
	Phase Names --->	WBL	EBT		SBTL	EBL	WBT		NBTL
0	Ped Walk		5		5		5		
1	Ped FDW		17		17		17		
2	Min Green	8	20		8	8	20		8
3	Type 3 Limit								
4	Added Initial								
5	Veh Extension	3.0	3.0		3.0	3.0	3.0		3.0
6	Max Gap								
7	Min Gap	3.0	3.0		3.0	3.0	3.0		3.0
8	Max Limit	15	35		25	15	35		15
9	Max Limit 2								
A									
B	Call To Phase								
C	Reduce By								
D	Reduce Every								
E	Yellow Change	3.5	3.5		3.5	3.5	3.5		3.5
F	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0

Phase Timing - Bank 1 <F Page>

E	
RR-1 Delay	
RR-1 Clear	
EV-A Delay	
EV-A Clear	
EV-B Delay	
EV-B Clear	
EV-C Delay	
EV-C Clear	
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

F		Row
Permit	1,2,4,5,6,8	0
Red Lock		1
Yellow Lock		2
Min Recall	2,6	3
Ped Recall		4
View Set Peds	2,4,6	5
Rest In Walk		6
Red Rest		7
Dual Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start		E
First Phases	2,6	F

Phase Functions <F Page>

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

INTERSECTION:

Coordination

Row	Column Numbers ---->	Plan 1	2	3	4	5	6	7	8	9	Row
	Plan Name ---->	WEEK	FRI	SUN							
0	Cycle Length	90	90	90							0
1	Phase 1 - ForceOff	15	15	15							1
2	Phase 2 - ForceOff	35	35	35							2
3	Phase 3 - ForceOff										3
4	Phase 4 - ForceOff	25	25	25							4
5	Phase 5 - ForceOff	15	15	15							5
6	Phase 6 - ForceOff	35	35	35							6
7	Phase 7 - ForceOff										7
8	Phase 8 - ForceOff	15	15	15							8
9	Ring Offset										9
A	Offset 1										A
B	Offset 2										B
C	Offset 3										C
D	Permissive										D
E	Hold Release										E
F	Zone Offset										F

<C Page>

(* = Coordination Recall)

Sync Phases

Row		E	Row
			0
1	Plan 1 - Sync		1
2	Plan 2 - Sync		2
3	Plan 3 - Sync		3
4	Plan 4 - Sync		4
5	Plan 5 - Sync		5
6	Plan 6 - Sync		6
7	Plan 7 - Sync		7
8	Plan 8 - Sync		8
9	Plan 9 - Sync		9
A	Coord Ped *		A
B	NEMA Hold		B
C			C
D			D
E			E
F			F

<C Page>

Configuration

Row	Column Numbers ---->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	
C	EV-C Phases	
D	EV-D Phases	
E	Extra 1 Config. Bits	
F	IC Select (Interconnect)	

<E Page>

Configuration

	F
RR Overlap A - Phases	
RR Overlap B - Phases	
RR Overlap C - Phases	
RR Overlap D - Phases	
Ped 2P	2
Ped 6P	6
Ped 4P	4
Ped 8P	
Yellow Flash Phases	
Overlap A - Phases	
Overlap B - Phases	
Overlap C - Phases	
Overlap D - Phases	
Restricted Phases	
Assign 5 Outputs	

<E Page>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 =
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

Assign 5 Outputs
(Ped Loadswitch Yellows)
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Force-Off Adjust	

Coord Force-Off Adjust for Ped Service <C+D+F>

Transition Type	

TBC Transition <C+D+D>

Transition Type
0 = Shortway
Non-zero = Lengthen

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Lag Phases

Row		F	Row
0	Free Lag		0
1	Plan 1 - Lag	2,6	1
2	Plan 2 - Lag		2
3	Plan 3 - Lag		3
4	Plan 4 - Lag		4
5	Plan 5 - Lag		5
6	Plan 6 - Lag		6
7	Plan 7 - Lag		7
8	Plan 8 - Lag		8
9	Plan 9 - Lag		9
A	Coord Max *		A
B	Coord Lag *		B
C			C
D			D
E			E
F			F

<C Page>

INTERSECTION:

Row	Time	Plan	Offset	Day of Week
0	:			
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Coordination
<9 Key with C+D+9=0>

Time	Funct.	Day of Week
05:00		All
19:00		All
:		
:		
:		
:		
:		
:		
:		
:		
:		
:		
:		
:		
:		
:		
:		

TOD Function
<7 Key>

Column F
Phases/Bits

<D Page>

Time	Plan	Offset	Day of Week
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			

Holiday # 1
TOD Coordination
<9 Key with C+D+9=1>

Time	Plan	Offset	Day of Week
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			
:			

Holiday # 2
TOD Coordination
<9 Key with C+D+9=2>

Time	Plan	Offset	Day of Week	Row
:				0
:				1
:				2
:				3
:				4
:				5
:				6
:				7
:				8
:				9
:				A
:				B
:				C
:				D
:				E
:				F

Holiday # 3
TOD Coordination
<9 Key with C+D+9=3>

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Month Select
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Row		Day	Year	Month	Day of Week
A	Holiday # 1 Date				
B	Holiday # 2 Date				
C	Holiday # 3 Date				

Holiday Dates
<8 Key>

INTERSECTION:

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				I-1	14
1				I-2U	1
2				I-2L	5
3				I-3U	21
4				I-3L	25
5				I-4	9
6				I-5	16
7				I-6U	3
8				I-6L	7
9				I-7U	23
A				I-7L	27
B				I-8	11
C				I-9U	18
D				I-9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				J-1	13
1				J-2U	2
2				J-2L	6
3				J-3U	22
4				J-3L	26
5				J-4	10
6				J-5	15
7				J-6U	4
8				J-6L	8
9				J-7U	24
A				J-7L	28
B				J-8	12
C				J-9U	17
D				J-9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	
B	9 10 11 12 -- -- -- --	
C	13 14 15 16 17 18 19 20	
D	-- -- -- -- 21 22 23 24	
E	-- -- -- -- -- -- -- --	
F	-- 25 26 27 28 -- -- --	

Active Detectors <D Page>

Note: Initialized data is for all detectors to be active (ie, all flag bits set). A Detector which is "not flagged", will not be active as a Phase Detector, and WILL NOT call or extend its associated phase. It will still function as a System Detector.

Row		0 Detector Number
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (minutes)		<D+A+E>
Max OFF (minutes)		<D+A+F>

Detector Failure Monitor

Phase Number		<F+C+1>
Time B4 Yellow		<F+C+3>

Advance Warning Beacon - Sign 1

Phase Number		<F+D+1>
Time B4 Yellow		<F+D+3>

Advance Warning Beacon - Sign 2

Long Failure		<F+0+6>
Short Failure		<F+0+7>

Power Cycle Correction (Default = 0.5)

Disable Parity		<D+B+0>

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

INTERSECTION:

Row	Column Numbers --->	Phase 1	2	3	4	5	6	7	8
	Phase Names --->								
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Limit								
4	Added Initial								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A									
B	Call To Phase								
C	Reduce By								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 2 <F Page>

Row	Column Numbers --->	Phase 1	2	3	4	5	6	7	8
	Phase Names --->								
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Limit								
4	Added Initial								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A									
B	Call To Phase								
C	Reduce By								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 3 <F Page>

Row	7 Time	8 Dwell	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0 (Delay Only --->)		---	---	---	---	---	---	---	---
1									
2									
3									
4									
5									
6									
7									
8									
9									
A (Limited Service Int. --->)	---								
B									
C									
D									
E									
F									

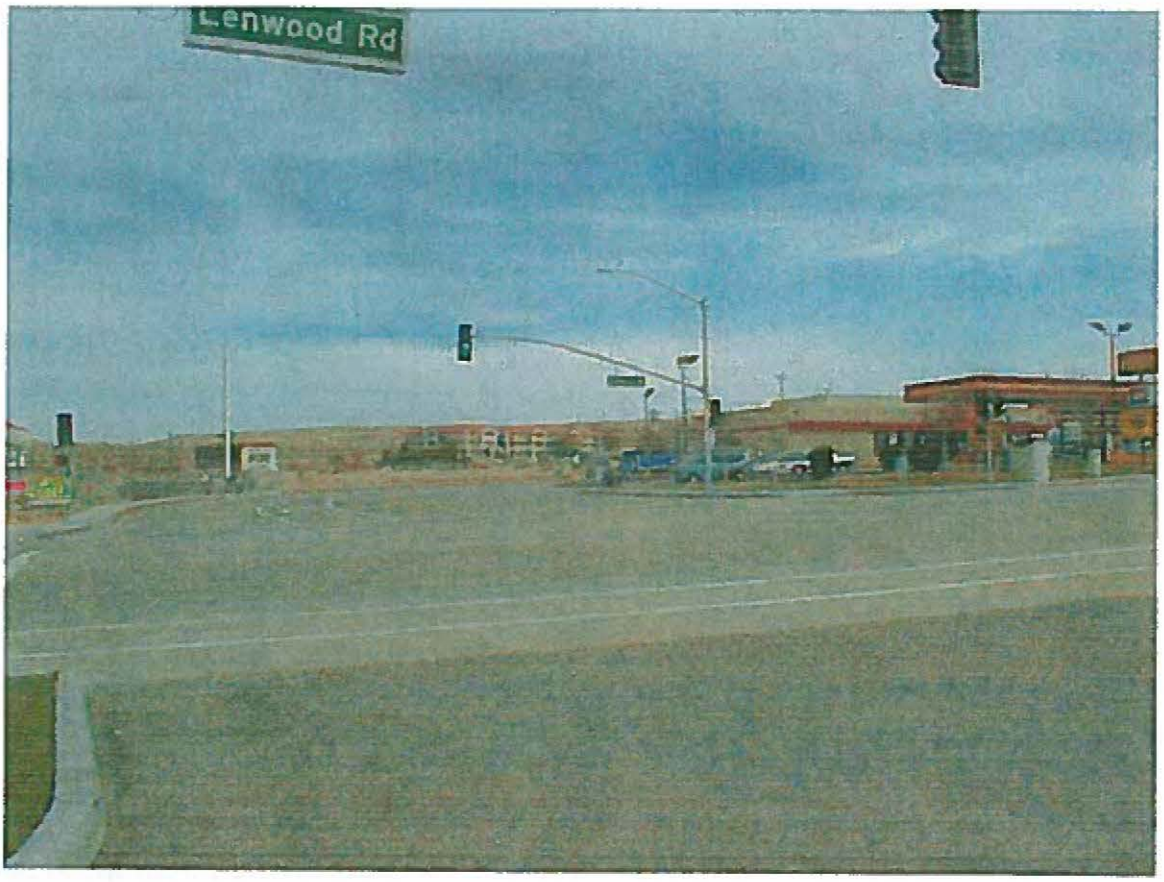
Special Event Schedule <C Page with F+9+F=22>

<--- Limited Service Interval (Set Dwell = 255)

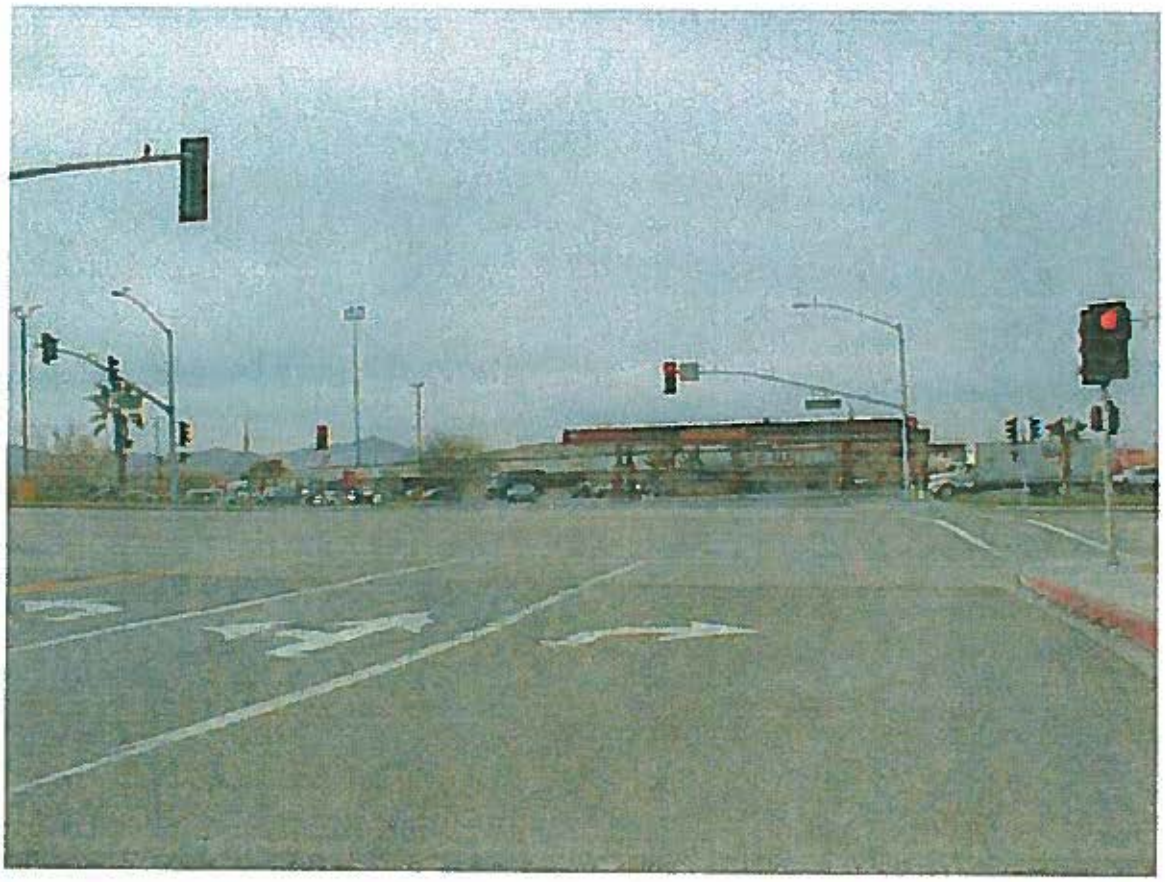
Copy from controller 11-5-04

Phase

INTERVAL	1	2	3	4	5	6	7	8	
0		5	0	5		5		7	0
1		23	0	24		23		10	1
2	10	10	3	5	10	10	3	9	2
3									3
4		1.2		1.2		1.2		1.2	4
5	0.5	3.5	0.5	3.5	0.5	3.5	0.5	3.5	5
6	0.5	5.0	0.5	5.0	0.5	5.0	0.5	50	6
7	0.5	2.0	0.5	2.0	0.5	2.0	0.5	20	7
8	19	40	17	40	17	40	17	40	8
9	30	70	30	70	30	70	30	70	9
A									A
B									B
C	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	C
D	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	D
E	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0	E
F	1.0	1.0		1.0	1.0	1.0		1.0	F



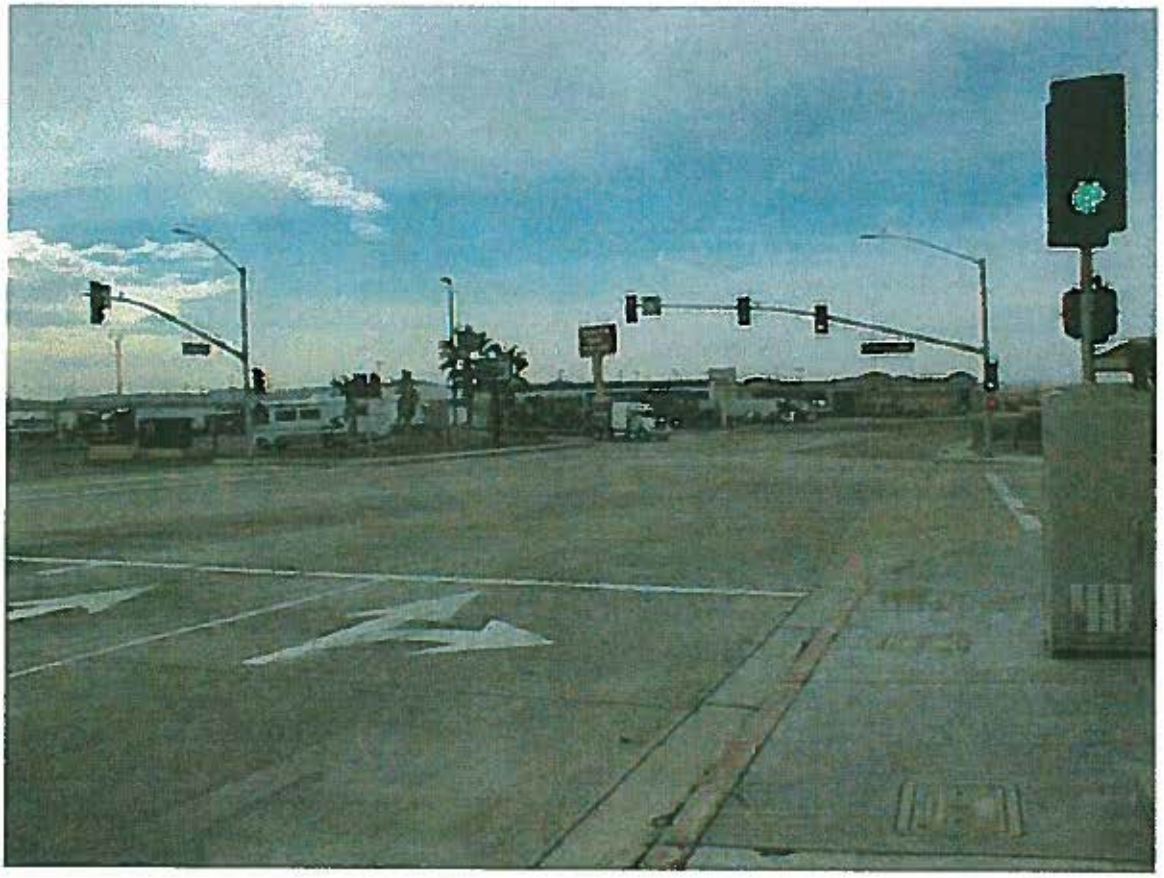
Commerce Park Way at Lenwood Rd. - north bound 2/27/02



Commerce Park Way at Lenwood Rd. - south bound 2/27/02



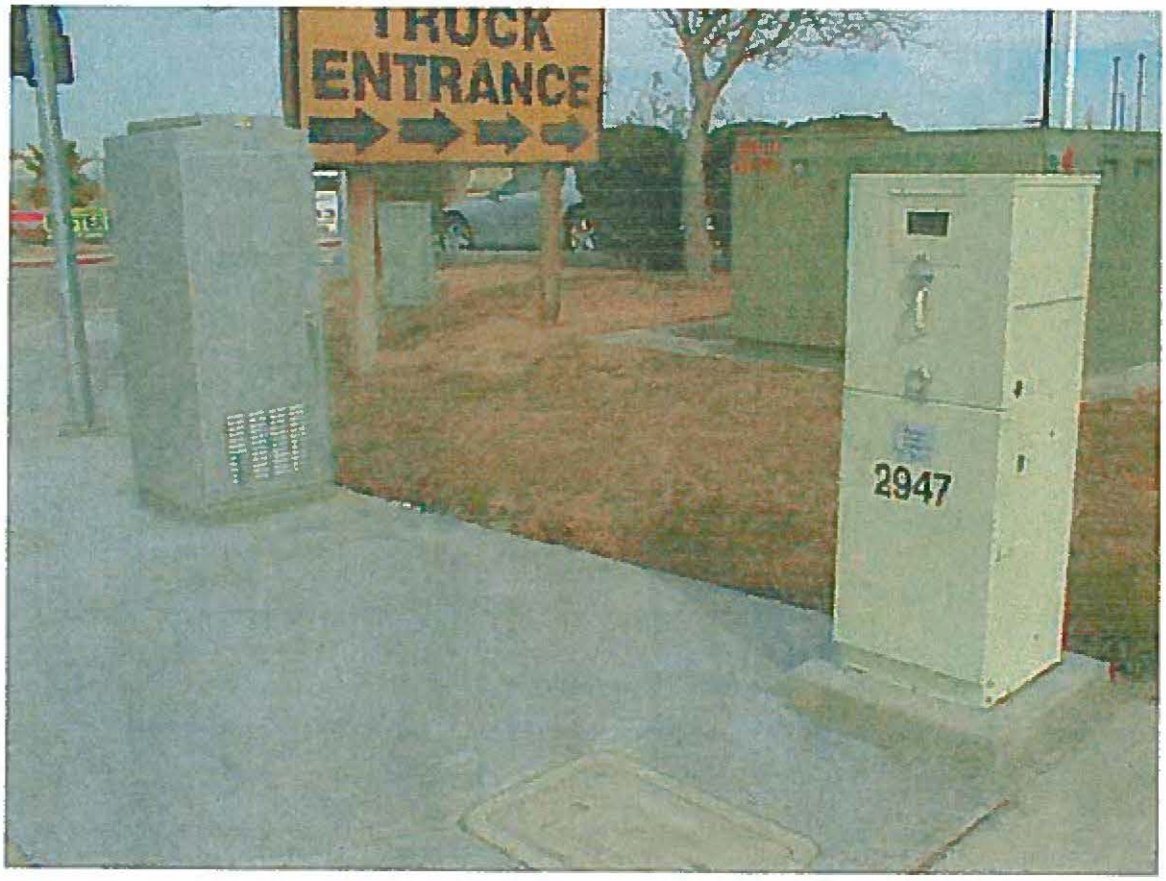
Lenwood Rd. at Commerce Park Way - east bound 2/27/02



Lenwood Rd. at Commerce Park Way - west bound 2/27/02



Lenwood Rd. at Commerce Park Way N/E corner - Denotation box (telephone?) and Cal-Trans Service panel?



Lenwood Rd. at Commerce Park Way N/E corner - Controller box & Service bos SCE 3-113050 and 31 598 644

Location: SR58 @ West Main St (EB Ramp)
System: Coordinated
District: 08
Master At: This location
I/C:

Designed By: NADER ARJOMANDI
Installed By: NADER ARJOMANDI
Service Info: NADER ARJOMANDI

Timing Change:	Date Start:	Date End:	Designed:	Installed:
5/12/2021	3/4/1997			5/27/2016

		FLASH
PHASE	1) SOUTH BOUND LEFT TURN	[ ]
	2) NORTH BOUND THRU	[ ]
	3)	[ ]
	4) EAST BOUND THRU	[ ]
	5)	[ ]
	6) SOUTH BOUND THRU	[ ]
	7)	[ ]
	8)	[ ]
OVERLAP	A)	[ ]
	B)	[ ]
	C)	[ ]
	D)	[ ]
	E)	[ ]
	F)	[ ]

Intersection Layout

Comments and Notes:
yellow time and red time is updated on 05/12/2021. Nader
Controller was upgraded to 2.21 on 5/12/2021. Nader

RAM Checksum

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CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	1 2 . 4 . 6 . .
Restricted	. . . . .

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 . . . 6 . .
Vehicle Max	. . . . .
Pedestrian	. . . . .
Bicycle	. . . . .

Phase Locks (2-1-1-3)	
Red	. . . . .
Yellow	. . . . .
Force/Max	. . . . .

Phase Features (2-1-1-4)	
Double Entry	. . . . .
Rest In Walk	. . . . .
Rest In Red	. . . . .
Walk 2	. . . . .
Max Green 2	. . . . .
Max Green 3	. . . . .

Startup (2-1-1-5)	
First Green Phases	. 2 . . . 6 . .
Yellow Start Phases	. . . . .
Vehicle Calls	1 2 . 4 . 6 . .
Pedestrian Calls	. . . . .
Yellow Start Overlaps	. . . . .
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	. . . . .	1	. . . . .
2	. . . . .	2	. . . . .
3	. . . . .	3	. . . . .
4	. . . . .	4	. . . . .
5	. . . . .	5	. . . . .
6	. . . . .	6	. . . . .
7	. . . . .	7	. . . . .
8	. . . . .	8	. . . . .

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	. . . . .
Yellow Flash Overlap	. . . . .
Flash In Red Phases	. . . . .
Flash In Red Overlaps	. . . . .

Special Operation (2-1-2-3)	
Single Exit Phase	. . . . .
Driveway Signal Phases	. . . . .
Driveway Signal Overlaps	. . . . .
Leading Ped Phases	. . . . .

Protected Permissive (2-1-2-4)	
Protected Permissive	. . . . .

Pedestrian (2-1-3)	
P1	. . . . .
P2	. . . . .
P3	. . . . .
P4	. . . . .
P5	. . . . .
P6	. . . . .
P7	. . . . .
P8	. . . . .

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	. . . . .	. . . . .	. . . . .	. . . . .
B	. . . . .	. . . . .	. . . . .	. . . . .
C	. . . . .	. . . . .	. . . . .	. . . . .
D	. . . . .	. . . . .	. . . . .	. . . . .
E	. . . . .	. . . . .	. . . . .	. . . . .
F	. . . . .	. . . . .	. . . . .	. . . . .

PHASE TIMING

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	0	0	0	0	0
Flash Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	10	5	0	5	0	5	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	30	50	0	30	0	50	0	0
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Maximum Gap	2.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Minimum Gap	2.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.7	5.0	3.0	5.0	3.0	5.0	3.0	3.0
All-Red	1.0	1.0	0.0	2.0	0.0	1.0	0.0	0.0
Ped/Bike (2-3)	**-1-**	**-2-**	**-3-**	**-4-**	**-5-**	**-6-**	**-7-**	**-8-**
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor	60		.....				12	16		12		35		
Plan 2	Green Factor			.....											
Plan 3	Green Factor			.....											
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	.....
11-19	.....
21-29	.....

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
. 2 . 4 . 6 . 8	.....
Veh Min	Veh Max
. 2 . . . 6 . .	.....
Ped	Bike
.....	.....
Cond	Cond Grn
.....	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	1	. 2 . . . 6 . .	.....	.....	.....	.....	.....	.....
Plan 2	.....	.....	.....	.....	.....	.....	.....	.....
Plan 3	.....	.....	.....	.....	.....	.....	.....	.....
Plan 4	.....	.....	.....	.....	.....	.....	.....	.....
Plan 5	.....	.....	.....	.....	.....	.....	.....	.....
Plan 6	.....	.....	.....	.....	.....	.....	.....	.....
Plan 7	.....	.....	.....	.....	.....	.....	.....	.....
Plan 8	.....	.....	.....	.....	.....	.....	.....	.....
Plan 9	.....	.....	.....	.....	.....	.....	.....	.....

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	OffSet
	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	.....	.....	.....	.....	.....	.....	.....	.....
Plan 12	.....	.....	.....	.....	.....	.....	.....	.....
Plan 13	.....	.....	.....	.....	.....	.....	.....	.....
Plan 14	.....	.....	.....	.....	.....	.....	.....	.....
Plan 15	.....	.....	.....	.....	.....	.....	.....	.....
Plan 16	.....	.....	.....	.....	.....	.....	.....	.....
Plan 17	.....	.....	.....	.....	.....	.....	.....	.....
Plan 18	.....	.....	.....	.....	.....	.....	.....	.....
Plan 19	.....	.....	.....	.....	.....	.....	.....	.....

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	.....	.....	.....	.....	.....	.....	.....	.....
Plan 22	.....	.....	.....	.....	.....	.....	.....	.....
Plan 23	.....	.....	.....	.....	.....	.....	.....	.....
Plan 24	.....	.....	.....	.....	.....	.....	.....	.....
Plan 25	.....	.....	.....	.....	.....	.....	.....	.....
Plan 26	.....	.....	.....	.....	.....	.....	.....	.....
Plan 27	.....	.....	.....	.....	.....	.....	.....	.....
Plan 28	.....	.....	.....	.....	.....	.....	.....	.....
Plan 29	.....	.....	.....	.....	.....	.....	.....	.....

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3			10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4			10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5			10	4.5
6	COUNT+CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	COUNT+CALL+EXTEND	. 2	NO	I4U	7			10	2.1
8	COUNT+CALL+EXTEND	. 2	NO	I4L	8			10	7.4
9	COUNT+CALL+EXTEND	. . 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	. . 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6U	11			10	1.3
12	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6L	12			10	1.7
13	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7U	13			10	4.7
14	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7L	14			10	6.4
15	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8U	15			10	2.3
16	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8L	16			10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	. . 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U	23			10	1.2
24	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L	24			10	1.6
25	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U	25			10	4.6
26	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3L	26			10	6.3
27	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4U	27			10	2.2
28	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4L	28			10	7.3
29	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31			10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32			10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33			10	4.8
34	COUNT+CALL+EXTEND	 8	NO	J7L	34			10	6.5
35	COUNT+CALL+EXTEND	 8	NO	J8U	35			10	2.4
36	COUNT+CALL+EXTEND	 8	NO	J8L	36			10	7.7
37	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	. . . 4 . . .	NO	I12L	42			10	5.3
43	PEDESTRIAN	. . . . . 6 . .	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors17-24	. . . . .
Detectors 25-32	. . . . .
Detectors 33-40	. . . . .
Detectors 41-44	. . . . .

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0600	1	A
2000	255	A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 2 (8-2-2)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 3 (8-2-3)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 4 (8-2-4)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 5 (8-2-5)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 6 (8-2-6)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	1	1

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1			.....		.....
2			.....		.....
3			.....		.....
4			.....		.....
5			.....		.....
6			.....		.....
7			.....		.....
8			.....		.....
9			.....		.....
10			.....		.....
11			.....		.....
12			.....		.....
13			.....		.....
14			.....		.....
15			.....		.....
16			.....		.....

Action Codes:

0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11. Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
27. Traffic Actuated Max 2
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	1
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	.	168	.	0	.	101				
Netmask	255	.	255	.	255	.	0				
Broadcast	192	.	168	.	0	.	255				
Gateway	192	.	168	.	0	.	1				

RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. 2 . . 5 . . .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		. . . .	. . . .	1 2 3 4 5 6 7 8	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	A B C D E F
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8

Configuration (3-1-6)			
Primary Port	Secondary Port	Latching	Power-Up
2.5	0.0	YES	FLASHING

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. . . 4 . . 7 .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		1 2 3 . . 6 . .	. . . .	. . . .	. 2 . . . 6 . .	. . . .	. . . 4 . . . 8	. . . . . .	. . . . . .	. . . . . .
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-2-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	. . . 4 . . 7 .	. . . .

Configuration (3-2-6)			
Primary Port	Secondary Port	Latching	Power-up
2.6	0.0	YES	DARK

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. 2 . . 5 . . .	. . . . . .

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . . 4 . . 7 .	. . . . . .

Port	Latching	Phase Termination
5.6	NO	ADVANCE

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	1 . . . . 6 . .	. . . . . .

Port	Latching	Phase Termination
5.7	NO	ADVANCE

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . 3 8	. . . . . .

Port	Latching	Phase Termination
5.8	NO	ADVANCE

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							+
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C

\+ middle output of loadswitches 3 and 6 Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)				Indicator Output	
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	. . . . .	0.0	OPT	0	0
Plan 11-19	. . . . .	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	. . . . .
	. . . . .

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	. . . . .

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
					. . . . .	0.0	0.0	0.0	0	0.0	0

Location: SR58 @ WEST MAIN ST (WEST BOUND)
System: COORDINATED
District: 08
Master At: EB RAMP
I/C:

Designed By: NADER ARJOMANDI
Installed By: NADER ARJOMANDI
Service Info: NADER ARJOMANDI

Timing Change:	Date Start:	Date End:	Designed:	Installed:
5/12/2021	3/4/1997			5/26/2016

			FLASH
PHASE	1)		[ ]
	2)	NORTH BOUND THRU	[ ]
	3)		[ ]
	4)		[ ]
	5)	NORTH BOUND LEFT TURN	[ ]
	6)	SOUTH BOUND THRU	[ ]
	7)		[ ]
	8)	WEST BOUND THRU	[ ]
OVERLAP	A)		[ ]
	B)		[ ]
	C)		[ ]
	D)		[ ]
	E)		[ ]
	F)		[ ]

Intersection Layout

Comments and Notes:
YELLOW TIME AND RED TIME WAS UPDATED. CONTROLLER WAS UPGRADED TO 2.21 VERSION ON 5/12/2021.
NADER

RAM Checksum

Page 2: F85C	Page 8: 355A
Page 3: E71B	Page 9: D2FD
Page 4: 7B1C	Page 10: 5856
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: 384E	Page 13: 86F7

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	. 2 . . 5 6 . 8
Restricted	. . . . .

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 . . . 6 . .
Vehicle Max	. . . . .
Pedestrian	. . . . .
Bicycle	. . . . .

Phase Locks (2-1-1-3)	
Red	. . . . .
Yellow	. . . . .
Force/Max	. . . . .

Phase Features (2-1-1-4)	
Double Entry	. . . . .
Rest In Walk	. . . . .
Rest In Red	. . . . .
Walk 2	. . . . .
Max Green 2	. . . . .
Max Green 3	. . . . .

Startup (2-1-1-5)	
First Green Phases	. 2 . . . 6 . .
Yellow Start Phases	. . . . .
Vehicle Calls	. 2 . . 5 6 . 8
Pedestrian Calls	. . . . .
Yellow Start Overlaps	. . . . .
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	. . . . .	1	. . . . .
2	. . . . .	2	. . . . .
3	. . . . .	3	. . . . .
4	. . . . .	4	. . . . .
5	. . . . .	5	. . . . .
6	. . . . .	6	. . . . .
7	. . . . .	7	. . . . .
8	. . . . .	8	. . . . .

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	. . . . .
Yellow Flash Overlap	. . . . .
Flash In Red Phases	. . . . .
Flash In Red Overlaps	. . . . .

Special Operation (2-1-2-3)	
Single Exit Phase	. . . . .
Driveway Signal Phases	. . . . .
Driveway Signal Overlaps	. . . . .
Leading Ped Phases	. . . . .

Protected Permissive (2-1-2-4)	
Protected Permissive	. . . . .

Pedestrian (2-1-3)	
P1	. . . . .
P2	. . . . .
P3	. . . . .
P4	. . . . .
P5	. . . . .
P6	. . . . .
P7	. . . . .
P8	. . . . .

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	. . . . .	. . . . .	. . . . .	. . . . .
B	. . . . .	. . . . .	. . . . .	. . . . .
C	. . . . .	. . . . .	. . . . .	. . . . .
D	. . . . .	. . . . .	. . . . .	. . . . .
E	. . . . .	. . . . .	. . . . .	. . . . .
F	. . . . .	. . . . .	. . . . .	. . . . .

PHASE TIMING

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	0	0	0	0	0
Flash Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	0	5	0	0	5	5	0	5
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	0	50	0	0	25	50	0	30
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	0.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0
Maximum Gap	0.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0
Minimum Gap	0.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	5.0	3.0	3.0	3.7	5.0	3.0	5.0
All-Red	0.0	1.0	0.0	0.0	1.0	1.0	0.0	2.0

Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor	60		.....	6				35			12	18		12
Plan 2	Green Factor			.....											
Plan 3	Green Factor			.....											
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	.....
11-19	.....
21-29	.....

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
. 2 . 4 . 6 . 8	.....
Veh Min	Veh Max
. 2 . . . 6 . .	.....
Ped	Bike
.....	.....
Cond	Cond Grn
.....	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	. 2 . 4 . 6 . 8	. 2 . . . 6 . .	.....	.....	.....	.....	.....	.....
Plan 2	.....	.....	.....	.....	.....	.....	.....	.....
Plan 3	.....	.....	.....	.....	.....	.....	.....	.....
Plan 4	.....	.....	.....	.....	.....	.....	.....	.....
Plan 5	.....	.....	.....	.....	.....	.....	.....	.....
Plan 6	.....	.....	.....	.....	.....	.....	.....	.....
Plan 7	.....	.....	.....	.....	.....	.....	.....	.....
Plan 8	.....	.....	.....	.....	.....	.....	.....	.....
Plan 9	.....	.....	.....	.....	.....	.....	.....	.....

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	OffSet
	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	.....	.....	.....	.....	.....	.....	.....	.....
Plan 12	.....	.....	.....	.....	.....	.....	.....	.....
Plan 13	.....	.....	.....	.....	.....	.....	.....	.....
Plan 14	.....	.....	.....	.....	.....	.....	.....	.....
Plan 15	.....	.....	.....	.....	.....	.....	.....	.....
Plan 16	.....	.....	.....	.....	.....	.....	.....	.....
Plan 17	.....	.....	.....	.....	.....	.....	.....	.....
Plan 18	.....	.....	.....	.....	.....	.....	.....	.....
Plan 19	.....	.....	.....	.....	.....	.....	.....	.....

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	.....	.....	.....	.....	.....	.....	.....	.....
Plan 22	.....	.....	.....	.....	.....	.....	.....	.....
Plan 23	.....	.....	.....	.....	.....	.....	.....	.....
Plan 24	.....	.....	.....	.....	.....	.....	.....	.....
Plan 25	.....	.....	.....	.....	.....	.....	.....	.....
Plan 26	.....	.....	.....	.....	.....	.....	.....	.....
Plan 27	.....	.....	.....	.....	.....	.....	.....	.....
Plan 28	.....	.....	.....	.....	.....	.....	.....	.....
Plan 29	.....	.....	.....	.....	.....	.....	.....	.....

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3			10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4			10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5			10	4.5
6	COUNT+CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	COUNT+CALL+EXTEND	. 2	NO	I4U	7			10	2.1
8	COUNT+CALL+EXTEND	. 2	NO	I4L	8			10	7.4
9	COUNT+CALL+EXTEND	. . 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	. . 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6U	11			10	1.3
12	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6L	12			10	1.7
13	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7U	13			10	4.7
14	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7L	14			10	6.4
15	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8U	15			10	2.3
16	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8L	16			10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	. . 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U	23			10	1.2
24	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L	24			10	1.6
25	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U	25			10	4.6
26	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3L	26			10	6.3
27	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4U	27			10	2.2
28	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4L	28			10	7.3
29	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31			10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32			10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33		1.0	10	4.8
34	COUNT+CALL+EXTEND	 8	NO	J7L	34			10	6.5
35	COUNT+CALL+EXTEND	 8	NO	J8U	35			10	2.4
36	COUNT+CALL+EXTEND	 8	NO	J8L	36			10	7.7
37	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	. . . 4 . . .	NO	I12L	42			10	5.3
43	PEDESTRIAN	. . . . . 6 . .	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors17-24	. . . . .
Detectors 25-32	. . . . .
Detectors 33-40	. . . . .
Detectors 41-44	. . . . .

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0600	1	A
2000	255	A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 2 (8-2-2)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 3 (8-2-3)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 4 (8-2-4)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 5 (8-2-5)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 6 (8-2-6)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	1	1

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1			.....		.....
2			.....		.....
3			.....		.....
4			.....		.....
5			.....		.....
6			.....		.....
7			.....		.....
8			.....		.....
9			.....		.....
10			.....		.....
11			.....		.....
12			.....		.....
13			.....		.....
14			.....		.....
15			.....		.....
16			.....		.....

Action Codes:

0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11. Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
27. Traffic Actuated Max 2
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	1
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)

#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	1
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	.	168	.	0	.	101
Netmask	255	.	255	.	255	.	0
Broadcast	192	.	168	.	0	.	255
Gateway	192	.	168	.	0	.	1

RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. 2 . . 5 . . .	. . . . .	. . . . .	. . . . .	. . . . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .	. . . . .
Clear 2		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Clear 3		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Hold		. . . . .	. . . . .	1 2 3 4 5 6 7 8	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	A B C D E F
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . . .	. . . . .	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8

Configuration (3-1-6)			
Primary Port	Secondary Port	Latching	Power-Up
2.5	0.0	YES	FLASHING

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. . . 4 . . 7 .	. . . . .	. . . . .	. . . . .	. . . . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .	. . . . .
Clear 2		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Clear 3		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Hold		1 2 3 . . 6 . .	. . . . .	. . . . .	. 2 . . . 6 . .	. . . . .	. . . 4 . . . 8	. . . . .	. . . . .	. . . . .
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-2-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . . .	. . . . .	. . . 4 . . 7 .	. . . . .

Configuration (3-2-6)			
Primary Port	Secondary Port	Latching	Power-up
2.6	0.0	YES	DARK

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. 2 . . 5 . . .	. . . . .

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . . 4 . . 7 .	. . . . .

Port	Latching	Phase Termination
5.6	NO	ADVANCE

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	1 . . . . 6 . .	. . . . .

Port	Latching	Phase Termination
5.7	NO	ADVANCE

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . 3 8	. . . . .

Port	Latching	Phase Termination
5.8	NO	ADVANCE

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							+
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C

\+ middle output of loadswitches 3 and 6
Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)				Indicator Output	
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	.....	0.0	OPT	0	0
Plan 11-19	.....	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	.....
	.....

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	.....

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
					.....	0.0	0.0	0.0	0	0.0	0

Location: I15 @ Barstow Rd NB (247@NB RAMPS TO/FR Rte 15)
System: Coordinated **District:** 08
Master At: **I/C:**

Designed By: NADER ARJOMANDI
Installed By: NADER ARJOMANDI
Service Info: NADER ARJOMANDI

Timing Change:	Date Start:	Date End:	Designed:	Installed:
9/22/2021	1/5/1987		6/30/2015	6/30/2015

			FLASH
PHASE	1)	NORTH BOUND ON RAMP(LEFT TURN	[ ]
	2)	SOUTH BOUND BARSTOW BLVD (RTE	[ ]
	3)		[ ]
	4)		[ ]
	5)		[ ]
	6)	NORTH BOUND BARSTOW BLVD (RT	[ ]
	7)		[ ]
	8)	NORTH BOUND OFF RAMP	[ ]

OVERLAP	A)	[ ]
	B)	[ ]
	C)	[ ]
	D)	[ ]
	E)	[ ]
	F)	[ ]

Intersection Layout

Comments and Notes:
Controller upgrad to 2.21 Version. Yellow & Red time updated. 9/22/2021 Nader
I15 @ Barstow Rd NB PM: 73.347 is the same as SR247 @ NB Ramps to/FR Rte15 PM:78.026
NO PED, NO LPI
Min Green, Yellow time and Bike time is updated. Nader 2/1/2023

RAM Checksum

Page 2: 991A	Page 8: 8F78
Page 3: 9DF6	Page 9: D2FD
Page 4: 0519	Page 10: 911F
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: 398C	Page 13: 86F7

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	1 2 . . . 6 . 8
Restricted	. . . . .

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 . . . 6 . .
Vehicle Max	. . . . .
Pedestrian	. . . . .
Bicycle	. . . . .

Phase Locks (2-1-1-3)	
Red	. . . . .
Yellow	. . . . .
Force/Max	. . . . .

Phase Features (2-1-1-4)	
Double Entry	. . . . .
Rest In Walk	. . . . .
Rest In Red	. . . . .
Walk 2	. . . . .
Max Green 2	. . . . .
Max Green 3	. . . . .

Startup (2-1-1-5)	
First Green Phases	. 2 . . . 6 . .
Yellow Start Phases	. . . . .
Vehicle Calls	1 2 . . . 6 . 8
Pedestrian Calls	. . . . .
Yellow Start Overlaps	. . . . .
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	. . . . .	1	. . . . .
2	. . . . .	2	. . . . .
3	. . . . .	3	. . . . .
4	. . . . .	4	. . . . .
5	. . . . .	5	. . . . .
6	. . . . .	6	. . . . .
7	. . . . .	7	. . . . .
8	. . . . .	8	. . . . .

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	. . . . .
Yellow Flash Overlap	. . . . .
Flash In Red Phases	. . . . .
Flash In Red Overlap	. . . . .

Special Operation (2-1-2-3)	
Single Exit Phase	. . . . .
Driveway Signal Phases	. . . . .
Driveway Signal Overlaps	. . . . .
Leading Ped Phases	. . . . .

Protected Permissive (2-1-2-4)	
Protected Permissive	. . . . .

Pedestrian (2-1-3)	
P1	. . . . .
P2	. . . . .
P3	. . . . .
P4	. . . . .
P5	. . . . .
P6	. . . . .
P7	. . . . .
P8	. . . . .

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	. . . . .	. . . . .	. . . . .	. . . . .
B	. . . . .	. . . . .	. . . . .	. . . . .
C	. . . . .	. . . . .	. . . . .	. . . . .
D	. . . . .	. . . . .	. . . . .	. . . . .
E	. . . . .	. . . . .	. . . . .	. . . . .
F	. . . . .	. . . . .	. . . . .	. . . . .

PHASE TIMING

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	0	0	0	0	0
Flash Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	10	10	0	0	0	10	0	10
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	20	40	0	0	0	40	0	30
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	3.0	0.0	0.0	0.0	3.0	0.0	2.0
Maximum Gap	2.0	3.0	0.0	0.0	0.0	3.0	0.0	2.0
Minimum Gap	2.0	3.0	0.0	0.0	0.0	3.0	0.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.7	5.0	3.0	3.0	3.0	5.0	3.0	5.0
All-Red	1.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0
Ped/Bike (2-3)	**-1-**	**-2-**	**-3-**	**-4-**	**-5-**	**-6-**	**-7-**	**-8-**
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor	65		.....	34			15	21				41		12
Plan 2	Green Factor	75		.....	40			17	29				51		12
Plan 3	Green Factor	70		.....	33			15	26				46		12
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	.....
11-19	.....
21-29	.....

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
.2.4.6.8	.....
Veh Min	Veh Max
.2...6..	.....
Ped	Bike
.....	.....
Cond	Cond Grn
.....	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	.2...6.8	.2...6..	.....	.....	.....	.....	.....	.....
Plan 2	.2...6.8	.2...6..	.....	.....	.....	.....	.....	.....
Plan 3	.2...6.8	.2...6..	.....	.....	.....	.....	.....	.....
Plan 4	.....	.....	.....	.....	.....	.....	.....	.....
Plan 5	.....	.....	.....	.....	.....	.....	.....	.....
Plan 6	.....	.....	.....	.....	.....	.....	.....	.....
Plan 7	.....	.....	.....	.....	.....	.....	.....	.....
Plan 8	.....	.....	.....	.....	.....	.....	.....	.....
Plan 9	.....	.....	.....	.....	.....	.....	.....	.....

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	OffSet
	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	.....	.....	.....	.....	.....	.....	.....	.....
Plan 12	.....	.....	.....	.....	.....	.....	.....	.....
Plan 13	.....	.....	.....	.....	.....	.....	.....	.....
Plan 14	.....	.....	.....	.....	.....	.....	.....	.....
Plan 15	.....	.....	.....	.....	.....	.....	.....	.....
Plan 16	.....	.....	.....	.....	.....	.....	.....	.....
Plan 17	.....	.....	.....	.....	.....	.....	.....	.....
Plan 18	.....	.....	.....	.....	.....	.....	.....	.....
Plan 19	.....	.....	.....	.....	.....	.....	.....	.....

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	.....	.....	.....	.....	.....	.....	.....	.....
Plan 22	.....	.....	.....	.....	.....	.....	.....	.....
Plan 23	.....	.....	.....	.....	.....	.....	.....	.....
Plan 24	.....	.....	.....	.....	.....	.....	.....	.....
Plan 25	.....	.....	.....	.....	.....	.....	.....	.....
Plan 26	.....	.....	.....	.....	.....	.....	.....	.....
Plan 27	.....	.....	.....	.....	.....	.....	.....	.....
Plan 28	.....	.....	.....	.....	.....	.....	.....	.....
Plan 29	.....	.....	.....	.....	.....	.....	.....	.....

DETECTORS

Detector Attributes (5-1)				Slot
Det	Type	Phases	Lock	
1	COUNT+CALL+EXTEND	1	NO	I1U
2	COUNT+CALL+EXTEND	1	NO	I1L
3	COUNT+CALL+EXTEND	. 2	NO	I2U
4	COUNT+CALL+EXTEND	. 2	NO	I2L
5	COUNT+CALL+EXTEND	. 2	NO	I3U
6	COUNT+CALL+EXTEND	. 2	NO	I3L
7	COUNT+CALL+EXTEND	. 2	NO	I4U
8	COUNT+CALL+EXTEND	. 2	NO	I4L
9	COUNT+CALL+EXTEND	. . 3	NO	I5U
10	COUNT+CALL+EXTEND	. . 3	NO	I5L
11	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6U
12	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6L
13	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7U
14	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7L
15	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8U
16	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8L
17	COUNT+CALL+EXTEND	1	NO	I9U
18	COUNT+CALL+EXTEND	. . 3	NO	I9L
19	COUNT+CALL+EXTEND	. 2	NO	I10U
20	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I10L
21	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1U
22	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1L
23	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U
24	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L
25	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U
26	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3L
27	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4U
28	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4L
29	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5U
30	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5L
31	COUNT+CALL+EXTEND	 8	NO	J6U
32	COUNT+CALL+EXTEND	 8	NO	J6L
33	COUNT+CALL+EXTEND	 8	NO	J7U
34	COUNT+CALL+EXTEND	 8	NO	J7L
35	COUNT+CALL+EXTEND	 8	NO	J8U
36	COUNT+CALL+EXTEND	 8	NO	J8L
37	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J9U
38	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L
39	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J10U
40	COUNT+CALL+EXTEND	 8	NO	J10L
41	PEDESTRIAN	. 2	NO	I12U
42	PEDESTRIAN	. . . 4 . . .	NO	I12L
43	PEDESTRIAN	. . . . . 6 . .	NO	I13U
44	PEDESTRIAN	 8	NO	I13L

Detector Configuration (5-2)				
Det	Delay	Extend	Recall	Port
1			10	3.2
2			10	7.2
3			10	1.1
4			10	1.5
5			10	4.5
6			10	6.2
7			10	2.1
8			10	7.4
9			10	3.4
10			10	7.6
11			10	1.3
12			10	1.7
13			10	4.7
14			10	6.4
15			10	2.3
16			10	7.8
17			10	3.6
18			10	3.8
19			10	4.1
20			10	4.2
21			10	3.1
22			10	7.1
23			10	1.2
24			10	1.6
25			10	4.6
26			10	6.3
27			10	2.2
28			10	7.3
29			10	3.3
30			10	7.5
31			10	1.4
32			10	1.8
33			10	4.8
34			10	6.5
35			10	2.4
36			10	7.7
37			10	3.5
38			10	3.7
39			10	4.3
40			10	4.4
41			10	5.1
42			10	5.3
43			10	5.2
44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors17-24	. . . . .
Detectors 25-32	. . . . .
Detectors 33-40	. . . . .
Detectors 41-44	. . . . .

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Nu								
Sys Det	9	10	11	12	13	14	15	16
Det Nu								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0700	1	A
0740	3	A
0840	1	A
0910	3	A
1130	1	A
1150	2	A
1210	3	A
1310	1	A
1500	2	A
1700	1	A
1800	255	A
		A
		A
		A
		A
		A

Table 2 (8-2-2)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 3 (8-2-3)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 4 (8-2-4)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 5 (8-2-5)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 6 (8-2-6)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1			.....		.....
2			.....		.....
3			.....		.....
4			.....		.....
5			.....		.....
6			.....		.....
7			.....		.....
8			.....		.....
9			.....		.....
10			.....		.....
11			.....		.....
12			.....		.....
13			.....		.....
14			.....		.....
15			.....		.....
16			.....		.....

Action Codes:

0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11. Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
27. Traffic Actuated Max 2
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	3
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)

#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	3
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	.	168	.	0	.	103
Netmask	255	.	255	.	255	.	0
Broadcast	192	.	168	.	0	.	255
Gateway	192	.	168	.	0	.	1

RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. 2 . . 5 . . .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		. . . .	. . . .	1 2 3 4 5 6 7 8	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	A B C D E F
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8

Configuration (3-1-6)			
Primary Port	Secondary Port	Latching	Power-Up
2.5	0.0	YES	FLASHING

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. . . 4 . . 7 .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		1 2 3 . . 6 . .	. . . .	. . . .	. 2 . . . 6 . .	. . . .	. . . 4 . . . 8	. . . . . .	. . . . . .	. . . . . .
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-2-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	. . . 4 . . 7 .	. . . .

Configuration (3-2-6)			
Primary Port	Secondary Port	Latching	Power-up
2.6	0.0	YES	DARK

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. 2 . . 5 . . .	. . . . . .

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . . 4 . . 7 .	. . . . . .

Port	Latching	Phase Termination
5.6	NO	ADVANCE

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	1 . . . . 6 . .	. . . . . .

Port	Latching	Phase Termination
5.7	NO	ADVANCE

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . 3 8	. . . . . .

Port	Latching	Phase Termination
5.8	NO	ADVANCE

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							+
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C

+ middle output of loadswitches 3 and 6 Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)				Indicator Output	
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	.....	0.0	OPT	0	0
Plan 11-19	.....	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	.....
	.....

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	.....

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
					.....	0.0	0.0	0.0	0	0.0	0

Location: I15SB @ Barstow rd (SR247)
System: COORDINATED **District:** 08
Master At: NB **I/C:**

Designed By: NADER ARJOMANDI
Installed By: NADER ARJOMANDI
Service Info: NADER ARJOMANDI

Timing Change:	Date Start:	Date End:	Designed:	Installed:
1/23/2023				6/20/2015

			FLASH
PHASE	1)	NORTH BOUND LEFT TURN	[ ]
	2)	SOUTH BOUND THRU	[ ]
	3)		[ ]
	4)	WEST BOUND	[ ]
	5)		[ ]
	6)	NORTH BOUND THRU	[ ]
	7)		[ ]
	8)		[ ]
OVERLAP	A)		[ ]
	B)		[ ]
	C)		[ ]
	D)		[ ]
	E)		[ ]
	F)		[ ]

Intersection Layout

Comments and Notes:
Upgraded to 2.21 version & Implemented LPI for PED phases. Min Green, Yellow time and Bike time was updated .
Nader 01/30/2023

RAM Checksum

Page 2: F6E1	Page 8: 8F78
Page 3: 1F3A	Page 9: D2FD
Page 4: B586	Page 10: 71B3
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: 398C	Page 13: 86F7

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	1 2 . 4 . 6 . .
Restricted	. . . . .

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 . . . 6 . .
Vehicle Max	. . . . .
Pedestrian	. . . . .
Bicycle	. . . . .

Phase Locks (2-1-1-3)	
Red	. . . . .
Yellow	. . . 4 . . . .
Force/Max	. . . . .

Phase Features (2-1-1-4)	
Double Entry	. . . . .
Rest In Walk	. . . . .
Rest In Red	. . . . .
Walk 2	. . . . .
Max Green 2	. . . . .
Max Green 3	. . . . .

Startup (2-1-1-5)	
First Green Phases	. . . 4 . . . .
Yellow Start Phases	. 2 . . . 6 . .
Vehicle Calls	1 2 . 4 . 6 . .
Pedestrian Calls	. . . . . 6 . .
Yellow Start Overlaps	. . . . .
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	. . . . .	1	. . . . .
2	. . . . .	2	. . . . .
3	. . . . .	3	. . . . .
4	. . . . .	4	. . . . .
5	. . . . .	5	. . . . .
6	. . . . .	6	. . . . .
7	. . . . .	7	. . . . .
8	. . . . .	8	. . . . .

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	. . . . .
Yellow Flash Overlap	. . . . .
Flash In Red Phases	. . . . .
Flash In Red Overlaps	. . . . .

Special Operation (2-1-2-3)	
Single Exit Phase	. . . . .
Driveway Signal Phases	. . . . .
Driveway Signal Overlaps	. . . . .
Leading Ped Phases	. . . . . 6 . .

Protected Permissive (2-1-2-4)	
Protected Permissive	. . . . .

Pedestrian (2-1-3)	
P1	. . . . .
P2	. . . . .
P3	. . . . .
P4	. . . . .
P5	. . . . .
P6	. . . . . 6 . .
P7	. . . . .
P8	. . . . .

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	. . . . .	. . . . .	. . . . .	. . . . .
B	. . . . .	. . . . .	. . . . .	. . . . .
C	. . . . .	. . . . .	. . . . .	. . . . .
D	. . . . .	. . . . .	. . . . .	. . . . .
E	. . . . .	. . . . .	. . . . .	. . . . .
F	. . . . .	. . . . .	. . . . .	. . . . .

PHASE TIMING

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	0	0	4	0	0
Flash Don't Walk	0	0	0	0	0	13	0	0
Minimum Green	10	10	0	10	0	10	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	20	40	0	30	0	40	0	0
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	3.0	0.0	3.0	0.0	3.0	0.0	0.0
Maximum Gap	2.0	3.0	0.0	3.0	0.0	3.0	0.0	0.0
Minimum Gap	2.0	3.0	0.0	3.0	0.0	3.0	0.0	0.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.7	5.0	3.0	5.0	3.0	5.0	3.0	3.0
All-Red	1.0	1.0	0.0	1.0	0.0	1.0	0.0	0.0

Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	3	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor	65		.....	26			20	15		11		42		
Plan 2	Green Factor	75		.....	26			21	23		12		51		
Plan 3	Green Factor	70		.....	24			20	21		10		48		
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	1..4.6..	.2...6..	.....	.....	.....	.....	.....	.....
Plan 2	1..4.6..	.2...6..	.....	.....	.....	.....	.....	.....
Plan 3	1..4.6..	.2...6..	.....	.....	.....	.....	.....	.....
Plan 4	.....	.....	.....	.....	.....	.....	.....	.....
Plan 5	.....	.....	.....	.....	.....	.....	.....	.....
Plan 6	.....	.....	.....	.....	.....	.....	.....	.....
Plan 7	.....	.....	.....	.....	.....	.....	.....	.....
Plan 8	.....	.....	.....	.....	.....	.....	.....	.....
Plan 9	.....	.....	.....	.....	.....	.....	.....	.....

Master Timer Sync (7-A)	
Enable in Plans	
1-9	.....
11-19	.....
21-29	.....

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
.2.4.6.8	.....
Veh Min	Veh Max
.2...6..	.....
Ped	Bike
.....	.....
Cond	Cond Grn
.....	10

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	OffSet
	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	.....	.....	.....	.....	.....	.....	.....	.....
Plan 12	.....	.....	.....	.....	.....	.....	.....	.....
Plan 13	.....	.....	.....	.....	.....	.....	.....	.....
Plan 14	.....	.....	.....	.....	.....	.....	.....	.....
Plan 15	.....	.....	.....	.....	.....	.....	.....	.....
Plan 16	.....	.....	.....	.....	.....	.....	.....	.....
Plan 17	.....	.....	.....	.....	.....	.....	.....	.....
Plan 18	.....	.....	.....	.....	.....	.....	.....	.....
Plan 19	.....	.....	.....	.....	.....	.....	.....	.....

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	.....	.....	.....	.....	.....	.....	.....	.....
Plan 22	.....	.....	.....	.....	.....	.....	.....	.....
Plan 23	.....	.....	.....	.....	.....	.....	.....	.....
Plan 24	.....	.....	.....	.....	.....	.....	.....	.....
Plan 25	.....	.....	.....	.....	.....	.....	.....	.....
Plan 26	.....	.....	.....	.....	.....	.....	.....	.....
Plan 27	.....	.....	.....	.....	.....	.....	.....	.....
Plan 28	.....	.....	.....	.....	.....	.....	.....	.....
Plan 29	.....	.....	.....	.....	.....	.....	.....	.....

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3			10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4			10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5			10	4.5
6	COUNT+CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	COUNT+CALL+EXTEND	. 2	NO	I4U	7			10	2.1
8	COUNT+CALL+EXTEND	. 2	NO	I4L	8			10	7.4
9	COUNT+CALL+EXTEND	. . 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	. . 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6U	11			10	1.3
12	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6L	12			10	1.7
13	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7U	13			10	4.7
14	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7L	14			10	6.4
15	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8U	15			10	2.3
16	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8L	16			10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	. . 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U	23			10	1.2
24	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L	24			10	1.6
25	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U	25			10	4.6
26	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3L	26			10	6.3
27	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4U	27			10	2.2
28	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4L	28			10	7.3
29	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31			10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32			10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33			10	4.8
34	COUNT+CALL+EXTEND	 8	NO	J7L	34			10	6.5
35	COUNT+CALL+EXTEND	 8	NO	J8U	35			10	2.4
36	COUNT+CALL+EXTEND	 8	NO	J8L	36			10	7.7
37	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	. . . 4 . . .	NO	I12L	42			10	5.3
43	PEDESTRIAN	. . . . . 6 . .	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors17-24	. . . . .
Detectors 25-32	. . . . .
Detectors 33-40	. . . . .
Detectors 41-44	. . . . .

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0700	1	A
0740	3	A
0840	1	A
0910	3	A
1130	1	A
1150	2	A
1210	3	A
1310	1	A
1500	2	A
1700	1	A
1800	255	A
		A
		A
		A
		A
		A

Table 2 (8-2-2)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 3 (8-2-3)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 4 (8-2-4)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 5 (8-2-5)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 6 (8-2-6)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1			.....		.....
2			.....		.....
3			.....		.....
4			.....		.....
5			.....		.....
6			.....		.....
7			.....		.....
8			.....		.....
9			.....		.....
10			.....		.....
11			.....		.....
12			.....		.....
13			.....		.....
14			.....		.....
15			.....		.....
16			.....		.....

Action Codes:

0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11. Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
27. Traffic Actuated Max 2
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	2
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)

#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	2
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	.	168	.	0	.	102
Netmask	255	.	255	.	255	.	0
Broadcast	192	.	168	.	0	.	255
Gateway	192	.	168	.	0	.	1

RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. 2 . . 5 . . .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		. . . .	. . . .	1 2 3 4 5 6 7 8	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	A B C D E F
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-1-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8

Configuration (3-1-6)

Primary Port	Secondary Port	Latching	Power-Up
2.5	0.0	YES	FLASHING

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. . . 4 . . 7 .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		1 2 3 . . 6 . .	. . . .	. . . .	. 2 . . . 6 . .	. . . .	. . . 4 . . . 8	. . . . . .	. . . . . .	. . . . . .
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-2-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	. . . 4 . . 7 .	. . . .

Configuration (3-2-6)

Primary Port	Secondary Port	Latching	Power-up
2.6	0.0	YES	DARK

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. 2 . . 5 . . .	. . . . . .

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . . 4 . . 7 .	. . . . . .

Port	Latching	Phase Termination
5.6	NO	ADVANCE

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	1 . . . . 6 . .	. . . . . .

Port	Latching	Phase Termination
5.7	NO	ADVANCE

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . 3 8	. . . . . .

Port	Latching	Phase Termination
5.8	NO	ADVANCE

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							+
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C

\+ middle output of loadswitches 3 and 6
Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)				Indicator Output	
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	. . . . .	0.0	OPT	0	0
Plan 11-19	. . . . .	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	. . . . .
	. . . . .

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	. . . . .

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
					. . . . .	0.0	0.0	0.0	0	0.0	0

Location: I15@ LENWOOD RD North Bound
System: ISOLATED **District:** 08
Master At: **I/C:**

Designed By: NADER ARJOMANDI
Installed By: NADER ARJOMANDI
Service Info: NADER ARJOMANDI

Timing Change:	Date Start:	Date End:	Designed:	Installed:
5/25/2021	7/7/2015			7/7/2015

			FLASH
PHASE	1)		[ ]
	2)	EAST BOUND	[ ]
	3)		[ ]
	4)		[ ]
	5)	EAST BOUND TO NORTH BOUND	[ ]
	6)	WEST BOUND	[ ]
	7)	SOUTH BOUND	[ ]
	8)	NORTH BOUND	[ ]

OVERLAP	A)		[ ]
	B)		[ ]
	C)	SB Right turn overlap onto Lenwood R	[ ]
	D)		[ ]
	E)		[ ]
	F)		[ ]

Intersection Layout

Comments and Notes:
CONTROLLER PROGRAM UPGRADED TO 2.21 VERSION ON 5/25/2021. NADER
YELLOW AND RED TIME WAS UPDATED ON 5/25/2021

RAM Checksum

Page 2: 3AE7	Page 8: 91FA
Page 3: 81B0	Page 9: 2ED6
Page 4: F29E	Page 10: 01A8
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: 398C	Page 13: 86F7

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	. 2 . . 5 6 7 8
Restricted	. . . . .

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 . . . 6 . .
Vehicle Max	. . . . .
Pedestrian	. . . . .
Bicycle	. . . . .

Phase Locks (2-1-1-3)	
Red	. . . . .
Yellow	. . . . 5 . 7 .
Force/Max	. . . . .

Phase Features (2-1-1-4)	
Double Entry	. . . . .
Rest In Walk	. . . . .
Rest In Red	. . . . .
Walk 2	. . . . .
Max Green 2	. . . . .
Max Green 3	. . . . .

Startup (2-1-1-5)	
First Green Phases	 8
Yellow Start Phases	. . . . .
Vehicle Calls	. 2 . . 5 6 7 8
Pedestrian Calls	. . . . . 6 . .
Yellow Start Overlaps	. . . . .
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	. . . . .	1	. . . . .
2	. . . . .	2	. . . . .
3	. . . . .	3	. . . . .
4	. . . . .	4	. . . . .
5	. . . . .	5	. . . . .
6	. . . . .	6	. . . . .
7	. . . . .	7	. . . . .
8	. . . . .	8	. . . . .

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	. . . . .
Yellow Flash Overlap	. . . . .
Flash In Red Phases	. . . . .
Flash In Red Overlaps	. . . . .

Special Operation (2-1-2-3)	
Single Exit Phase	. . . . .
Driveway Signal Phases	. . . . .
Driveway Signal Overlaps	. . . . .
Leading Ped Phases	. . . . .

Protected Permissive (2-1-2-4)	
Protected Permissive	. . . . .

Pedestrian (2-1-3)	
P1	. . . . .
P2	. . . . .
P3	. . . . .
P4	. . . . .
P5	. . . . .
P6	. . . . . 6 . .
P7	. . . . .
P8	. . . . .

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	. . . . .	. . . . .	. . . . .	. . . . .
B	. . . . .	. . . . .	. . . . .	. . . . .
C	. . . . 5 . 7 .	. . . . .	. . . . .	. . . . . 6 . 8
D	. . . . .	. . . . .	. . . . .	. . . . .
E	. . . . .	. . . . .	. . . . .	. . . . .
F	. . . . .	. . . . .	. . . . .	. . . . .

PHASE TIMING

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	0	0	7	0	0
Flash Don't Walk	0	0	0	0	0	27	0	0
Minimum Green	0	5	0	0	5	5	5	5
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	0	50	0	0	20	40	20	50
Max Green 2	0	0	0	0	0	80	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	0.0	2.5	0.0	0.0	2.5	2.5	2.5	3.5
Maximum Gap	0.0	2.5	0.0	0.0	2.5	2.5	2.5	3.5
Minimum Gap	0.0	2.5	0.0	0.0	2.5	2.5	2.5	3.5
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	5.0	3.0	3.0	4.0	5.0	5.0	5.0
All-Red	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0

Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor			. . . . .											
Plan 2	Green Factor			. . . . .											
Plan 3	Green Factor			. . . . .											
Plan 4	Green Factor			. . . . .											
Plan 5	Green Factor			. . . . .											
Plan 6	Green Factor			. . . . .											
Plan 7	Green Factor			. . . . .											
Plan 8	Green Factor			. . . . .											
Plan 9	Green Factor			. . . . .											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	. . . . .
11-19	. . . . .
21-29	. . . . .

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
. 2 . 4 . 6 . 8	. . . . .
Veh Min	Veh Max
. 2 . . . 6 . .	. . . . .
Ped	Bike
. . . . .	. . . . .
Cond	Cond Grn
. . . . .	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 2	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 3	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 4	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 5	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 6	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 7	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 8	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 9	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	OffSet
	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	.....	.....	.....	.....	.....	.....	.....	.....
Plan 12	.....	.....	.....	.....	.....	.....	.....	.....
Plan 13	.....	.....	.....	.....	.....	.....	.....	.....
Plan 14	.....	.....	.....	.....	.....	.....	.....	.....
Plan 15	.....	.....	.....	.....	.....	.....	.....	.....
Plan 16	.....	.....	.....	.....	.....	.....	.....	.....
Plan 17	.....	.....	.....	.....	.....	.....	.....	.....
Plan 18	.....	.....	.....	.....	.....	.....	.....	.....
Plan 19	.....	.....	.....	.....	.....	.....	.....	.....

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	.....	.....	.....	.....	.....	.....	.....	.....
Plan 22	.....	.....	.....	.....	.....	.....	.....	.....
Plan 23	.....	.....	.....	.....	.....	.....	.....	.....
Plan 24	.....	.....	.....	.....	.....	.....	.....	.....
Plan 25	.....	.....	.....	.....	.....	.....	.....	.....
Plan 26	.....	.....	.....	.....	.....	.....	.....	.....
Plan 27	.....	.....	.....	.....	.....	.....	.....	.....
Plan 28	.....	.....	.....	.....	.....	.....	.....	.....
Plan 29	.....	.....	.....	.....	.....	.....	.....	.....

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3			10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4			10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5			10	4.5
6	COUNT+CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	COUNT+CALL+EXTEND	. 2	NO	I4U	7			10	2.1
8	COUNT+CALL+EXTEND	. 2	NO	I4L	8			10	7.4
9	COUNT+CALL+EXTEND	. . 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	. . 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6U	11			10	1.3
12	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6L	12			10	1.7
13	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7U	13			10	4.7
14	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7L	14			10	6.4
15	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8U	15			10	2.3
16	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8L	16			10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	. . 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U	23			10	1.2
24	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L	24			10	1.6
25	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U	25			10	4.6
26	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3L	26			10	6.3
27	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4U	27			10	2.2
28	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4L	28			10	7.3
29	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31			10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32			10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33			10	4.8
34	COUNT+CALL+EXTEND	 8	NO	J7L	34			10	6.5
35	COUNT+CALL+EXTEND	 8	NO	J8U	35			10	2.4
36	COUNT+CALL+EXTEND	 8	NO	J8L	36			10	7.7
37	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	. . . 4 . . .	NO	I12L	42			10	5.3
43	PEDESTRIAN	. . . . . 6 . .	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors17-24	. . . . .
Detectors 25-32	. . . . .
Detectors 33-40	. . . . .
Detectors 41-44	. . . . .

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0600	1	A
1900	255	A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 2 (8-2-2)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 3 (8-2-3)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 4 (8-2-4)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 5 (8-2-5)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 6 (8-2-6)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	1	1

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	1100	2200	....F S S	17	.....6..
2			.....		.....
3			.....		.....
4			.....		.....
5			.....		.....
6			.....		.....
7			.....		.....
8			.....		.....
9			.....		.....
10			.....		.....
11			.....		.....
12			.....		.....
13			.....		.....
14			.....		.....
15			.....		.....
16			.....		.....

Action Codes:

0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11. Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
27. Traffic Actuated Max 2
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)

#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	1
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	.	168	.	0	.	101
Netmask	255	.	255	.	255	.	0
Broadcast	192	.	168	.	0	.	255
Gateway	192	.	168	.	0	.	1

RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. 2 . . 5 . . .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		. . . .	. . . .	1 2 3 4 5 6 7 8	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	A B C D E F
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8

Configuration (3-1-6)			
Primary Port	Secondary Port	Latching	Power-Up
2.5	0.0	YES	FLASHING

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. . . 4 . . 7 .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		1 2 3 . . 6 . .	. . . .	. . . .	. 2 . . . 6 . .	. . . .	. . . 4 . . . 8	. . . . . .	. . . . . .	. . . . . .
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-2-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	. . . 4 . . 7 .	. . . .

Configuration (3-2-6)			
Primary Port	Secondary Port	Latching	Power-up
2.6	0.0	YES	DARK

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. 2 . . 5 . . .	. . . . . .

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . . 4 . . 7 .	. . . . . .

Port	Latching	Phase Termination
5.6	NO	ADVANCE

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	1 . . . . 6 . .	. . . . .

Port	Latching	Phase Termination
5.7	NO	ADVANCE

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . 3 8	. . . . .

Port	Latching	Phase Termination
5.8	NO	ADVANCE

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							+
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C

\+ middle output of loadswitches 3 and 6 Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)				Indicator Output	
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	. . . . .	0.0	OPT	0	0
Plan 11-19	. . . . .	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	. . . . .
	. . . . .

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	. . . . .

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
					. . . . .	0.0	0.0	0.0	0	0.0	0

Location: I15@ Lenwood Rd (South Bound)
System: Coordinated **District:** 08
Master At: This Location **I/C:**

Designed By: NADER ARJOMANDI
Installed By: NADER ARJOMANDI
Service Info: NADER ARJOMANDI

Timing Change:	Date Start:	Date End:	Designed:	Installed:
5/20/2021	7/7/2015			7/7/2015

			FLASH
PHASE	1)		[ ]
	2)	EAST BOUND (LENWOOD RD)	[ ]
	3)		[ ]
	4)	SOUTH BOUND OFF RAMP	[ ]
	5)		[ ]
	6)	WEST BOUND (LENWOOD RD)	[ ]
	7)		[ ]
	8)		[ ]
OVERLAP	A)		[ ]
	B)		[ ]
	C)		[ ]
	D)		[ ]
	E)		[ ]
	F)		[ ]

Intersection Layout

Comments and Notes:
YELLOW & RED TIME WAS UPDATEDC, Controller was updated to 2.21 version. 5/20/2021 NADER

RAM Checksum

Page 2: AAC8	Page 8: 91FA
Page 3: D5AE	Page 9: D2FD
Page 4: 1825	Page 10: 5856
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: 5608	Page 13: 86F7

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	. 2 . 4 . 6 . .
Restricted	. . . . .

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 . . . 6 . .
Vehicle Max	. . . . .
Pedestrian	. . . . .
Bicycle	. . . . .

Phase Locks (2-1-1-3)	
Red	. . . . .
Yellow	. . . . .
Force/Max	. . . . .

Phase Features (2-1-1-4)	
Double Entry	. . . . .
Rest In Walk	. . . . .
Rest In Red	. . . . .
Walk 2	. . . . .
Max Green 2	. . . . .
Max Green 3	. . . . .

Startup (2-1-1-5)	
First Green Phases	. 2 . . . 6 . .
Yellow Start Phases	. . . . .
Vehicle Calls	. 2 . 4 . 6 . .
Pedestrian Calls	. . . . . 6 . .
Yellow Start Overlaps	. . . . .
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	. . . . .	1	. . . . .
2	. . . . .	2	. . . . .
3	. . . . .	3	. . . . .
4	. . . . .	4	. . . . .
5	. . . . .	5	. . . . .
6	. . . . .	6	. . . . .
7	. . . . .	7	. . . . .
8	. . . . .	8	. . . . .

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	. . . . .
Yellow Flash Overlap	. . . . .
Flash In Red Phases	. . . . .
Flash In Red Overlaps	. . . . .

Special Operation (2-1-2-3)	
Single Exit Phase	. . . . .
Driveway Signal Phases	. . . . .
Driveway Signal Overlaps	. . . . .
Leading Ped Phases	. . . . .

Protected Permissive (2-1-2-4)	
Protected Permissive	. . . . .

Pedestrian (2-1-3)	
P1	. . . . .
P2	. . . . .
P3	. . . . .
P4	. . . . .
P5	. . . . .
P6	. . . . . 6 . .
P7	. . . . .
P8	. . . . .

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	. . . . .	. . . . .	. . . . .	. . . . .
B	. . . . .	. . . . .	. . . . .	. . . . .
C	. . . . .	. . . . .	. . . . .	. . . . .
D	. . . . .	. . . . .	. . . . .	. . . . .
E	. . . . .	. . . . .	. . . . .	. . . . .
F	. . . . .	. . . . .	. . . . .	. . . . .

PHASE TIMING

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	0	0	7	0	0
Flash Don't Walk	0	0	0	0	0	23	0	0
Minimum Green	0	5	0	20	0	5	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	0	40	0	30	0	40	0	0
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	0.0	2.5	0.0	3.5	0.0	2.5	0.0	0.0
Maximum Gap	0.0	2.5	0.0	3.5	0.0	2.5	0.0	0.0
Minimum Gap	0.0	2.5	0.0	3.5	0.0	2.5	0.0	0.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	5.0	3.0	5.0	3.0	5.0	3.0	3.0
All-Red	0.0	1.0	0.0	1.0	0.0	1.0	0.0	0.0

Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor	70		. . . . .					38		20		38		
Plan 2	Green Factor			. . . . .											
Plan 3	Green Factor			. . . . .											
Plan 4	Green Factor			. . . . .											
Plan 5	Green Factor			. . . . .											
Plan 6	Green Factor			. . . . .											
Plan 7	Green Factor			. . . . .											
Plan 8	Green Factor			. . . . .											
Plan 9	Green Factor			. . . . .											

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	. 2 . 4 . 6 . 8	. 2 . . . 6 . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 2	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 3	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 4	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 5	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 6	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 7	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 8	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Plan 9	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .

Master Timer Sync (7-A)	
Enable in Plans	
1-9	. . . . .
11-19	. . . . .
21-29	. . . . .

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
. 2 . 4 . 6 . 8	. . . . .
Veh Min	Veh Max
. 2 . . . 6 . .	. . . . .
Ped	Bike
. . . . .	. . . . .
Cond	Cond Grn
. . . . .	10

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	OffSet
	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	.....	.....	.....	.....	.....	.....	.....	.....
Plan 12	.....	.....	.....	.....	.....	.....	.....	.....
Plan 13	.....	.....	.....	.....	.....	.....	.....	.....
Plan 14	.....	.....	.....	.....	.....	.....	.....	.....
Plan 15	.....	.....	.....	.....	.....	.....	.....	.....
Plan 16	.....	.....	.....	.....	.....	.....	.....	.....
Plan 17	.....	.....	.....	.....	.....	.....	.....	.....
Plan 18	.....	.....	.....	.....	.....	.....	.....	.....
Plan 19	.....	.....	.....	.....	.....	.....	.....	.....

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	.....	.....	.....	.....	.....	.....	.....	.....
Plan 22	.....	.....	.....	.....	.....	.....	.....	.....
Plan 23	.....	.....	.....	.....	.....	.....	.....	.....
Plan 24	.....	.....	.....	.....	.....	.....	.....	.....
Plan 25	.....	.....	.....	.....	.....	.....	.....	.....
Plan 26	.....	.....	.....	.....	.....	.....	.....	.....
Plan 27	.....	.....	.....	.....	.....	.....	.....	.....
Plan 28	.....	.....	.....	.....	.....	.....	.....	.....
Plan 29	.....	.....	.....	.....	.....	.....	.....	.....

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3		3.0	10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4			10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5		3.0	10	4.5
6	COUNT+CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	COUNT+CALL+EXTEND	. 2	NO	I4U	7			10	2.1
8	COUNT+CALL+EXTEND	. 2	NO	I4L	8			10	7.4
9	COUNT+CALL+EXTEND	. . 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	. . 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6U	11			10	1.3
12	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6L	12			10	1.7
13	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7U	13			10	4.7
14	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7L	14			10	6.4
15	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8U	15			10	2.3
16	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8L	16			10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	. . 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U	23			10	1.2
24	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L	24			10	1.6
25	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U	25			10	4.6
26	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3L	26			10	6.3
27	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4U	27			10	2.2
28	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4L	28			10	7.3
29	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31			10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32			10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33			10	4.8
34	COUNT+CALL+EXTEND	 8	NO	J7L	34			10	6.5
35	COUNT+CALL+EXTEND	 8	NO	J8U	35			10	2.4
36	COUNT+CALL+EXTEND	 8	NO	J8L	36			10	7.7
37	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	. . . 4 . . .	NO	I12L	42			10	5.3
43	PEDESTRIAN	. . . . . 6 . .	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors17-24	. . . . .
Detectors 25-32	. . . . .
Detectors 33-40	. . . . .
Detectors 41-44	. . . . .

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0600	1	A
1900	255	A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 2 (8-2-2)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 3 (8-2-3)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 4 (8-2-4)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 5 (8-2-5)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 6 (8-2-6)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	1	1

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1			.....		.....
2			.....		.....
3			.....		.....
4			.....		.....
5			.....		.....
6			.....		.....
7			.....		.....
8			.....		.....
9			.....		.....
10			.....		.....
11			.....		.....
12			.....		.....
13			.....		.....
14			.....		.....
15			.....		.....
16			.....		.....

Action Codes:

0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11. Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
27. Traffic Actuated Max 2
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	1
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)

#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	1
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	.	168	.	0	.	101				
Netmask	255	.	255	.	255	.	0				
Broadcast	192	.	168	.	0	.	255				
Gateway	192	.	168	.	0	.	1				

RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. 2 . . 5 . . .	. . . . .	. . . . .	. . . . .	. . . . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .	. . . . .
Clear 2		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Clear 3		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Hold		. . . . .	. . . . .	1 2 3 4 5 6 7 8	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	A B C D E F
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-1-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . . .	. . . . .	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8

Configuration (3-1-6)

Primary Port	Secondary Port	Latching	Power-Up
2.5	0.0	YES	FLASHING

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. . . 4 . . 7 .	. . . . .	. . . . .	. . . . .	. . . . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .	. . . . .
Clear 2		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Clear 3		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Hold		1 2 3 . . 6 . .	. . . . .	. . . . .	. 2 . . . 6 . .	. . . . .	. . . 4 . . . 8	. . . . .	. . . . .	. . . . .
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-2-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . . .	. . . . .	. . . 4 . . 7 .	. . . . .

Configuration (3-2-6)

Primary Port	Secondary Port	Latching	Power-up
2.6	0.0	YES	DARK

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. 2 . . 5 . . .	. . . . .

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . . 4 . . 7 .	. . . . .

Port	Latching	Phase Termination
5.6	NO	ADVANCE

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	1 . . . . 6 . .	. . . . .

Port	Latching	Phase Termination
5.7	NO	ADVANCE

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . 3 8	. . . . .

Port	Latching	Phase Termination
5.8	NO	ADVANCE

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							+
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C

\+ middle output of loadswitches 3 and 6
Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)				Indicator Output	
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	.....	0.0	OPT	0	0
Plan 11-19	.....	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	.....
	.....

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	.....

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
					.....	0.0	0.0	0.0	0	0.0	0

Location: I15 @ Barstow Rd NB (247@NB RAMPS TO/FR Rte 15)
System: Coordinated **District:** 08
Master At: **I/C:**

Designed By: NADER ARJOMANDI
Installed By: NADER ARJOMANDI
Service Info: NADER ARJOMANDI

Timing Change:	Date Start:	Date End:	Designed:	Installed:
9/22/2021	1/5/1987		6/30/2015	6/30/2015

			FLASH
PHASE	1)	NORTH BOUND ON RAMP(LEFT TURN	[ ]
	2)	SOUTH BOUND BARSTOW BLVD (RTE	[ ]
	3)		[ ]
	4)		[ ]
	5)		[ ]
	6)	NORTH BOUND BARSTOW BLVD (RT	[ ]
	7)		[ ]
	8)	NORTH BOUND OFF RAMP	[ ]

OVERLAP	A)	[ ]
	B)	[ ]
	C)	[ ]
	D)	[ ]
	E)	[ ]
	F)	[ ]

Intersection Layout

Comments and Notes:
Controller upgrad to 2.21 Version. Yellow & Red time updated. 9/22/2021 Nader
I15 @ Barstow Rd NB PM: 73.347 is the same as SR247 @ NB Ramps to/FR Rte15 PM:78.026
NO PED, NO LPI
Min Green, Yellow time and Bike time is updated. Nader 2/1/2023

RAM Checksum

Page 2: 991A	Page 8: 8F78
Page 3: 9DF6	Page 9: D2FD
Page 4: 0519	Page 10: 911F
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: 398C	Page 13: 86F7

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	1 2 . . . 6 . 8
Restricted	. . . . .

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 . . . 6 . .
Vehicle Max	. . . . .
Pedestrian	. . . . .
Bicycle	. . . . .

Phase Locks (2-1-1-3)	
Red	. . . . .
Yellow	. . . . .
Force/Max	. . . . .

Phase Features (2-1-1-4)	
Double Entry	. . . . .
Rest In Walk	. . . . .
Rest In Red	. . . . .
Walk 2	. . . . .
Max Green 2	. . . . .
Max Green 3	. . . . .

Startup (2-1-1-5)	
First Green Phases	. 2 . . . 6 . .
Yellow Start Phases	. . . . .
Vehicle Calls	1 2 . . . 6 . 8
Pedestrian Calls	. . . . .
Yellow Start Overlaps	. . . . .
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	. . . . .	1	. . . . .
2	. . . . .	2	. . . . .
3	. . . . .	3	. . . . .
4	. . . . .	4	. . . . .
5	. . . . .	5	. . . . .
6	. . . . .	6	. . . . .
7	. . . . .	7	. . . . .
8	. . . . .	8	. . . . .

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	. . . . .
Yellow Flash Overlap	. . . . .
Flash In Red Phases	. . . . .
Flash In Red Overlap	. . . . .

Special Operation (2-1-2-3)	
Single Exit Phase	. . . . .
Driveway Signal Phases	. . . . .
Driveway Signal Overlaps	. . . . .
Leading Ped Phases	. . . . .

Protected Permissive (2-1-2-4)	
Protected Permissive	. . . . .

Pedestrian (2-1-3)	
P1	. . . . .
P2	. . . . .
P3	. . . . .
P4	. . . . .
P5	. . . . .
P6	. . . . .
P7	. . . . .
P8	. . . . .

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	. . . . .	. . . . .	. . . . .	. . . . .
B	. . . . .	. . . . .	. . . . .	. . . . .
C	. . . . .	. . . . .	. . . . .	. . . . .
D	. . . . .	. . . . .	. . . . .	. . . . .
E	. . . . .	. . . . .	. . . . .	. . . . .
F	. . . . .	. . . . .	. . . . .	. . . . .

PHASE TIMING

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	0	0	0	0	0
Flash Don't Walk	0	0	0	0	0	0	0	0
Minimum Green	10	10	0	0	0	10	0	10
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	20	40	0	0	0	40	0	30
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	3.0	0.0	0.0	0.0	3.0	0.0	2.0
Maximum Gap	2.0	3.0	0.0	0.0	0.0	3.0	0.0	2.0
Minimum Gap	2.0	3.0	0.0	0.0	0.0	3.0	0.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.7	5.0	3.0	3.0	3.0	5.0	3.0	5.0
All-Red	1.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0
Ped/Bike (2-3)	**-1-**	**-2-**	**-3-**	**-4-**	**-5-**	**-6-**	**-7-**	**-8-**
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor	65		.....	34			15	21				41		12
Plan 2	Green Factor	75		.....	40			17	29				51		12
Plan 3	Green Factor	70		.....	33			15	26				46		12
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	.....
11-19	.....
21-29	.....

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
.2.4.6.8	.....
Veh Min	Veh Max
.2...6..	.....
Ped	Bike
.....	.....
Cond	Cond Grn
.....	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	.2...6.8	.2...6..	.....	.....	.....	.....	.....	.....
Plan 2	.2...6.8	.2...6..	.....	.....	.....	.....	.....	.....
Plan 3	.2...6.8	.2...6..	.....	.....	.....	.....	.....	.....
Plan 4	.....	.....	.....	.....	.....	.....	.....	.....
Plan 5	.....	.....	.....	.....	.....	.....	.....	.....
Plan 6	.....	.....	.....	.....	.....	.....	.....	.....
Plan 7	.....	.....	.....	.....	.....	.....	.....	.....
Plan 8	.....	.....	.....	.....	.....	.....	.....	.....
Plan 9	.....	.....	.....	.....	.....	.....	.....	.....

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	OffSet
	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	.....	.....	.....	.....	.....	.....	.....	.....
Plan 12	.....	.....	.....	.....	.....	.....	.....	.....
Plan 13	.....	.....	.....	.....	.....	.....	.....	.....
Plan 14	.....	.....	.....	.....	.....	.....	.....	.....
Plan 15	.....	.....	.....	.....	.....	.....	.....	.....
Plan 16	.....	.....	.....	.....	.....	.....	.....	.....
Plan 17	.....	.....	.....	.....	.....	.....	.....	.....
Plan 18	.....	.....	.....	.....	.....	.....	.....	.....
Plan 19	.....	.....	.....	.....	.....	.....	.....	.....

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	.....	.....	.....	.....	.....	.....	.....	.....
Plan 22	.....	.....	.....	.....	.....	.....	.....	.....
Plan 23	.....	.....	.....	.....	.....	.....	.....	.....
Plan 24	.....	.....	.....	.....	.....	.....	.....	.....
Plan 25	.....	.....	.....	.....	.....	.....	.....	.....
Plan 26	.....	.....	.....	.....	.....	.....	.....	.....
Plan 27	.....	.....	.....	.....	.....	.....	.....	.....
Plan 28	.....	.....	.....	.....	.....	.....	.....	.....
Plan 29	.....	.....	.....	.....	.....	.....	.....	.....

DETECTORS

Detector Attributes (5-1)				Slot
Det	Type	Phases	Lock	
1	COUNT+CALL+EXTEND	1	NO	I1U
2	COUNT+CALL+EXTEND	1	NO	I1L
3	COUNT+CALL+EXTEND	. 2	NO	I2U
4	COUNT+CALL+EXTEND	. 2	NO	I2L
5	COUNT+CALL+EXTEND	. 2	NO	I3U
6	COUNT+CALL+EXTEND	. 2	NO	I3L
7	COUNT+CALL+EXTEND	. 2	NO	I4U
8	COUNT+CALL+EXTEND	. 2	NO	I4L
9	COUNT+CALL+EXTEND	. . 3	NO	I5U
10	COUNT+CALL+EXTEND	. . 3	NO	I5L
11	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6U
12	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6L
13	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7U
14	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7L
15	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8U
16	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8L
17	COUNT+CALL+EXTEND	1	NO	I9U
18	COUNT+CALL+EXTEND	. . 3	NO	I9L
19	COUNT+CALL+EXTEND	. 2	NO	I10U
20	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I10L
21	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1U
22	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1L
23	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U
24	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L
25	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U
26	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3L
27	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4U
28	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4L
29	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5U
30	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5L
31	COUNT+CALL+EXTEND	 8	NO	J6U
32	COUNT+CALL+EXTEND	 8	NO	J6L
33	COUNT+CALL+EXTEND	 8	NO	J7U
34	COUNT+CALL+EXTEND	 8	NO	J7L
35	COUNT+CALL+EXTEND	 8	NO	J8U
36	COUNT+CALL+EXTEND	 8	NO	J8L
37	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J9U
38	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L
39	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J10U
40	COUNT+CALL+EXTEND	 8	NO	J10L
41	PEDESTRIAN	. 2	NO	I12U
42	PEDESTRIAN	. . . 4 . . .	NO	I12L
43	PEDESTRIAN	. . . . . 6 . .	NO	I13U
44	PEDESTRIAN	 8	NO	I13L

Detector Configuration (5-2)				
Det	Delay	Extend	Recall	Port
1			10	3.2
2			10	7.2
3			10	1.1
4			10	1.5
5			10	4.5
6			10	6.2
7			10	2.1
8			10	7.4
9			10	3.4
10			10	7.6
11			10	1.3
12			10	1.7
13			10	4.7
14			10	6.4
15			10	2.3
16			10	7.8
17			10	3.6
18			10	3.8
19			10	4.1
20			10	4.2
21			10	3.1
22			10	7.1
23			10	1.2
24			10	1.6
25			10	4.6
26			10	6.3
27			10	2.2
28			10	7.3
29			10	3.3
30			10	7.5
31			10	1.4
32			10	1.8
33			10	4.8
34			10	6.5
35			10	2.4
36			10	7.7
37			10	3.5
38			10	3.7
39			10	4.3
40			10	4.4
41			10	5.1
42			10	5.3
43			10	5.2
44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors17-24	. . . . .
Detectors 25-32	. . . . .
Detectors 33-40	. . . . .
Detectors 41-44	. . . . .

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Nu								
Sys Det	9	10	11	12	13	14	15	16
Det Nu								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0700	1	A
0740	3	A
0840	1	A
0910	3	A
1130	1	A
1150	2	A
1210	3	A
1310	1	A
1500	2	A
1700	1	A
1800	255	A
		A
		A
		A
		A
		A

Table 2 (8-2-2)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 3 (8-2-3)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 4 (8-2-4)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 5 (8-2-5)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 6 (8-2-6)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1			.....		.....
2			.....		.....
3			.....		.....
4			.....		.....
5			.....		.....
6			.....		.....
7			.....		.....
8			.....		.....
9			.....		.....
10			.....		.....
11			.....		.....
12			.....		.....
13			.....		.....
14			.....		.....
15			.....		.....
16			.....		.....

Action Codes:

0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11. Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
27. Traffic Actuated Max 2
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	3
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)

#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	3
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	.	168	.	0	.	103
Netmask	255	.	255	.	255	.	0
Broadcast	192	.	168	.	0	.	255
Gateway	192	.	168	.	0	.	1

RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. 2 . . 5 . . .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		. . . .	. . . .	1 2 3 4 5 6 7 8	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	A B C D E F
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8

Configuration (3-1-6)			
Primary Port	Secondary Port	Latching	Power-Up
2.5	0.0	YES	FLASHING

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. . . 4 . . 7 .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		1 2 3 . . 6 . .	. . . .	. . . .	. 2 . . . 6 . .	. . . .	. . . 4 . . . 8	. . . . . .	. . . . . .	. . . . . .
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-2-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	. . . 4 . . 7 .	. . . .

Configuration (3-2-6)			
Primary Port	Secondary Port	Latching	Power-up
2.6	0.0	YES	DARK

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. 2 . . 5 . . .	. . . . . .

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . . 4 . . 7 .	. . . . . .

Port	Latching	Phase Termination
5.6	NO	ADVANCE

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	1 . . . . 6 . .	. . . . . .

Port	Latching	Phase Termination
5.7	NO	ADVANCE

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . 3 8	. . . . . .

Port	Latching	Phase Termination
5.8	NO	ADVANCE

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							+
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C

+ middle output of loadswitches 3 and 6 Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)				Indicator Output	
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	.....	0.0	OPT	0	0
Plan 11-19	.....	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	.....
	.....

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	.....

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
					.....	0.0	0.0	0.0	0	0.0	0

Location: I15SB @ Barstow rd (SR247)
System: COORDINATED **District:** 08
Master At: NB **I/C:**

Designed By: NADER ARJOMANDI
Installed By: NADER ARJOMANDI
Service Info: NADER ARJOMANDI

Timing Change:	Date Start:	Date End:	Designed:	Installed:
1/23/2023				6/20/2015

			FLASH
PHASE	1)	NORTH BOUND LEFT TURN	[ ]
	2)	SOUTH BOUND THRU	[ ]
	3)		[ ]
	4)	WEST BOUND	[ ]
	5)		[ ]
	6)	NORTH BOUND THRU	[ ]
	7)		[ ]
	8)		[ ]
OVERLAP	A)		[ ]
	B)		[ ]
	C)		[ ]
	D)		[ ]
	E)		[ ]
	F)		[ ]

Intersection Layout

Comments and Notes:
Upgraded to 2.21 version & Implemented LPI for PED phases. Min Green, Yellow time and Bike time was updated .
Nader 01/30/2023

RAM Checksum

Page 2: F6E1	Page 8: 8F78
Page 3: 1F3A	Page 9: D2FD
Page 4: B586	Page 10: 71B3
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: 398C	Page 13: 86F7

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	1 2 . 4 . 6 . .
Restricted	. . . . .

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 . . . 6 . .
Vehicle Max	. . . . .
Pedestrian	. . . . .
Bicycle	. . . . .

Phase Locks (2-1-1-3)	
Red	. . . . .
Yellow	. . . 4 . . . .
Force/Max	. . . . .

Phase Features (2-1-1-4)	
Double Entry	. . . . .
Rest In Walk	. . . . .
Rest In Red	. . . . .
Walk 2	. . . . .
Max Green 2	. . . . .
Max Green 3	. . . . .

Startup (2-1-1-5)	
First Green Phases	. . . 4 . . . .
Yellow Start Phases	. 2 . . . 6 . .
Vehicle Calls	1 2 . 4 . 6 . .
Pedestrian Calls	. . . . . 6 . .
Yellow Start Overlaps	. . . . .
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	. . . . .	1	. . . . .
2	. . . . .	2	. . . . .
3	. . . . .	3	. . . . .
4	. . . . .	4	. . . . .
5	. . . . .	5	. . . . .
6	. . . . .	6	. . . . .
7	. . . . .	7	. . . . .
8	. . . . .	8	. . . . .

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	. . . . .
Yellow Flash Overlap	. . . . .
Flash In Red Phases	. . . . .
Flash In Red Overlaps	. . . . .

Special Operation (2-1-2-3)	
Single Exit Phase	. . . . .
Driveway Signal Phases	. . . . .
Driveway Signal Overlaps	. . . . .
Leading Ped Phases	. . . . . 6 . .

Protected Permissive (2-1-2-4)	
Protected Permissive	. . . . .

Pedestrian (2-1-3)	
P1	. . . . .
P2	. . . . .
P3	. . . . .
P4	. . . . .
P5	. . . . .
P6	. . . . . 6 . .
P7	. . . . .
P8	. . . . .

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	. . . . .	. . . . .	. . . . .	. . . . .
B	. . . . .	. . . . .	. . . . .	. . . . .
C	. . . . .	. . . . .	. . . . .	. . . . .
D	. . . . .	. . . . .	. . . . .	. . . . .
E	. . . . .	. . . . .	. . . . .	. . . . .
F	. . . . .	. . . . .	. . . . .	. . . . .

PHASE TIMING

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	0	0	4	0	0
Flash Don't Walk	0	0	0	0	0	13	0	0
Minimum Green	10	10	0	10	0	10	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	20	40	0	30	0	40	0	0
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	3.0	0.0	3.0	0.0	3.0	0.0	0.0
Maximum Gap	2.0	3.0	0.0	3.0	0.0	3.0	0.0	0.0
Minimum Gap	2.0	3.0	0.0	3.0	0.0	3.0	0.0	0.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.7	5.0	3.0	5.0	3.0	5.0	3.0	3.0
All-Red	1.0	1.0	0.0	1.0	0.0	1.0	0.0	0.0

Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	3	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor	65		.....	26			20	15		11		42		
Plan 2	Green Factor	75		.....	26			21	23		12		51		
Plan 3	Green Factor	70		.....	24			20	21		10		48		
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	1..4.6..	.2...6..	.....	.....	.....	.....	.....	.....
Plan 2	1..4.6..	.2...6..	.....	.....	.....	.....	.....	.....
Plan 3	1..4.6..	.2...6..	.....	.....	.....	.....	.....	.....
Plan 4	.....	.....	.....	.....	.....	.....	.....	.....
Plan 5	.....	.....	.....	.....	.....	.....	.....	.....
Plan 6	.....	.....	.....	.....	.....	.....	.....	.....
Plan 7	.....	.....	.....	.....	.....	.....	.....	.....
Plan 8	.....	.....	.....	.....	.....	.....	.....	.....
Plan 9	.....	.....	.....	.....	.....	.....	.....	.....

Master Timer Sync (7-A)	
Enable in Plans	
1-9	.....
11-19	.....
21-29	.....

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
.2.4.6.8	.....
Veh Min	Veh Max
.2...6..	.....
Ped	Bike
.....	.....
Cond	Cond Grn
.....	10

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	OffSet
	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	.....	.....	.....	.....	.....	.....	.....	.....
Plan 12	.....	.....	.....	.....	.....	.....	.....	.....
Plan 13	.....	.....	.....	.....	.....	.....	.....	.....
Plan 14	.....	.....	.....	.....	.....	.....	.....	.....
Plan 15	.....	.....	.....	.....	.....	.....	.....	.....
Plan 16	.....	.....	.....	.....	.....	.....	.....	.....
Plan 17	.....	.....	.....	.....	.....	.....	.....	.....
Plan 18	.....	.....	.....	.....	.....	.....	.....	.....
Plan 19	.....	.....	.....	.....	.....	.....	.....	.....

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	.....	.....	.....	.....	.....	.....	.....	.....
Plan 22	.....	.....	.....	.....	.....	.....	.....	.....
Plan 23	.....	.....	.....	.....	.....	.....	.....	.....
Plan 24	.....	.....	.....	.....	.....	.....	.....	.....
Plan 25	.....	.....	.....	.....	.....	.....	.....	.....
Plan 26	.....	.....	.....	.....	.....	.....	.....	.....
Plan 27	.....	.....	.....	.....	.....	.....	.....	.....
Plan 28	.....	.....	.....	.....	.....	.....	.....	.....
Plan 29	.....	.....	.....	.....	.....	.....	.....	.....

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3			10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4			10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5			10	4.5
6	COUNT+CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	COUNT+CALL+EXTEND	. 2	NO	I4U	7			10	2.1
8	COUNT+CALL+EXTEND	. 2	NO	I4L	8			10	7.4
9	COUNT+CALL+EXTEND	. . 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	. . 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6U	11			10	1.3
12	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6L	12			10	1.7
13	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7U	13			10	4.7
14	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7L	14			10	6.4
15	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8U	15			10	2.3
16	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8L	16			10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	. . 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U	23			10	1.2
24	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L	24			10	1.6
25	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U	25			10	4.6
26	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3L	26			10	6.3
27	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4U	27			10	2.2
28	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4L	28			10	7.3
29	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31			10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32			10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33			10	4.8
34	COUNT+CALL+EXTEND	 8	NO	J7L	34			10	6.5
35	COUNT+CALL+EXTEND	 8	NO	J8U	35			10	2.4
36	COUNT+CALL+EXTEND	 8	NO	J8L	36			10	7.7
37	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	. . . 4 . . .	NO	I12L	42			10	5.3
43	PEDESTRIAN	. . . . . 6 . .	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors17-24	. . . . .
Detectors 25-32	. . . . .
Detectors 33-40	. . . . .
Detectors 41-44	. . . . .

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0700	1	A
0740	3	A
0840	1	A
0910	3	A
1130	1	A
1150	2	A
1210	3	A
1310	1	A
1500	2	A
1700	1	A
1800	255	A
		A
		A
		A
		A
		A

Table 2 (8-2-2)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 3 (8-2-3)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 4 (8-2-4)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 5 (8-2-5)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 6 (8-2-6)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1			.....	
2			.....	
3			.....	
4			.....	
5			.....	
6			.....	
7			.....	
8			.....	
9			.....	
10			.....	
11			.....	
12			.....	
13			.....	
14			.....	
15			.....	
16			.....	

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)

Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1			.....		.....
2			.....		.....
3			.....		.....
4			.....		.....
5			.....		.....
6			.....		.....
7			.....		.....
8			.....		.....
9			.....		.....
10			.....		.....
11			.....		.....
12			.....		.....
13			.....		.....
14			.....		.....
15			.....		.....
16			.....		.....

Action Codes:

0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11. Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
27. Traffic Actuated Max 2
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	2
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)

#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	2
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	192	.	168	.	0	.	102
Netmask	255	.	255	.	255	.	0
Broadcast	192	.	168	.	0	.	255
Gateway	192	.	168	.	0	.	1

RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. 2 . . 5 . . .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		. . . .	. . . .	1 2 3 4 5 6 7 8	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	A B C D E F
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-1-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8

Configuration (3-1-6)

Primary Port	Secondary Port	Latching	Power-Up
2.5	0.0	YES	FLASHING

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. . . 4 . . 7 .	. . . .	. . . .	. . . .	. . . .	. 2 . 4 . 6 . 8	. . . . . .	. . . . . .	. . . . . .
Clear 2		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Clear 3		. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . . . . .	. . . . . .	. . . . . .
Hold		1 2 3 . . 6 . .	. . . .	. . . .	. 2 . . . 6 . .	. . . .	. . . 4 . . . 8	. . . . . .	. . . . . .	. . . . . .
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-2-5)

Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . .	. . . . . .	. . . 4 . . 7 .	. . . .

Configuration (3-2-6)

Primary Port	Secondary Port	Latching	Power-up
2.6	0.0	YES	DARK

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. 2 . . 5 . . .	. . . . . .

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . . 4 . . 7 .	. . . . . .

Port	Latching	Phase Termination
5.6	NO	ADVANCE

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	1 . . . . 6 . .	. . . . . .

Port	Latching	Phase Termination
5.7	NO	ADVANCE

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . 3 8	. . . . . .

Port	Latching	Phase Termination
5.8	NO	ADVANCE

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							+
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C

\+ middle output of loadswitches 3 and 6
Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)				Indicator Output	
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	. . . . .	0.0	OPT	0	0
Plan 11-19	. . . . .	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	. . . . .
	. . . . .

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	. . . . .

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
					. . . . .	0.0	0.0	0.0	0	0.0	0

Appendix C: Existing Traffic Count Data

NDS - August 2021

Intersections 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26

Prepared by National Data & Surveying Services

Hinkley Rd & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-001
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS

AM	07:15 AM - 08:15 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Hinkley Rd)

	L	T	R	U	Total	
AM	11	0	3	0	15	AM
NOON	0	0	0	0	0	NOON
PM	27	0	7	0	15	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM	
62	0	282	⇦
0	0	0	0
8	0	7	0
126	0	74	1
0	0	0	0
AM	NOON	PM	

WESTBOUND (National Trails Hwy)

PM	NOON	AM	
8	0	7	0
255	0	51	1
0	0	0	0
0	0	0	0
81	0	129	⇨
PM	NOON	AM	

NORTHBOUND (Hinkley Rd)

	L	T	R	U	Total	
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

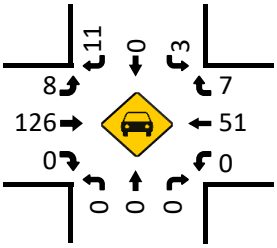
0 1 0 0 (SB) | 0 0 0 0 (NB)

CONTROL

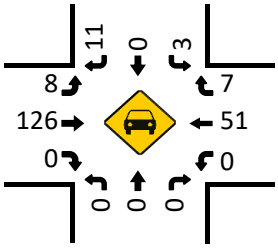
1-Way Stop(SB)

	AM	NOON	PM
TEV	206	0	378
PHF	0.86		0.87

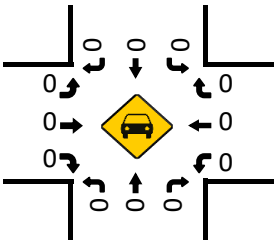
Totals (AM)



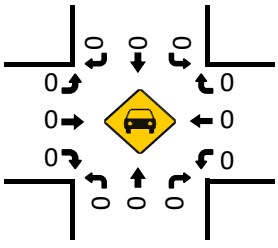
Totals (AM)



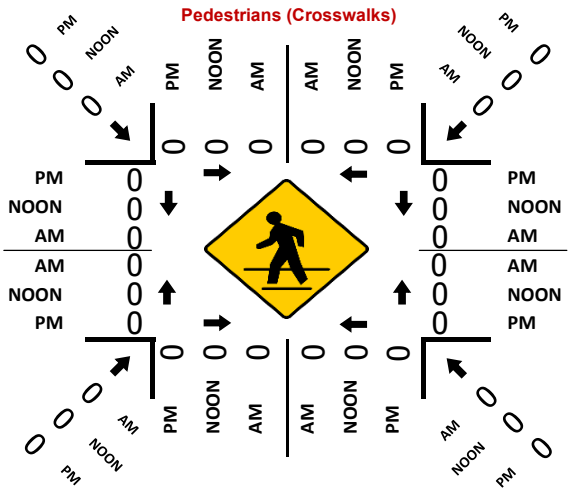
Totals (NOON)



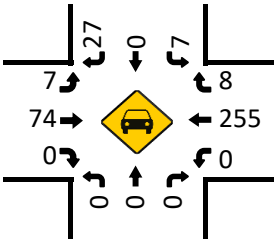
Totals (NOON)



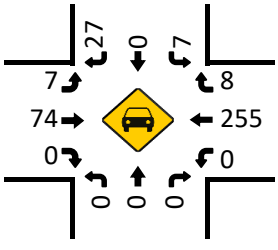
Pedestrians (Crosswalks)



Totals (PM)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Hinkley Rd & National Trails Hwy
City: Barstow
Control: 1-Way Stop(SB)

Project ID: 21-030063-001
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Hinkley Rd				Hinkley Rd				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	4	0	4	27	0	0	0	10	2	0	48
7:15 AM	0	0	0	0	0	0	1	0	2	27	0	0	0	10	4	0	44
7:30 AM	0	0	0	0	2	0	5	0	1	34	0	0	0	18	0	0	60
7:45 AM	0	0	0	0	0	0	1	0	3	32	0	0	0	10	2	0	48
8:00 AM	0	0	0	0	1	0	4	0	2	33	0	0	0	13	1	0	54
8:15 AM	0	0	0	0	1	0	1	0	2	19	0	0	0	16	1	0	40
8:30 AM	0	0	0	0	1	0	0	0	1	19	0	0	0	13	0	0	34
8:45 AM	0	0	0	0	0	0	4	0	0	21	0	0	0	14	0	0	39
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	6	0	20	0	15	212	0	0	0	104	10	0	367
APPROACH %'s :					23.08%	0.00%	76.92%	0.00%	6.61%	93.39%	0.00%	0.00%	0.00%	91.23%	8.77%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	3	0	11	0	8	126	0	0	0	51	7	0	206
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.375	0.000	0.550	0.000	0.667	0.926	0.000	0.000	0.000	0.708	0.438	0.000	0.858
					0.500				0.957				0.806				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	5	0	2	21	0	0	0	34	0	0	62
4:15 PM	0	0	0	0	0	0	5	0	0	29	0	0	0	45	1	0	80
4:30 PM	0	0	0	0	0	0	1	0	1	18	0	0	0	42	0	0	62
4:45 PM	0	0	0	0	0	0	1	0	0	30	0	0	0	38	0	0	69
5:00 PM	0	0	0	0	2	0	1	0	2	22	0	0	0	50	0	0	77
5:15 PM	0	0	0	0	3	0	3	0	2	26	0	0	0	70	2	0	106
5:30 PM	0	0	0	0	1	0	15	0	3	10	0	0	0	78	2	0	109
5:45 PM	0	0	0	0	1	0	8	0	0	16	0	0	0	57	4	0	86
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	7	0	39	0	10	172	0	0	0	414	9	0	651
APPROACH %'s :					15.22%	0.00%	84.78%	0.00%	5.49%	94.51%	0.00%	0.00%	0.00%	97.87%	2.13%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	7	0	27	0	7	74	0	0	0	255	8	0	378
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.583	0.000	0.450	0.000	0.583	0.712	0.000	0.000	0.000	0.817	0.500	0.000	0.867
					0.531				0.723				0.822				

National Data & Surveying Services Intersection Turning Movement Count

Location: Hinkley Rd & National Trails Hwy
City: Barstow
Control: 1-Way Stop(SB)

Project ID: 21-030063-001
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Hinkley Rd				Hinkley Rd				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Hinkley Rd & National Trails Hwy
City: Barstow
Project ID: 21-030063-001
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Hinkley Rd		Hinkley Rd		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Country Club Dr & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-002
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Country Club Dr)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM	
74	0	268	⇦
0	0	0	↶ 0
0	0	0	↱ 0
114	0	87	→ 1
0	0	3	↷ 0
AM	NOON	PM	

WESTBOUND (National Trails Hwy)

PM	NOON	AM	
0	0	0	↶ 0
268	0	74	← 1
21	0	2	↱ 0
0	0	0	↷ 0
97	0	120	⇨
PM	NOON	AM	

NORTHBOUND (Country Club Dr)

PM	24	0	0	0	10	PM
NOON	0	0	0	0	0	NOON
AM	2	0	0	0	6	AM

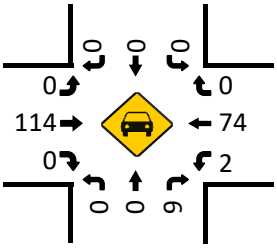
⇩	↶ 0	← 0	↑ 1	→ 0

CONTROL

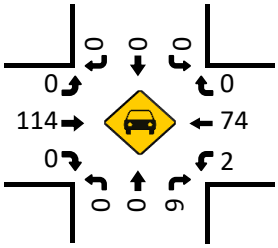
1-Way Stop(NB)

TEV	196	0	389
	AM	NOON	PM
PHF	0.88		0.86

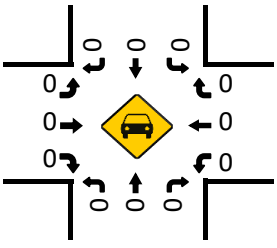
Totals (AM)



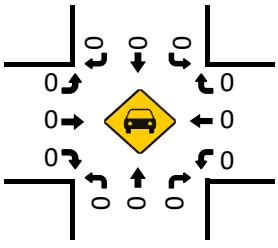
Totals (AM)



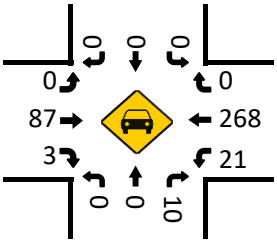
Totals (NOON)



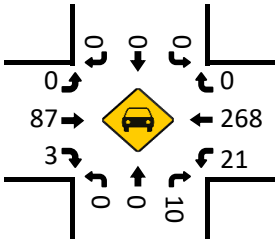
Totals (NOON)



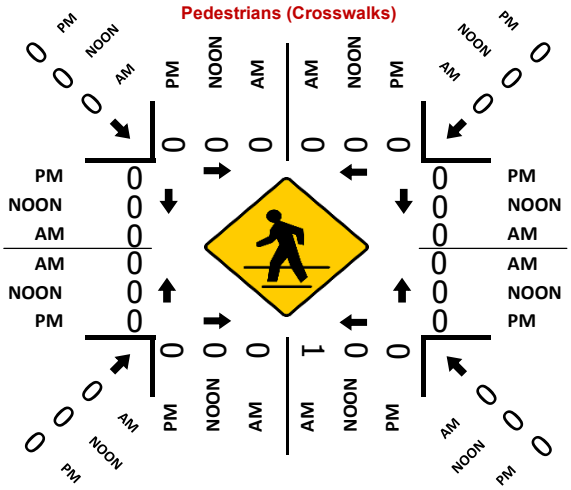
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Country Club Dr & National Trails Hwy
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-002
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Country Club Dr				Country Club Dr				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	37	0	0	0	10	0	0	47
7:15 AM	0	0	0	0	0	0	0	0	0	20	0	0	0	12	0	0	32
7:30 AM	0	0	1	0	0	0	0	0	0	28	0	0	0	14	0	0	43
7:45 AM	0	0	0	0	0	0	0	0	0	25	0	0	0	12	0	0	37
8:00 AM	0	0	0	0	0	0	0	0	0	37	0	0	0	19	0	0	56
8:15 AM	0	0	1	0	0	0	0	0	0	29	0	0	0	22	0	0	52
8:30 AM	0	0	2	0	0	0	0	0	0	26	0	0	2	16	0	0	46
8:45 AM	0	0	3	0	0	0	0	0	0	22	0	0	0	17	0	0	42
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	7	0	0	0	0	0	0	224	0	0	2	122	0	0	355
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	1.61%	98.39%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	6	0	0	0	0	0	0	114	0	0	2	74	0	0	196
PEAK HR FACTOR :	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.770	0.000	0.000	0.250	0.841	0.000	0.000	0.875
	0.500								0.770				0.864				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	32	0	0	4	38	0	0	75
4:15 PM	0	0	1	0	0	0	0	0	0	25	1	0	4	37	0	0	68
4:30 PM	0	0	8	0	0	0	0	0	0	23	0	0	6	51	0	0	88
4:45 PM	0	0	4	0	0	0	0	0	0	22	1	0	3	42	0	0	72
5:00 PM	0	0	1	0	0	0	0	0	0	27	1	0	5	46	0	0	80
5:15 PM	0	0	3	0	0	0	0	0	0	25	0	0	5	80	0	0	113
5:30 PM	0	0	1	0	0	0	0	0	0	17	2	0	5	75	0	0	100
5:45 PM	0	0	5	0	0	0	0	0	0	18	0	0	6	67	0	0	96
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	24	0	0	0	0	0	0	189	5	0	38	436	0	0	692
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	97.42%	2.58%	0.00%	8.02%	91.98%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	10	0	0	0	0	0	0	87	3	0	21	268	0	0	389
PEAK HR FACTOR :	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.806	0.375	0.000	0.875	0.838	0.000	0.000	0.861
	0.500								0.804				0.850				

National Data & Surveying Services Intersection Turning Movement Count

Location: Country Club Dr & National Trails Hwy
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-002
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Country Club Dr				Country Club Dr				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Country Club Dr & National Trails Hwy **Project ID:** 21-030063-002
City: Barstow **Date:** 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Country Club Dr		Country Club Dr		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	1	0	0	0	0	1
APPROACH %'s :			0.00%	100.00%					
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	1	0	0	0	0	1
PEAK HR FACTOR :				0.250					0.250
			0.250						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Lenwood Rd & Sun Valley Dr

Peak Hour Turning Movement Count

ID: 21-030063-004
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:00 AM - 08:00 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Lenwood Rd)

	L	T	R	U	Total	
AM	1	91	0	0	87	AM
NOON	0	0	0	0	0	NOON
PM	0	107	0	0	171	PM

EASTBOUND (Sun Valley Dr)

	L	T	R	U	Total	
AM	0	3	0	0	3	AM
NOON	0	0	0	0	0	NOON
PM	0	0	1	0	1	PM

WESTBOUND (Sun Valley Dr)

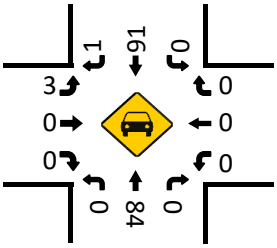
	L	T	R	U	Total	
AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

NORTHBOUND (Lenwood Rd)

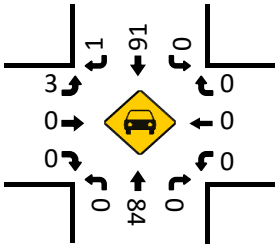
	L	T	R	U	Total	
AM	91	0	0	84	0	AM
NOON	0	0	0	0	0	NOON
PM	109	0	2	171	0	PM

CONTROL			
1-Way Stop(EB)			
TEV	179 AM	0 NOON	282 PM
PHF	0.76		0.88

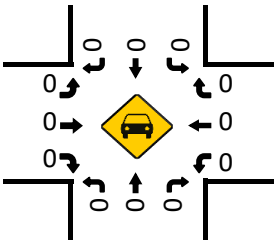
Totals (AM)



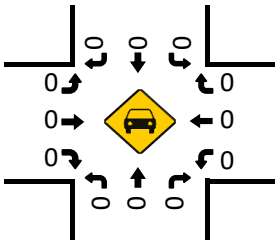
Totals (AM)



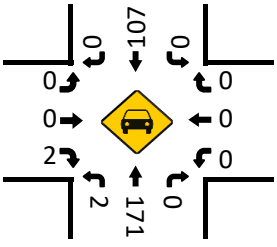
Totals (NOON)



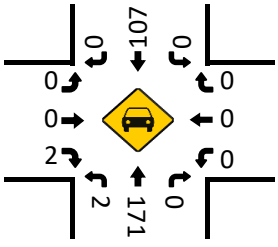
Totals (NOON)



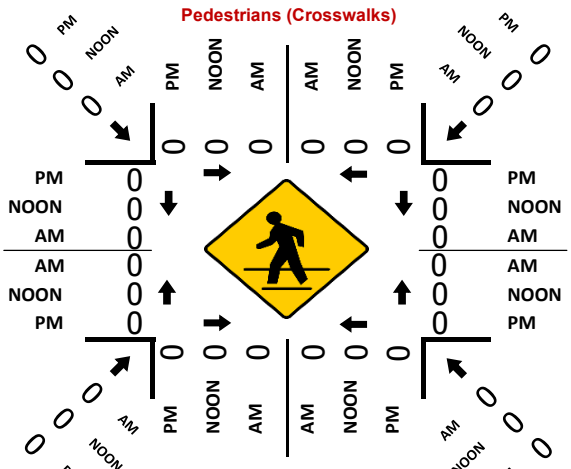
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0
0
0
0
0
0
0
0
0
0
0
0

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Sun Valley Dr
City: Barstow
Control: 1-Way Stop(EB)

Project ID: 21-030063-004
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Sun Valley Dr				Sun Valley Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	21	0	0	0	19	1	0	0	0	0	0	0	0	0	0	41
7:15 AM	0	26	0	0	0	21	0	0	1	0	0	0	0	0	0	0	48
7:30 AM	0	13	0	0	0	17	0	0	1	0	0	0	0	0	0	0	31
7:45 AM	0	24	0	0	0	34	0	0	1	0	0	0	0	0	0	0	59
8:00 AM	0	18	0	0	0	17	0	0	0	0	0	0	0	0	0	0	35
8:15 AM	0	19	0	0	0	18	0	0	0	0	0	0	0	0	0	0	37
8:30 AM	0	23	0	0	0	23	0	0	1	0	0	0	0	0	0	0	47
8:45 AM	0	21	0	0	0	25	0	0	2	0	0	0	0	0	0	0	48
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	165	0	0	0	174	1	0	6	0	0	0	0	0	0	0	346
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	99.43%	0.57%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	84	0	0	0	91	1	0	3	0	0	0	0	0	0	0	179
PEAK HR FACTOR :	0.000	0.808	0.000	0.000	0.000	0.669	0.250	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.758
		0.808				0.676				0.750							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	35	0	0	0	27	1	0	0	0	0	0	0	0	0	0	63
4:15 PM	0	31	0	0	0	28	0	0	0	0	0	0	0	0	0	0	59
4:30 PM	0	41	0	0	0	30	0	0	0	0	0	0	0	0	0	0	71
4:45 PM	0	38	0	0	0	24	0	0	0	0	1	0	0	0	0	0	63
5:00 PM	1	38	0	0	0	27	0	0	0	0	0	0	0	0	0	0	66
5:15 PM	0	52	0	0	0	21	0	0	0	0	0	0	0	0	0	0	73
5:30 PM	0	48	0	0	0	30	0	0	0	0	2	0	0	0	0	0	80
5:45 PM	1	33	0	0	0	29	0	0	0	0	0	0	0	0	0	0	63
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	316	0	0	0	216	1	0	0	0	3	0	0	0	0	0	538
APPROACH %'s :	0.63%	99.37%	0.00%	0.00%	0.00%	99.54%	0.46%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	2	171	0	0	0	107	0	0	0	0	2	0	0	0	0	0	282
PEAK HR FACTOR :	0.500	0.822	0.000	0.000	0.000	0.892	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.881
		0.832				0.892				0.250							

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Sun Valley Dr
City: Barstow
Control: 1-Way Stop(EB)

Project ID: 21-030063-004
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Sun Valley Dr				Sun Valley Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Sun Valley Dr
City: Barstow
Project ID: 21-030063-004
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lenwood Rd		Lenwood Rd		Sun Valley Dr		Sun Valley Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:00 AM - 08:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Holland St & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-027
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Holland St)

AM	0	0	1	0	0	AM
NOON	0	0	0	0	0	NOON
PM	2	0	0	0	2	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM	
111	0	323	
0	0	0	0
0	0	2	0
188	0	183	2
0	0	2	0
AM	NOON	PM	

WESTBOUND (National Trails Hwy)

PM	NOON	AM	
0	0	0	0
320	0	110	2
3	0	0	0
0	0	0	0
186	0	193	
PM	NOON	AM	

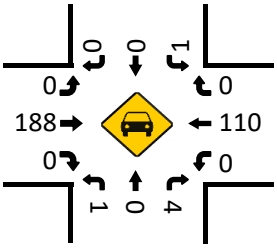
NORTHBOUND (Holland St)

PM	5	0	1	0	3	PM
NOON	0	0	0	0	0	NOON
AM	0	0	1	0	4	AM

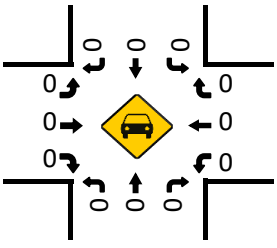
CONTROL: 2-Way Stop(NB/SB)

TEV	304 AM	0 NOON	516 PM
PHF	0.90		0.95

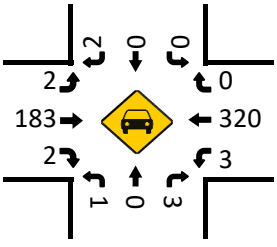
Totals (AM)



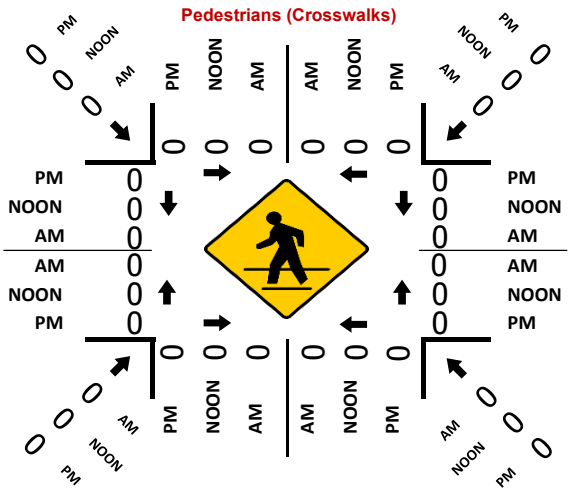
Totals (NOON)



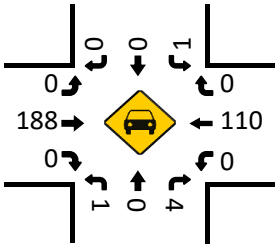
Totals (PM)



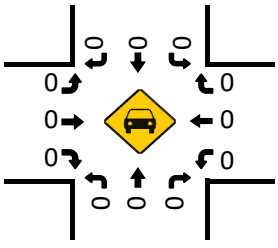
Pedestrians (Crosswalks)



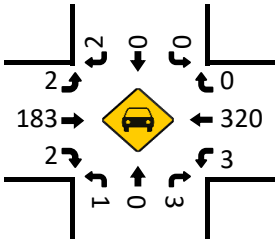
Totals (AM)



Totals (NOON)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Holland St & National Trails Hwy
City: Barstow
Control: 2-Way Stop(NB/SB)

Project ID: 21-030063-027
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Holland St				Holland St				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	0	41	0	0	1	20	0	0	63
7:15 AM	0	0	1	0	1	0	0	0	0	40	0	0	2	23	0	0	67
7:30 AM	0	0	1	0	0	0	0	0	0	53	0	0	0	30	0	0	84
7:45 AM	0	0	1	0	1	0	0	0	0	55	0	0	0	25	0	0	82
8:00 AM	0	0	0	0	0	0	0	0	0	49	0	0	0	17	0	0	66
8:15 AM	1	0	2	0	0	0	0	0	0	31	0	0	0	38	0	0	72
8:30 AM	0	0	2	0	0	0	1	0	0	41	0	0	3	32	0	0	79
8:45 AM	0	0	2	0	0	0	0	0	0	32	1	0	0	30	0	0	65
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	10	0	2	0	1	0	0	342	1	0	6	215	0	0	578
APPROACH %'s :	9.09%	0.00%	90.91%	0.00%	66.67%	0.00%	33.33%	0.00%	0.00%	99.71%	0.29%	0.00%	2.71%	97.29%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	0	4	0	1	0	0	0	0	188	0	0	0	110	0	0	304
PEAK HR FACTOR :	0.250	0.000	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.855	0.000	0.000	0.000	0.724	0.000	0.000	0.905
	0.417				0.250				0.855				0.724				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	49	0	0	1	58	0	0	108
4:15 PM	0	0	0	0	1	0	0	0	0	47	0	0	0	62	0	0	110
4:30 PM	0	0	1	0	0	0	0	0	0	51	0	0	0	63	0	0	115
4:45 PM	0	0	0	0	0	0	2	0	0	44	0	0	0	63	2	0	111
5:00 PM	0	0	1	0	0	0	0	0	0	54	0	0	1	61	0	0	117
5:15 PM	1	0	0	0	0	0	1	0	0	48	1	0	2	81	0	0	134
5:30 PM	0	0	0	0	0	0	0	0	1	32	1	0	0	95	0	0	129
5:45 PM	0	0	2	0	0	0	1	0	1	49	0	0	0	83	0	0	136
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	4	0	1	0	4	0	2	374	2	0	4	566	2	0	960
APPROACH %'s :	20.00%	0.00%	80.00%	0.00%	20.00%	0.00%	80.00%	0.00%	0.53%	98.94%	0.53%	0.00%	0.70%	98.95%	0.35%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	0	3	0	0	0	2	0	2	183	2	0	3	320	0	0	516
PEAK HR FACTOR :	0.250	0.000	0.375	0.000	0.000	0.000	0.500	0.000	0.500	0.847	0.500	0.000	0.375	0.842	0.000	0.000	0.949
	0.500				0.500				0.866				0.850				

National Data & Surveying Services Intersection Turning Movement Count

Location: Holland St & National Trails Hwy
City: Barstow
Control: 2-Way Stop(NB/SB)

Project ID: 21-030063-027
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Holland St				Holland St				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250
										0.250				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Holland St & National Trails Hwy
City: Barstow
Project ID: 21-030063-027
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Holland St		Holland St		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	1
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Hannan St & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-026
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Hannan St)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM		
111	0	323	⇦	
0	0	0	↶	0
0	0	0	↱	0
192	0	186	→	2
1	0	0	↷	0
AM	NOON	PM		

WESTBOUND (National Trails Hwy)

PM	NOON	AM		
0	0	0	↶	0
322	0	110	←	2
0	0	0	↰	0
0	0	0	↷	0
			⇨	
186	0	192		
PM	NOON	AM		

NORTHBOUND (Hannan St)

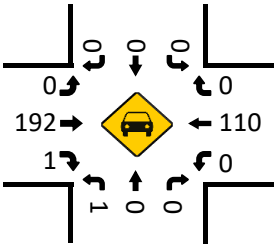
PM	0	0	1	0	0	PM
NOON	0	0	0	0	0	NOON
AM	1	0	1	0	0	AM

CONTROL

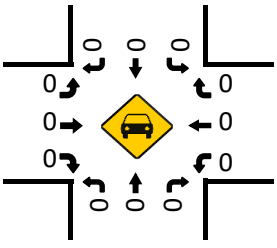
2-Way Stop(NB/SB)

TEV	304 AM	0 NOON	509 PM
PHF	0.87		0.95

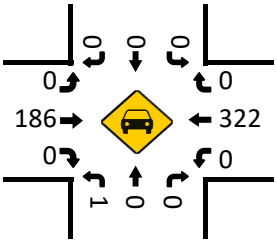
Totals (AM)



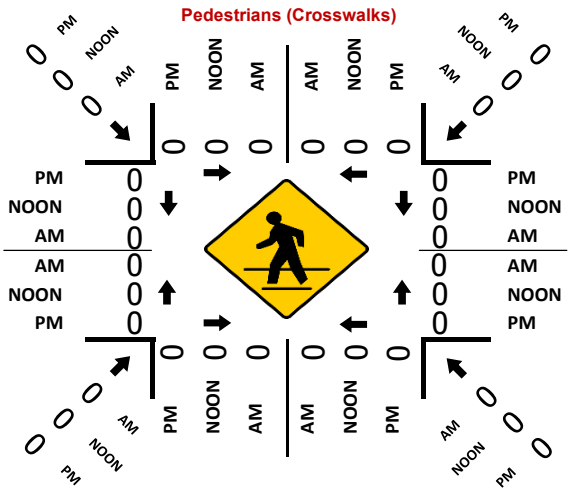
Totals (NOON)



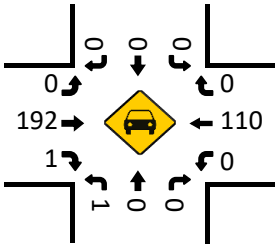
Totals (PM)



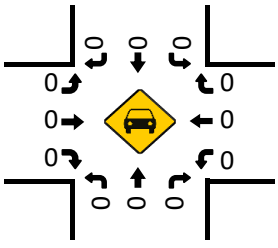
Pedestrians (Crosswalks)



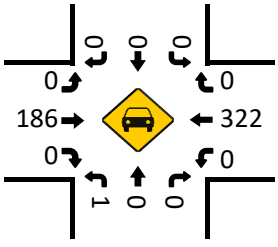
Totals (AM)



Totals (NOON)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Hannan St & National Trails Hwy
City: Barstow
Control: 2-Way Stop(NB/SB)

Project ID: 21-030063-026
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Hannan St				Hannan St				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	42	0	0	0	21	0	0	63
7:15 AM	0	0	0	0	0	0	0	0	0	42	0	0	0	25	0	0	67
7:30 AM	0	0	0	0	0	0	0	0	0	54	0	0	0	33	0	0	87
7:45 AM	0	0	0	0	0	0	0	0	0	54	1	0	0	25	0	0	80
8:00 AM	1	0	0	0	0	0	0	0	0	50	0	0	0	15	0	0	66
8:15 AM	0	0	0	0	0	0	0	0	0	34	0	0	0	37	0	0	71
8:30 AM	0	0	0	0	0	0	0	0	0	43	0	0	0	34	0	0	77
8:45 AM	0	0	0	0	0	0	0	0	0	34	0	0	0	31	0	0	65
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	0	0	0	353	1	0	0	221	0	0	576
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	99.72%	0.28%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	192	1	0	0	110	0	0	304
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.889	0.250	0.000	0.000	0.743	0.000	0.000	0.874
	0.250								0.877				0.743				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	46	0	0	0	58	0	0	104
4:15 PM	1	0	0	0	0	0	0	0	0	51	0	0	0	61	0	0	113
4:30 PM	0	0	0	0	0	0	1	0	0	50	1	0	0	63	0	1	116
4:45 PM	0	0	1	0	0	0	0	0	0	45	0	0	1	64	0	0	111
5:00 PM	0	0	0	0	0	0	0	0	0	55	0	0	0	62	0	0	117
5:15 PM	0	0	0	0	0	0	0	0	0	48	0	0	0	84	0	0	132
5:30 PM	1	0	0	0	0	0	0	0	0	32	0	0	0	93	0	0	126
5:45 PM	0	0	0	0	0	0	0	0	0	51	0	0	0	83	0	0	134
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	1	0	0	0	1	0	0	378	1	0	1	568	0	1	953
APPROACH %'s :	66.67%	0.00%	33.33%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	99.74%	0.26%	0.00%	0.18%	99.65%	0.00%	0.18%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	186	0	0	0	322	0	0	509
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.845	0.000	0.000	0.000	0.866	0.000	0.000	0.950
	0.250								0.845				0.866				

National Data & Surveying Services Intersection Turning Movement Count

Location: Hannan St & National Trails Hwy
City: Barstow
Control: 2-Way Stop(NB/SB)

Project ID: 21-030063-026
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Hannan St				Hannan St				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250
										0.250				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Hannan St & National Trails Hwy
City: Barstow
Project ID: 21-030063-026
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Hannan St		Hannan St		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	1
7:15 AM	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	0	1	0	0	0	0	0	2
APPROACH %'s :	100.00%	0.00%	100.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Townsend St & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-025
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Townsend St)

AM	0	0	2	0	2	AM
NOON	0	0	0	0	0	NOON
PM	4	0	0	0	1	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM	
108	0	323	
0	0	1	0
1	0	1	0
189	0	185	2
2	0	1	0
AM	NOON	PM	

WESTBOUND (National Trails Hwy)

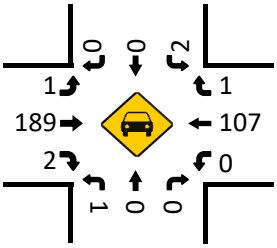
PM	NOON	AM	
0	0	1	0
318	0	107	2
0	0	0	0
0	0	0	0
185	0	191	
PM	NOON	AM	

NORTHBOUND (Townsend St)

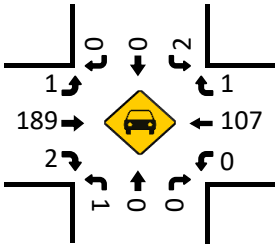
PM	1	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	2	0	1	0	0	AM

CONTROL			
2-Way Stop(NB/SB)			
TEV	303 AM	0 NOON	510 PM
PHF	0.88		0.96

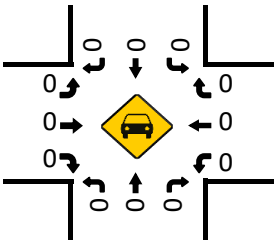
Totals (AM)



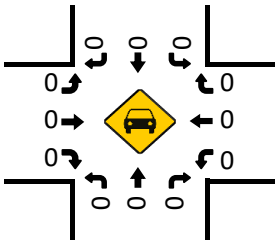
Totals (AM)



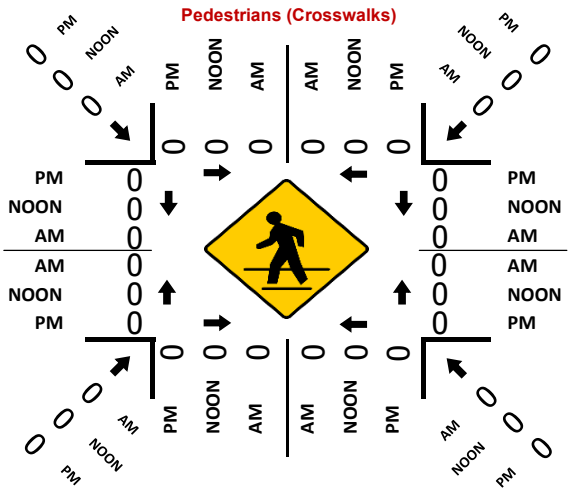
Totals (NOON)



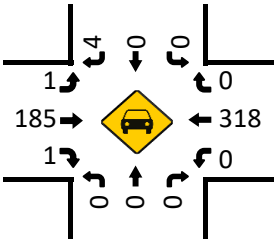
Totals (NOON)



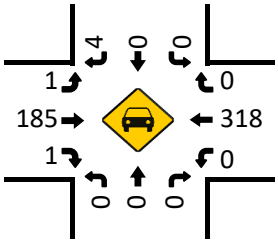
Pedestrians (Crosswalks)



Totals (PM)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Townsend St & National Trails Hwy
City: Barstow
Control: 2-Way Stop(NB/SB)

Project ID: 21-030063-025
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Townsend St				Townsend St				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	41	0	0	0	21	0	0	63
7:15 AM	0	0	0	0	0	0	0	0	0	43	0	0	0	27	0	0	70
7:30 AM	0	0	0	0	1	0	0	0	0	53	0	0	0	31	1	0	86
7:45 AM	0	0	0	0	1	0	0	0	0	55	0	0	0	26	0	0	82
8:00 AM	0	0	0	0	0	0	0	0	0	49	1	0	0	15	0	0	65
8:15 AM	1	0	0	0	0	0	0	0	1	32	1	0	0	35	0	0	70
8:30 AM	0	0	0	0	1	0	0	0	0	43	0	0	0	34	0	0	78
8:45 AM	0	0	0	0	0	0	0	0	1	33	0	0	0	31	0	0	65
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	4	0	0	0	2	349	2	0	0	220	1	0	579
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.57%	98.87%	0.57%	0.00%	0.00%	99.55%	0.45%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	0	0	0	2	0	0	0	1	189	2	0	0	107	1	0	303
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.859	0.500	0.000	0.000	0.764	0.250	0.000	0.881
	0.250				0.500				0.873				0.771				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	49	0	0	0	59	2	0	110
4:15 PM	1	0	0	0	1	0	0	0	0	47	1	1	0	58	0	0	109
4:30 PM	1	0	0	0	0	0	1	0	0	50	0	0	0	64	0	0	116
4:45 PM	0	0	0	0	0	0	0	0	0	47	0	0	0	63	0	0	110
5:00 PM	0	0	0	0	0	0	1	0	0	56	0	0	0	61	0	0	118
5:15 PM	0	0	0	0	0	0	1	0	0	45	1	0	0	84	0	0	131
5:30 PM	0	0	0	0	0	0	0	0	0	33	0	0	0	95	0	0	128
5:45 PM	0	0	0	0	0	0	2	0	1	51	0	1	0	78	0	0	133
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	0	0	1	0	5	0	1	378	2	2	0	562	2	0	955
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	16.67%	0.00%	83.33%	0.00%	0.26%	98.69%	0.52%	0.52%	0.00%	99.65%	0.35%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	4	0	1	185	1	1	0	318	0	0	510
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.826	0.250	0.250	0.000	0.837	0.000	0.000	0.959
					0.500				0.839				0.837				

National Data & Surveying Services Intersection Turning Movement Count

Location: Townsend St & National Trails Hwy
City: Barstow
Control: 2-Way Stop(NB/SB)

Project ID: 21-030063-025
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Townsend St				Townsend St				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250
										0.250				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Townsend St & National Trails Hwy
City: Barstow
Project ID: 21-030063-025
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Townsend St		Townsend St		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	1
7:15 AM	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	0	1	0	0	0	0	0	2
APPROACH %'s :	100.00%	0.00%	100.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Woods Ave & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-024
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (Woods Ave)

AM	0	0	0	0	1	AM
NOON	0	0	0	0	0	NOON
PM	0	0	3	0	2	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM	
102	0	323	⇦
2	0	0	0 ↶
1	0	1	0 ↱
203	0	185	2 →
0	0	1	0 ↷
AM	NOON	PM	

WESTBOUND (National Trails Hwy)

PM	NOON	AM	
1	0	0	0 ↷
320	0	100	2 ←
2	0	0	0 ↰
0	0	0	0 ↶
188	0	203	⇨
PM	NOON	AM	

NORTHBOUND (Woods Ave)

PM	3	0	3	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

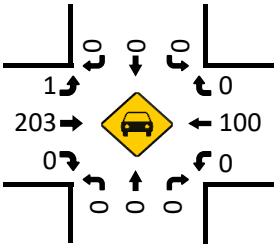
0 1 0 0 (SB) — 0 0 1 0 (NB)

CONTROL

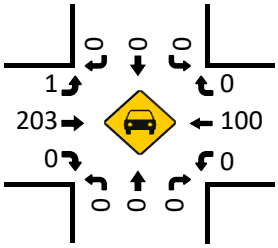
2-Way Stop(NB/SB)

TEV	306 AM	0 NOON	516 PM
PHF	0.79		0.94

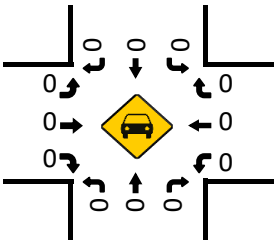
Totals (AM)



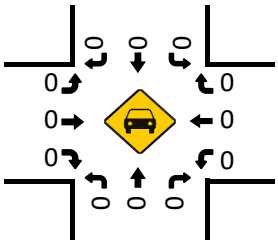
Totals (AM)



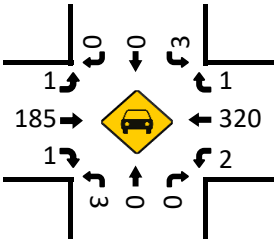
Totals (NOON)



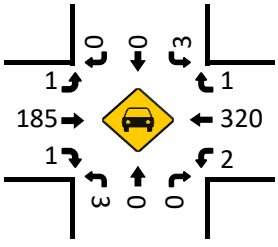
Totals (NOON)



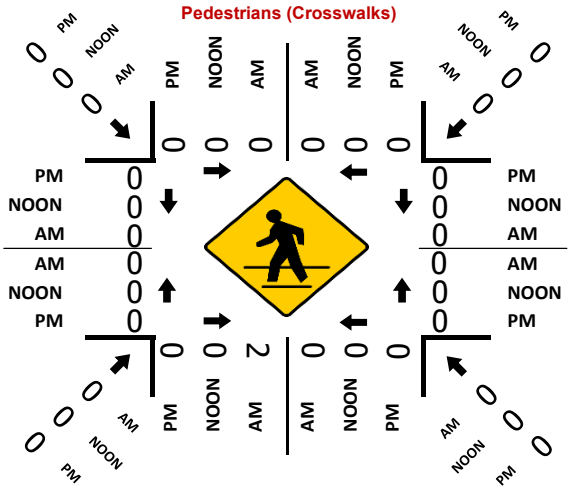
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Woods Ave & National Trails Hwy
City: Barstow
Control: 2-Way Stop(NB/SB)

Project ID: 21-030063-024
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Woods Ave				Woods Ave				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	38	0	0	0	25	0	0	64
7:15 AM	0	0	0	0	0	0	0	0	0	48	0	0	0	20	0	0	68
7:30 AM	0	0	0	0	0	0	0	0	0	43	0	0	0	31	0	0	74
7:45 AM	0	0	0	0	0	0	0	0	0	65	0	2	0	30	0	0	97
8:00 AM	0	0	0	0	0	0	0	0	1	47	0	0	0	19	0	0	67
8:15 AM	0	0	0	0	0	0	1	0	1	34	0	0	0	30	0	0	66
8:30 AM	0	0	0	0	1	0	0	0	0	36	0	0	0	31	1	0	69
8:45 AM	2	0	0	0	0	0	0	0	0	38	0	0	0	33	0	0	73
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	0	0	2	0	1	0	2	349	0	2	0	219	1	0	578
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	66.67%	0.00%	33.33%	0.00%	0.57%	98.87%	0.00%	0.57%	0.00%	99.55%	0.45%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	203	0	2	0	100	0	0	306
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.781	0.000	0.250	0.000	0.806	0.000	0.000	0.789
										0.769				0.806			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	0	0	0	0	0	1	0	0	42	2	0	1	52	0	0	100
4:15 PM	1	0	0	0	0	0	0	0	0	54	0	0	0	58	1	0	114
4:30 PM	0	0	0	0	0	0	2	0	0	48	0	0	0	60	0	0	110
4:45 PM	2	0	0	0	0	0	0	0	0	51	0	0	1	62	0	0	116
5:00 PM	1	0	0	0	0	0	0	0	0	51	0	0	0	67	0	0	119
5:15 PM	1	0	0	0	1	0	0	0	1	49	0	0	0	75	0	0	127
5:30 PM	1	0	0	0	0	0	0	0	0	37	1	0	2	96	0	0	137
5:45 PM	0	0	0	0	2	0	0	0	0	48	0	0	0	82	1	0	133
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	8	0	0	0	3	0	3	0	1	380	3	0	4	552	2	0	956
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	0.26%	98.96%	0.78%	0.00%	0.72%	98.92%	0.36%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	3	0	0	0	3	0	0	0	1	185	1	0	2	320	1	0	516
PEAK HR FACTOR :	0.750	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.250	0.907	0.250	0.000	0.250	0.833	0.250	0.000	0.942
		0.750				0.375				0.917				0.824			

National Data & Surveying Services Intersection Turning Movement Count

Location: Woods Ave & National Trails Hwy
City: Barstow
Control: 2-Way Stop(NB/SB)

Project ID: 21-030063-024
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Woods Ave				Woods Ave				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250
										0.250				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Woods Ave & National Trails Hwy
City: Barstow
Project ID: 21-030063-024
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Woods Ave		Woods Ave		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	1
7:30 AM	0	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	2	0	0	0	0	0	2
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	2	0	0	0	0	0	2
PEAK HR FACTOR :			0.500						0.500
			0.500						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Frank St & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-023
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS

AM	07:00 AM - 08:00 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Frank St)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	1	1	0	0	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM		
106	0	321	⇦	
0	0	0	↶	0
0	0	0	↱	0
187	0	174	→	2
6	0	17	↷	0
AM	NOON	PM		

WESTBOUND (National Trails Hwy)

PM	NOON	AM		
0	0	0	↶	0
301	0	96	←	2
15	0	3	↰	0
1	0	0	↲	0
189	0	197	⇨	
PM	NOON	AM		

NORTHBOUND (Frank St)

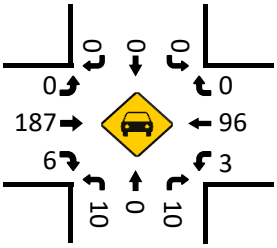
PM	33	0	20	0	13	PM
NOON	0	0	0	0	0	NOON
AM	9	0	10	0	10	AM

CONTROL

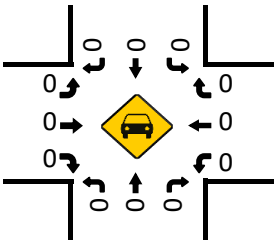
2-Way Stop(NB/SB)

TEV	312 AM	0 NOON	543 PM
PHF	0.90		0.96

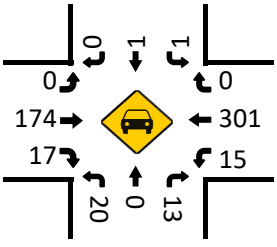
Totals (AM)



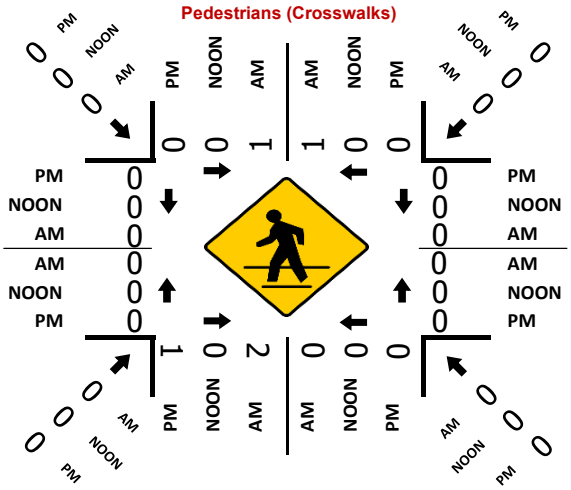
Totals (NOON)



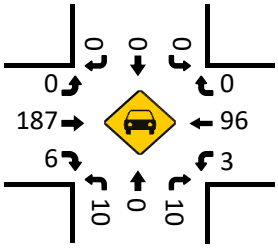
Totals (PM)



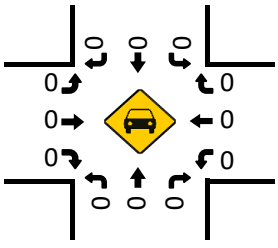
Pedestrians (Crosswalks)



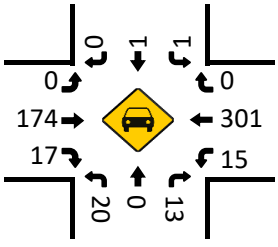
Totals (AM)



Totals (NOON)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Frank St & National Trails Hwy
City: Barstow
Control: 2-Way Stop(NB/SB)

Project ID: 21-030063-023
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Frank St				Frank St				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	0	2	0	0	0	0	0	0	39	4	0	0	19	0	0	67
7:15 AM	3	0	6	0	0	0	0	0	0	42	1	0	1	22	0	0	75
7:30 AM	2	0	0	0	0	0	0	0	0	51	0	0	1	33	0	0	87
7:45 AM	2	0	2	0	0	0	0	0	0	55	1	0	1	22	0	0	83
8:00 AM	1	0	1	0	0	0	0	0	0	45	0	0	1	16	0	0	64
8:15 AM	0	0	1	0	0	0	0	0	0	32	0	0	2	34	0	0	69
8:30 AM	1	0	1	0	0	0	0	0	0	42	1	0	0	29	0	0	74
8:45 AM	1	0	2	0	0	0	0	0	0	33	1	0	2	34	0	0	73
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	0	15	0	0	0	0	0	0	339	8	0	8	209	0	0	592
APPROACH %'s :	46.43%	0.00%	53.57%	0.00%					0.00%	97.69%	2.31%	0.00%	3.69%	96.31%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	10	0	10	0	0	0	0	0	0	187	6	0	3	96	0	0	312
PEAK HR FACTOR :	0.833	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.000	0.850	0.375	0.000	0.750	0.727	0.000	0.000	0.897
	0.556				0.000				0.862				0.728				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	0	2	0	0	0	0	0	0	42	3	0	5	54	3	0	111
4:15 PM	6	0	6	0	0	0	1	0	0	43	4	0	1	54	0	0	115
4:30 PM	2	0	3	0	0	0	0	0	0	44	8	0	2	53	0	0	112
4:45 PM	1	0	2	0	0	0	0	0	0	44	3	0	7	63	0	0	120
5:00 PM	4	0	4	0	0	0	0	0	0	51	7	0	4	60	0	0	130
5:15 PM	6	0	3	0	0	0	0	0	0	45	2	0	4	75	0	0	135
5:30 PM	6	0	2	0	0	0	0	0	0	32	2	0	5	93	0	1	141
5:45 PM	4	0	4	0	1	1	0	0	0	46	6	0	2	73	0	0	137
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	31	0	26	0	1	1	1	0	0	347	35	0	30	525	3	1	1001
APPROACH %'s :	54.39%	0.00%	45.61%	0.00%	33.33%	33.33%	33.33%	0.00%	0.00%	90.84%	9.16%	0.00%	5.37%	93.92%	0.54%	0.18%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	20	0	13	0	1	1	0	0	0	174	17	0	15	301	0	1	543
PEAK HR FACTOR :	0.833	0.000	0.813	0.000	0.250	0.250	0.000	0.000	0.000	0.853	0.607	0.000	0.750	0.809	0.000	0.250	0.963
	0.917				0.250				0.823				0.801				

National Data & Surveying Services Intersection Turning Movement Count

Location: Frank St & National Trails Hwy
City: Barstow
Control: 2-Way Stop(NB/SB)

Project ID: 21-030063-023
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Frank St				Frank St				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250
										0.250				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Frank St & National Trails Hwy
City: Barstow
Project ID: 21-030063-023
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Frank St		Frank St		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	1
7:30 AM	0	0	1	0	0	0	0	0	1
7:45 AM	1	1	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	1	2	0	0	0	0	0	4
APPROACH %'s :	50.00%	50.00%	100.00%	0.00%					
PEAK HR :	07:00 AM - 08:00 AM								TOTAL
PEAK HR VOL :	1	1	2	0	0	0	0	0	4
PEAK HR FACTOR :	0.250	0.250	0.500						0.500
	0.250		0.500						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	1
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	1
PEAK HR FACTOR :			0.250						0.250
			0.250						

Prepared by National Data & Surveying Services

Paris Ave & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-022
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Paris Ave)

	L	T	R	U	Total
AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	0	0	0	0	0

EASTBOUND (National Trails Hwy)

	L	T	R	U	Total
AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	0	0	0	0	0

WESTBOUND (National Trails Hwy)

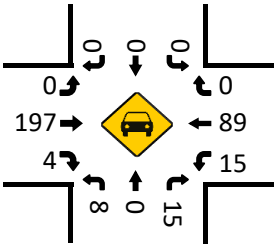
	L	T	R	U	Total
PM	0	0	0	0	0
NOON	0	0	0	0	0
AM	0	0	0	0	0

NORTHBOUND (Paris Ave)

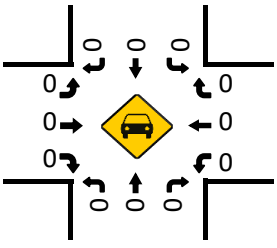
	L	T	R	U	Total
PM	23	0	3	0	7
NOON	0	0	0	0	0
AM	19	0	8	0	15

CONTROL			
1-Way Stop(NB)			
TEV	328	0	532
	AM	NOON	PM
PHF	0.86		0.95

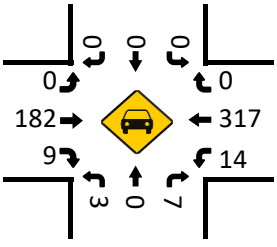
Totals (AM)



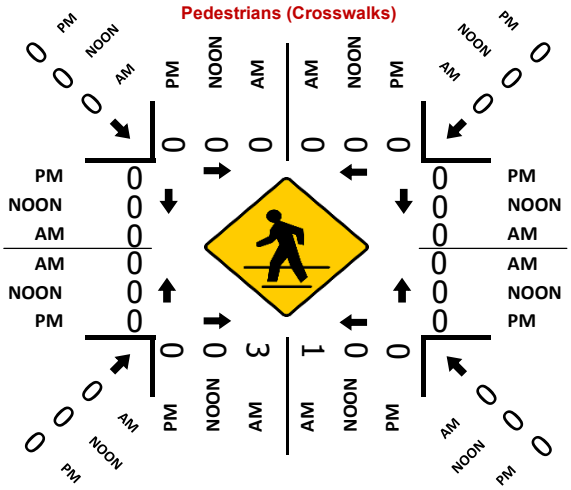
Totals (NOON)



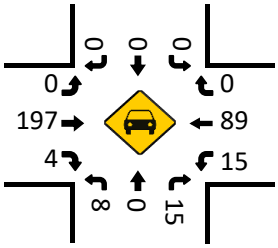
Totals (PM)



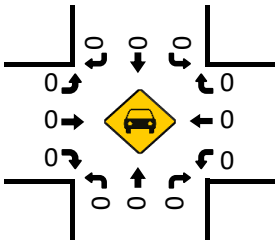
Pedestrians (Crosswalks)



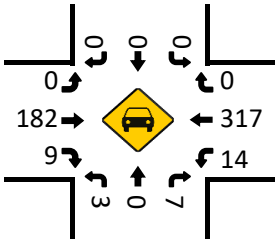
Totals (AM)



Totals (NOON)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Paris Ave & National Trails Hwy
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-022
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Paris Ave				Paris Ave				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	0	39	2	0	4	17	0	0	63
7:15 AM	2	0	2	0	0	0	0	0	0	48	0	0	8	23	0	0	83
7:30 AM	5	0	9	0	0	0	0	0	0	49	1	0	1	30	0	0	95
7:45 AM	0	0	0	0	0	0	0	0	0	54	3	0	4	20	0	0	81
8:00 AM	1	0	4	0	0	0	0	0	0	46	0	0	2	16	0	0	69
8:15 AM	1	0	5	0	0	0	0	0	0	31	1	0	2	37	0	0	77
8:30 AM	0	0	5	0	0	0	0	0	0	44	0	0	2	27	0	0	78
8:45 AM	0	0	5	0	0	0	0	0	0	35	0	0	3	37	0	0	80
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	9	0	31	0	0	0	0	0	0	346	7	0	26	207	0	0	626
APPROACH %'s :	22.50%	0.00%	77.50%	0.00%					0.00%	98.02%	1.98%	0.00%	11.16%	88.84%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	8	0	15	0	0	0	0	0	0	197	4	0	15	89	0	0	328
PEAK HR FACTOR :	0.400	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.000	0.912	0.333	0.000	0.469	0.742	0.000	0.000	0.863
	0.411								0.882				0.839				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	43	2	0	5	63	0	0	114
4:15 PM	2	0	5	0	0	0	0	0	0	45	2	0	5	52	0	0	111
4:30 PM	3	0	9	0	0	0	0	0	0	46	3	0	1	58	0	0	120
4:45 PM	2	0	3	0	0	0	0	0	0	44	0	0	6	62	0	0	117
5:00 PM	0	0	1	0	0	0	0	0	0	54	4	0	2	64	0	0	125
5:15 PM	2	0	3	0	0	0	0	0	0	43	2	0	3	77	0	0	130
5:30 PM	1	0	2	0	0	0	0	0	0	35	1	0	3	98	0	0	140
5:45 PM	0	0	1	0	0	0	0	0	0	50	2	0	6	78	0	0	137
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	10	0	25	0	0	0	0	0	0	360	16	0	31	552	0	0	994
APPROACH %'s :	28.57%	0.00%	71.43%	0.00%					0.00%	95.74%	4.26%	0.00%	5.32%	94.68%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	3	0	7	0	0	0	0	0	0	182	9	0	14	317	0	0	532
PEAK HR FACTOR :	0.375	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.843	0.563	0.000	0.583	0.809	0.000	0.000	0.950
	0.500								0.823				0.819				

National Data & Surveying Services Intersection Turning Movement Count

Location: Paris Ave & National Trails Hwy
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-022
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Paris Ave				Paris Ave				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250
										0.250				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Paris Ave & National Trails Hwy
City: Barstow
Project ID: 21-030063-022
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Paris Ave		Paris Ave		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	1
8:00 AM	0	0	1	1	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	1
8:45 AM	0	0	0	1	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	4	2	0	0	0	0	6
APPROACH %'s :			66.67%	33.33%					
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	3	1	0	0	0	0	4
PEAK HR FACTOR :			0.750	0.250					0.500
			0.500						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Ash Rd & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-021
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

CONTROL: 1-Way Stop(NB)

	AM	NOON	PM
TEV	339	0	545
PHF	0.92		0.85

SOUTHBOUND (Ash Rd)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM	
102	0	322	
0	0	0	0
0	0	0	0
184	0	165	2
28	0	20	0

WESTBOUND (National Trails Hwy)

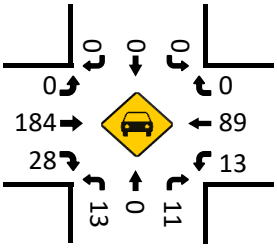
	PM	NOON	AM
0	0	0	0
2	301	0	89
0	19	0	13
0	0	0	1
	184	0	196

NORTHBOUND (Ash Rd)

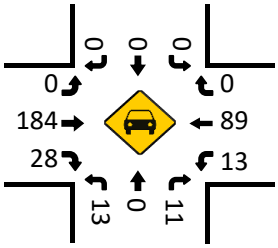
PM	39	0	21	0	19	PM
NOON	0	0	0	0	0	NOON
AM	41	0	13	0	11	AM

0 0 1 0

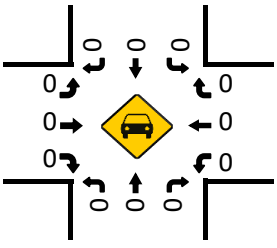
Totals (AM)



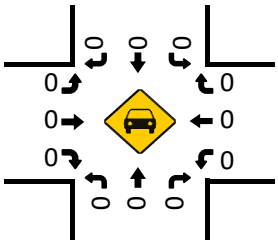
Totals (AM)



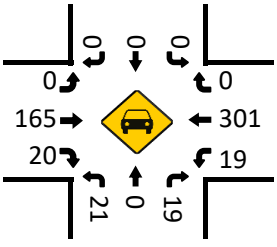
Totals (NOON)



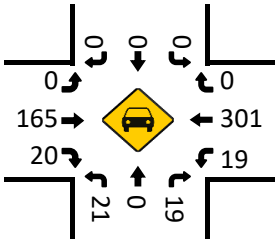
Totals (NOON)



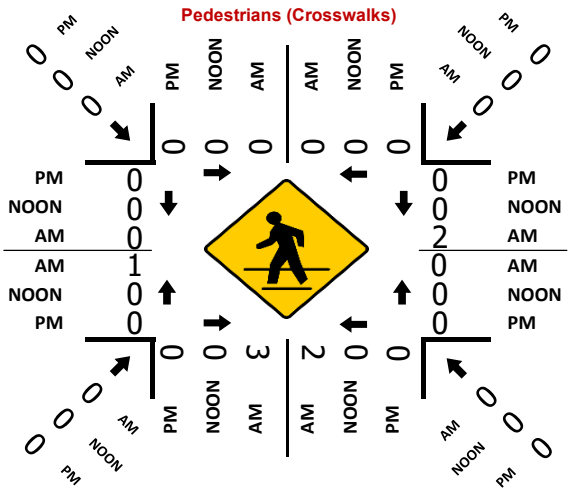
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Ash Rd & National Trails Hwy
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-021
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Ash Rd				Ash Rd				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	6	0	0	0	0	0	0	32	6	0	1	21	0	0	67
7:15 AM	6	0	5	0	0	0	0	0	0	45	6	0	2	24	0	1	89
7:30 AM	1	0	1	0	0	0	0	0	0	56	4	0	1	29	0	0	92
7:45 AM	2	0	3	0	0	0	0	0	0	39	11	0	8	26	0	0	89
8:00 AM	4	0	2	0	0	0	0	0	0	44	7	0	2	10	0	0	69
8:15 AM	2	0	6	0	0	0	0	0	0	33	0	0	1	39	0	0	81
8:30 AM	4	0	1	0	0	0	0	0	0	50	3	0	3	24	0	0	85
8:45 AM	4	0	2	0	0	0	0	0	0	40	3	0	4	35	0	0	88
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	24	0	26	0	0	0	0	0	0	339	40	0	22	208	0	1	660
APPROACH %'s :	48.00%	0.00%	52.00%	0.00%					0.00%	89.45%	10.55%	0.00%	9.52%	90.04%	0.00%	0.43%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	13	0	11	0	0	0	0	0	0	184	28	0	13	89	0	1	339
PEAK HR FACTOR :	0.542	0.000	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.821	0.636	0.000	0.406	0.767	0.000	0.250	0.921
	0.545								0.883				0.757				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	5	0	6	0	0	0	0	0	0	42	4	0	6	64	0	0	127
4:15 PM	4	0	5	0	0	0	0	0	0	48	2	0	3	54	0	0	116
4:30 PM	6	0	4	0	0	0	0	0	0	47	8	0	5	52	0	0	122
4:45 PM	3	0	5	0	0	0	0	0	0	43	4	0	9	67	0	0	131
5:00 PM	4	0	4	0	0	0	0	0	0	50	5	0	2	59	0	0	124
5:15 PM	4	0	5	0	0	0	0	0	0	38	3	0	4	76	0	0	130
5:30 PM	10	0	5	0	0	0	0	0	0	34	8	0	4	99	0	0	160
5:45 PM	11	0	1	0	0	0	0	0	0	42	6	0	4	65	0	0	129
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	47	0	35	0	0	0	0	0	0	344	40	0	37	536	0	0	1039
APPROACH %'s :	57.32%	0.00%	42.68%	0.00%					0.00%	89.58%	10.42%	0.00%	6.46%	93.54%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	21	0	19	0	0	0	0	0	0	165	20	0	19	301	0	0	545
PEAK HR FACTOR :	0.525	0.000	0.950	0.000	0.000	0.000	0.000	0.000	0.000	0.825	0.625	0.000	0.528	0.760	0.000	0.000	0.852
	0.667								0.841				0.777				

National Data & Surveying Services Intersection Turning Movement Count

Location: Ash Rd & National Trails Hwy
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-021
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Ash Rd				Ash Rd				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250
										0.250				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Ash Rd & National Trails Hwy
City: Barstow
Project ID: 21-030063-021
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Ash Rd		Ash Rd		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	1
7:15 AM	0	0	2	1	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	1	0	2	1	0	5
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	2	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	4	4	0	2	1	0	11
APPROACH %'s :			50.00%	50.00%	0.00%	100.00%	100.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	3	2	0	2	1	0	8
PEAK HR FACTOR :			0.375	0.500		0.250	0.250		0.400
			0.417		0.250		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	2	0	0	0	0	2
APPROACH %'s :			0.00%	100.00%					
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Birch Rd & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-020
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (Birch Rd)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM		
121	0	323	⇦	
0	0	0	↶	0
0	0	0	↱	0
190	0	183	→	2
3	0	8	↷	0
AM	NOON	PM		

WESTBOUND (National Trails Hwy)

PM	NOON	AM		
0	0	0	↶	0
316	0	117	←	2
53	0	10	↰	0
0	0	0	↳	0
209	0	220	⇨	
PM	NOON	AM		

NORTHBOUND (Birch Rd)

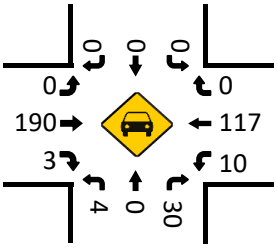
PM	61	0	7	0	26	PM
NOON	0	0	0	0	0	NOON
AM	13	0	4	0	30	AM

CONTROL

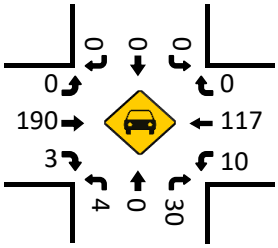
1-Way Stop(NB)

	AM	NOON	PM
TEV	354	0	593
PHF	0.85		0.95

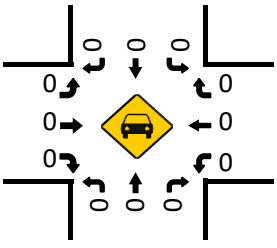
Totals (AM)



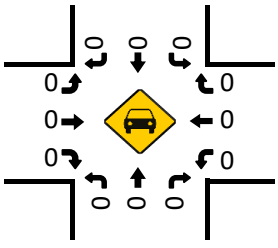
Totals (AM)



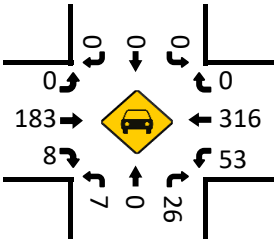
Totals (NOON)



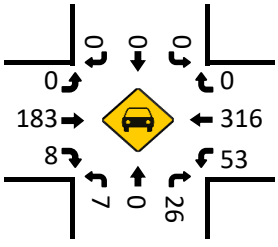
Totals (NOON)



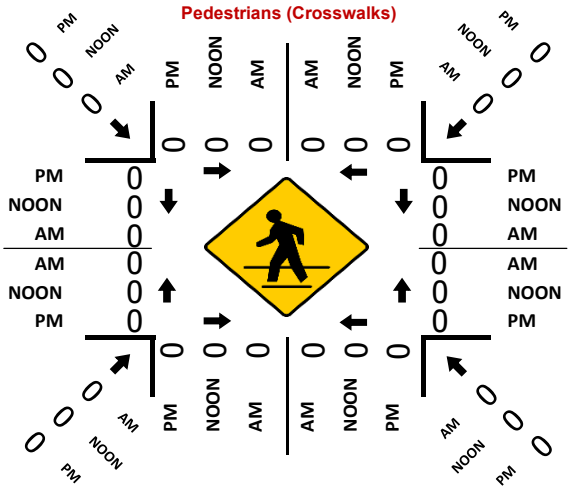
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Birch Rd & National Trails Hwy
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-020
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Birch Rd				Birch Rd				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	5	0	0	0	0	0	0	39	0	0	1	24	0	0	71
7:15 AM	2	0	4	0	0	0	0	0	0	49	1	0	2	26	0	0	84
7:30 AM	0	0	11	0	0	0	0	0	0	60	1	0	3	29	0	0	104
7:45 AM	3	0	8	0	0	0	0	0	0	47	1	0	1	28	0	0	88
8:00 AM	1	0	4	0	0	0	0	0	0	46	0	0	3	19	0	0	73
8:15 AM	0	0	7	0	0	0	0	0	0	37	1	0	3	41	0	0	89
8:30 AM	1	0	7	0	0	0	0	0	0	47	3	0	4	28	0	0	90
8:45 AM	2	0	9	0	0	0	0	0	0	45	1	0	2	39	0	0	98
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	11	0	55	0	0	0	0	0	0	370	8	0	19	234	0	0	697
APPROACH %'s :	16.67%	0.00%	83.33%	0.00%					0.00%	97.88%	2.12%	0.00%	7.51%	92.49%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	4	0	30	0	0	0	0	0	0	190	3	0	10	117	0	0	354
PEAK HR FACTOR :	0.333	0.000	0.682	0.000	0.000	0.000	0.000	0.000	0.000	0.792	0.750	0.000	0.833	0.713	0.000	0.000	0.851
	0.773								0.791				0.722				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	0	11	0	0	0	0	0	0	46	4	0	13	66	0	0	144
4:15 PM	4	0	16	0	0	0	0	0	0	50	4	0	14	54	0	0	142
4:30 PM	2	0	9	0	0	0	0	0	0	49	2	0	14	60	0	0	136
4:45 PM	3	0	7	0	0	0	0	0	0	48	3	0	18	72	0	0	151
5:00 PM	3	0	5	0	0	0	0	0	0	53	0	0	9	62	0	0	132
5:15 PM	0	0	10	0	0	0	0	0	0	45	2	0	11	88	0	0	156
5:30 PM	1	0	4	0	0	0	0	0	0	37	3	0	15	94	0	0	154
5:45 PM	1	0	8	0	0	0	0	0	0	36	6	0	8	76	0	0	135
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	18	0	70	0	0	0	0	0	0	364	24	0	102	572	0	0	1150
APPROACH %'s :	20.45%	0.00%	79.55%	0.00%					0.00%	93.81%	6.19%	0.00%	15.13%	84.87%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	7	0	26	0	0	0	0	0	0	183	8	0	53	316	0	0	593
PEAK HR FACTOR :	0.583	0.000	0.650	0.000	0.000	0.000	0.000	0.000	0.000	0.863	0.667	0.000	0.736	0.840	0.000	0.000	0.950
	0.825								0.901				0.846				

National Data & Surveying Services Intersection Turning Movement Count

Location: Birch Rd & National Trails Hwy
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-020
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Birch Rd				Birch Rd				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250
										0.250				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Birch Rd & National Trails Hwy
City: Barstow
Project ID: 21-030063-020
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Birch Rd		Birch Rd		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	1
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Western Dr & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-019
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Western Dr)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM	
146	0	385	⇦
0	0	0	↶ 0
0	0	0	↱ 0
200	0	207	→ 2
4	0	4	↴ 0
AM	NOON	PM	

WESTBOUND (National Trails Hwy)

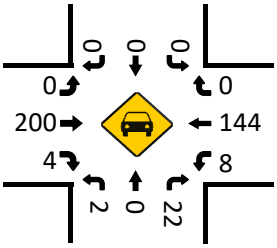
PM	NOON	AM	
0	0	0	↰ 0
381	0	144	← 2
23	0	8	↰ 0
0	0	0	↰ 0
224	0	222	⇨
PM	NOON	AM	

NORTHBOUND (Western Dr)

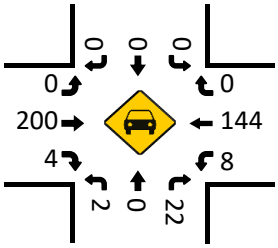
PM	27	0	4	0	17	PM
NOON	0	0	0	0	0	NOON
AM	12	0	2	0	22	AM
		0	0	1	0	

CONTROL			
1-Way Stop(NB)			
TEV	380 AM	0 NOON	636 PM
PHF	0.88		0.92

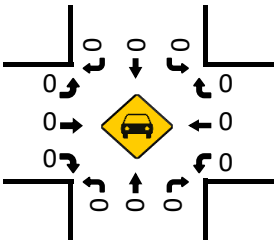
Totals (AM)



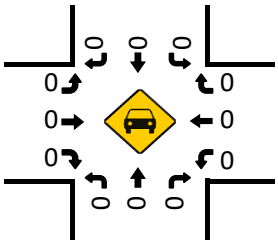
Totals (AM)



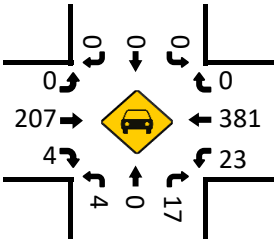
Totals (NOON)



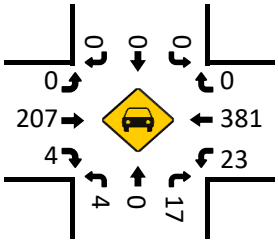
Totals (NOON)



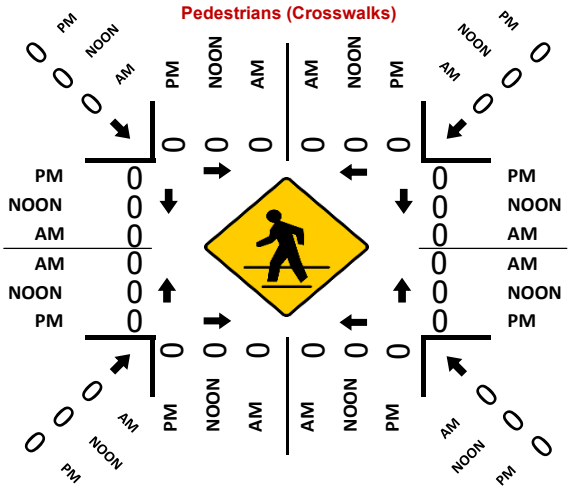
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Western Dr & National Trails Hwy
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-019
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Western Dr				Western Dr				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	1	0	0	0	0	0	0	41	0	0	1	27	0	0	71
7:15 AM	1	0	6	0	0	0	0	0	0	54	0	0	1	28	0	0	90
7:30 AM	1	0	5	0	0	0	0	0	0	67	1	0	4	31	0	0	109
7:45 AM	1	0	4	0	0	0	0	0	0	59	0	0	0	29	0	0	93
8:00 AM	1	0	2	0	0	0	0	0	0	49	1	0	0	27	0	0	80
8:15 AM	0	0	5	0	0	0	0	0	0	42	1	0	3	44	0	0	95
8:30 AM	0	0	5	0	0	0	0	0	0	55	1	0	3	33	0	0	97
8:45 AM	1	0	10	0	0	0	0	0	0	54	1	0	2	40	0	0	108
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	0	38	0	0	0	0	0	0	421	5	0	14	259	0	0	743
APPROACH %'s :	13.64%	0.00%	86.36%	0.00%					0.00%	98.83%	1.17%	0.00%	5.13%	94.87%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	2	0	22	0	0	0	0	0	0	200	4	0	8	144	0	0	380
PEAK HR FACTOR :	0.500	0.000	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.909	1.000	0.000	0.667	0.818	0.000	0.000	0.880
	0.545								0.911				0.809				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	0	4	0	0	0	0	0	0	53	2	0	8	78	0	0	149
4:15 PM	1	0	2	0	0	0	0	0	0	70	2	0	6	69	0	0	150
4:30 PM	3	0	8	0	0	0	0	0	0	56	2	0	9	71	0	0	149
4:45 PM	1	0	4	0	0	0	0	0	0	57	1	0	8	102	0	0	173
5:00 PM	1	0	3	0	0	0	0	0	0	55	0	0	9	70	0	0	138
5:15 PM	0	0	9	0	0	0	0	0	0	55	0	0	6	96	0	0	166
5:30 PM	2	0	1	0	0	0	0	0	0	40	3	0	0	113	0	0	159
5:45 PM	0	0	3	0	0	0	0	0	0	43	2	0	4	82	0	0	134
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	12	0	34	0	0	0	0	0	0	429	12	0	50	681	0	0	1218
APPROACH %'s :	26.09%	0.00%	73.91%	0.00%					0.00%	97.28%	2.72%	0.00%	6.84%	93.16%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	4	0	17	0	0	0	0	0	0	207	4	0	23	381	0	0	636
PEAK HR FACTOR :	0.500	0.000	0.472	0.000	0.000	0.000	0.000	0.000	0.000	0.908	0.333	0.000	0.639	0.843	0.000	0.000	0.919
	0.583								0.909				0.894				

National Data & Surveying Services Intersection Turning Movement Count

Location: Western Dr & National Trails Hwy
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-019
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Western Dr				Western Dr				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Western Dr & National Trails Hwy
City: Barstow
Project ID: 21-030063-019
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Western Dr		Western Dr		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	1
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Pettit Rd & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-018
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Pettit Rd)

AM	6	0	94	0	45	AM
NOON	0	0	0	0	0	NOON
PM	11	0	81	0	121	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM	
138	0	406	
0	0	0	0
5	0	12	1
228	0	214	2
0	0	0	0

WESTBOUND (National Trails Hwy)

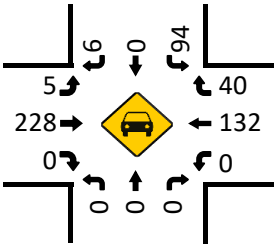
PM	NOON	AM	
109	0	40	0
395	0	132	2
0	0	0	0
0	0	0	0
295	0	322	

NORTHBOUND (Pettit Rd)

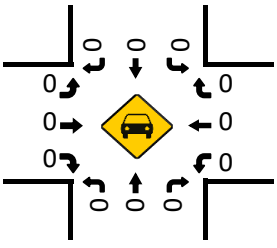
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL			
1-Way Stop(SB)			
TEV	505	0	822
	AM	NOON	PM
PHF	0.86		0.94

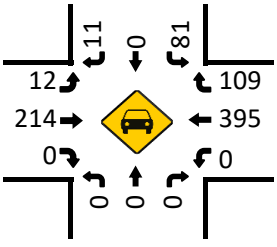
Totals (AM)



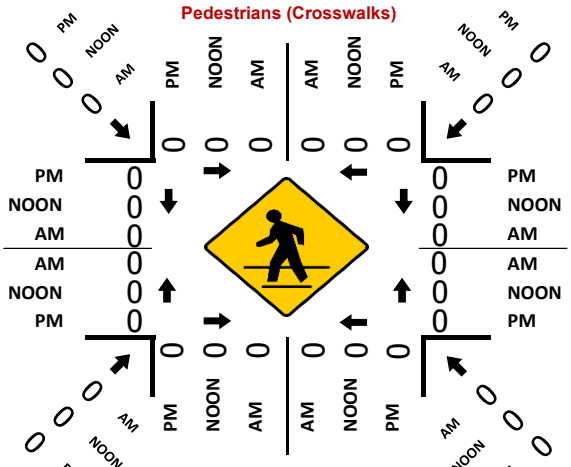
Totals (NOON)



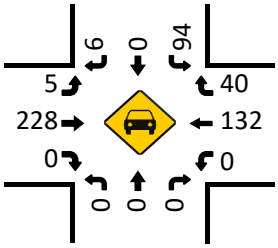
Totals (PM)



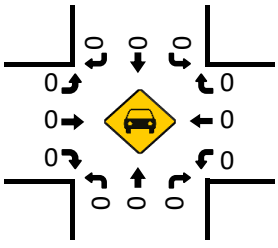
Pedestrians (Crosswalks)



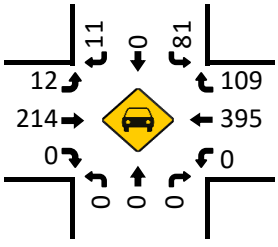
Totals (AM)



Totals (NOON)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Pettit Rd & National Trails Hwy
City: Barstow
Control: 1-Way Stop(SB)

Project ID: 21-030063-018
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Pettit Rd				Pettit Rd				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	31	0	3	0	1	36	0	0	0	24	6	0	101
7:15 AM	0	0	0	0	13	0	2	0	3	59	0	0	0	28	12	0	117
7:30 AM	0	0	0	0	24	0	3	0	1	74	0	0	0	33	12	0	147
7:45 AM	0	0	0	0	30	0	1	0	1	62	0	0	0	26	6	0	126
8:00 AM	0	0	0	0	18	0	1	0	1	48	0	0	0	28	6	0	102
8:15 AM	0	0	0	0	22	0	1	0	2	44	0	0	0	45	16	0	130
8:30 AM	0	0	0	0	26	0	1	0	2	59	0	0	0	34	9	0	131
8:45 AM	0	0	0	0	15	0	1	0	1	62	0	0	0	42	16	0	137
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	179	0	13	0	12	444	0	0	0	260	83	0	991
APPROACH %'s :					93.23%	0.00%	6.77%	0.00%	2.63%	97.37%	0.00%	0.00%	0.00%	75.80%	24.20%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	94	0	6	0	5	228	0	0	0	132	40	0	505
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.783	0.000	0.500	0.000	0.625	0.770	0.000	0.000	0.000	0.733	0.625	0.000	0.859
					0.806				0.777				0.705				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	21	0	6	0	7	52	0	0	0	82	27	0	195
4:15 PM	0	0	0	0	24	0	7	0	2	69	0	0	0	66	29	0	197
4:30 PM	0	0	0	0	19	0	3	0	3	58	0	0	0	76	27	0	186
4:45 PM	0	0	0	0	16	0	5	0	0	63	0	0	0	107	28	0	219
5:00 PM	0	0	0	0	15	0	2	0	6	49	0	0	0	76	29	0	177
5:15 PM	0	0	0	0	23	0	0	0	4	60	0	0	0	104	23	0	214
5:30 PM	0	0	0	0	27	0	4	0	2	42	0	0	0	108	29	0	212
5:45 PM	0	0	0	0	13	0	3	0	1	47	0	0	0	83	17	0	164
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	158	0	30	0	25	440	0	0	0	702	209	0	1564
APPROACH %'s :					84.04%	0.00%	15.96%	0.00%	5.38%	94.62%	0.00%	0.00%	0.00%	77.06%	22.94%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	81	0	11	0	12	214	0	0	0	395	109	0	822
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.750	0.000	0.550	0.000	0.500	0.849	0.000	0.000	0.000	0.914	0.940	0.000	0.938
					0.742				0.883				0.920				

National Data & Surveying Services Intersection Turning Movement Count

Location: Pettit Rd & National Trails Hwy
City: Barstow
Control: 1-Way Stop(SB)

Project ID: 21-030063-018
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Pettit Rd				Pettit Rd				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250
										0.250				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Pettit Rd & National Trails Hwy
City: Barstow
Project ID: 21-030063-018
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Pettit Rd		Pettit Rd		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

SR 58 EB Ramp & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-016
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (SR 58 EB Ramp)

AM	14	1	16	0	0	AM
NOON	0	0	0	0	0	NOON
PM	20	4	21	0	0	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM	
172	0	507	
0	0	0	0
0	0	0	0
198	0	212	2
128	0	85	0

WESTBOUND (National Trails Hwy)

PM	NOON	AM	
0	0	0	0
487	0	158	2
16	0	29	1
0	0	0	0
233	0	214	

NORTHBOUND (SR 58 EB Ramp)

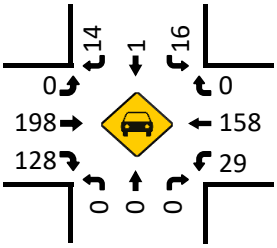
PM	105	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	158	0	0	0	0	AM

	1	0.5	1.5	0
	0	0	0	0

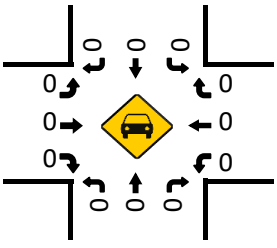
CONTROL: Signalized

TEV	544 AM	0 NOON	845 PM
PHF	0.92		0.93

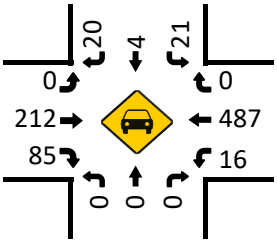
Totals (AM)



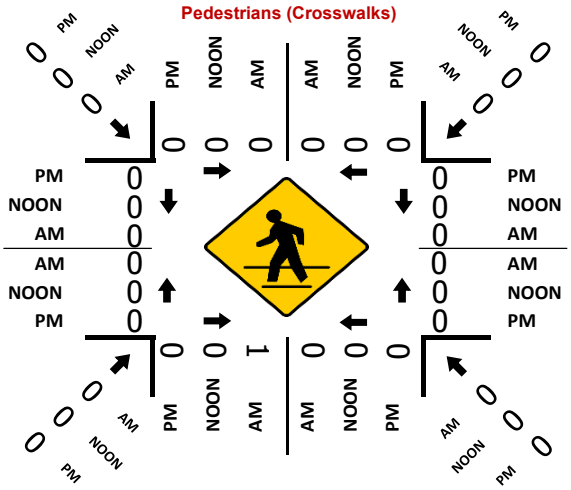
Totals (NOON)



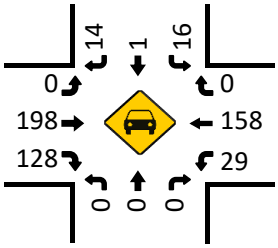
Totals (PM)



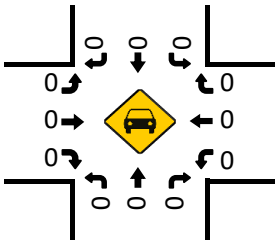
Pedestrians (Crosswalks)



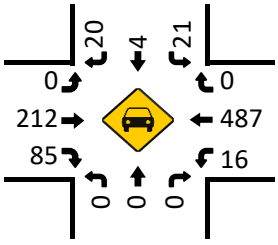
Totals (AM)



Totals (NOON)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: SR 58 EB Ramp & National Trails Hwy
City: Barstow
Control: Signalized

Project ID: 21-030063-016
Date: 8/4/2021

Data - Totals

NS/EW Streets:	SR 58 EB Ramp				SR 58 EB Ramp				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0.5	1	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	2	0	0	35	28	0	6	24	0	0	96
7:15 AM	0	0	0	0	3	0	0	0	0	39	35	0	1	40	0	0	118
7:30 AM	0	0	0	0	2	0	2	0	0	59	36	0	4	43	0	0	146
7:45 AM	0	0	0	0	6	0	2	0	0	57	38	0	11	34	0	0	148
8:00 AM	0	0	0	0	3	0	3	0	0	34	34	0	7	29	0	0	110
8:15 AM	0	0	0	0	5	1	7	0	0	48	20	0	7	52	0	0	140
8:30 AM	0	0	0	0	8	0	3	0	0	60	22	0	4	44	0	0	141
8:45 AM	0	0	0	0	2	0	1	0	0	53	26	0	2	53	0	0	137
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	30	1	20	0	0	385	239	0	42	319	0	0	1036
APPROACH %'s :					58.82%	1.96%	39.22%	0.00%	0.00%	61.70%	38.30%	0.00%	11.63%	88.37%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	16	1	14	0	0	198	128	0	29	158	0	0	544
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.667	0.250	0.500	0.000	0.000	0.839	0.842	0.000	0.659	0.760	0.000	0.000	0.919
					0.596				0.858				0.792				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0.5	1	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	10	0	10	0	0	47	27	0	5	100	0	0	199
4:15 PM	0	0	0	0	2	0	7	0	0	67	26	0	9	85	0	0	196
4:30 PM	0	0	0	0	7	0	4	0	0	55	20	0	6	100	0	0	192
4:45 PM	0	0	0	0	3	3	5	0	0	56	24	0	5	131	0	0	227
5:00 PM	0	0	0	0	10	1	7	0	0	43	20	0	6	99	0	0	186
5:15 PM	0	0	0	0	3	0	3	0	0	62	21	0	4	128	0	0	221
5:30 PM	0	0	0	0	5	0	5	0	0	51	20	0	1	129	0	0	211
5:45 PM	0	0	0	0	5	0	2	0	0	39	18	0	8	98	0	0	170
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	45	4	43	0	0	420	176	0	44	870	0	0	1602
APPROACH %'s :					48.91%	4.35%	46.74%	0.00%	0.00%	70.47%	29.53%	0.00%	4.81%	95.19%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	21	4	20	0	0	212	85	0	16	487	0	0	845
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.525	0.333	0.714	0.000	0.000	0.855	0.885	0.000	0.667	0.929	0.000	0.000	0.931
					0.625				0.895				0.925				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 58 EB Ramp & National Trails Hwy
City: Barstow
Control: Signalized

Project ID: 21-030063-016
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	SR 58 EB Ramp				SR 58 EB Ramp				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0.5	1	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
										0.250							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0.5	1	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 58 EB Ramp & National Trails Hwy **Project ID:** 21-030063-016
City: Barstow **Date:** 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	SR 58 EB Ramp		SR 58 EB Ramp		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	1
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	1
PEAK HR FACTOR :			0.250						0.250
			0.250						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

SR 58 WB Ramp & National Trails Hwy

Peak Hour Turning Movement Count

ID: 21-030063-017
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (SR 58 WB Ramp)

AM	0	0	0	0	31	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	38	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM		
202	0	503	⇦	
0	0	0	↶	0
18	0	18	↰	1
195	0	212	→	2
0	0	0	↷	0
AM	NOON	PM		

WESTBOUND (National Trails Hwy)

	PM	NOON	AM
1 ↱	20	0	13
2 ←	334	0	143
0 ↶	0	0	0
0 ↷	0	0	0
⇨	232	0	213
	PM	NOON	AM

NORTHBOUND (SR 58 WB Ramp)

PM	0	0	169	0	20	PM
NOON	0	0	0	0	0	NOON
AM	0	0	59	0	18	AM

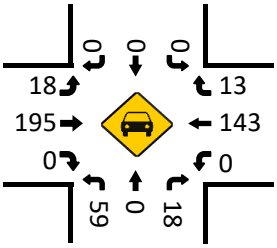
0 0 0 0 (SB) | 0 0 0 0 (WB) | 0 0.5 0.5 1 (NB)

CONTROL

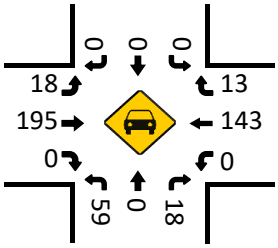
Signalized

TEV	446 AM	0 NOON	773 PM
PHF	0.87		0.94

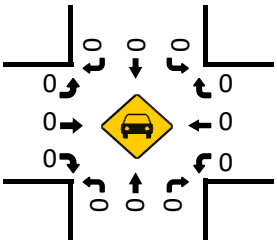
Totals (AM)



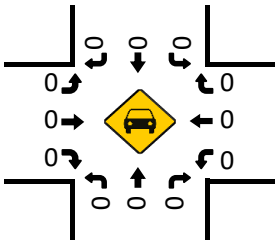
Totals (AM)



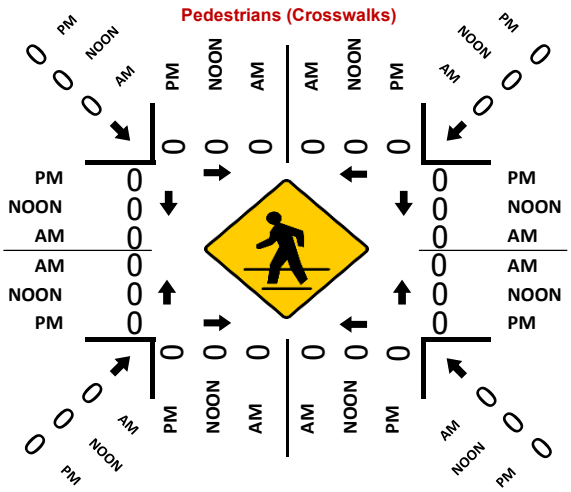
Totals (NOON)



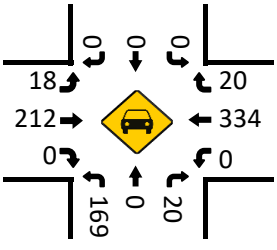
Totals (NOON)



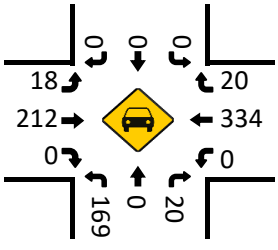
Pedestrians (Crosswalks)



Totals (PM)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: SR 58 WB Ramp & National Trails Hwy
City: Barstow
Control: Signalized

Project ID: 21-030063-017
Date: 8/4/2021

Data - Totals

NS/EW Streets:	SR 58 WB Ramp				SR 58 WB Ramp				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	0	0	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	6	0	1	0	0	0	0	0	3	34	0	0	0	24	1	0	69
7:15 AM	11	0	4	0	0	0	0	0	5	37	0	0	0	32	9	0	98
7:30 AM	18	0	3	0	0	0	0	0	2	58	0	0	0	27	5	0	113
7:45 AM	14	0	5	0	0	0	0	0	5	59	0	0	0	31	4	0	118
8:00 AM	8	0	5	0	0	0	0	0	4	33	0	0	0	28	1	0	79
8:15 AM	23	0	4	0	0	0	0	0	4	46	0	0	0	36	4	0	117
8:30 AM	12	0	4	0	0	0	0	0	6	65	0	0	0	36	5	0	128
8:45 AM	16	0	5	0	0	0	0	0	4	51	0	0	0	43	3	0	122
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	108	0	31	0	0	0	0	0	33	383	0	0	0	257	32	0	844
APPROACH %'s :	77.70%	0.00%	22.30%	0.00%					7.93%	92.07%	0.00%	0.00%	0.00%	88.93%	11.07%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	59	0	18	0	0	0	0	0	18	195	0	0	0	143	13	0	446
PEAK HR FACTOR :	0.641	0.000	0.900	0.000	0.000	0.000	0.000	0.000	0.750	0.750	0.000	0.000	0.000	0.831	0.650	0.000	0.871
	0.713								0.750				0.848				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	0	0	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	28	0	4	0	0	0	0	0	2	55	0	0	0	77	10	0	176
4:15 PM	42	0	8	0	0	0	0	0	0	69	0	0	0	54	7	0	180
4:30 PM	39	0	6	0	0	0	0	0	1	61	0	0	0	65	10	0	182
4:45 PM	56	0	2	0	0	0	0	0	3	56	0	0	0	81	3	0	201
5:00 PM	38	0	12	0	0	0	0	0	4	48	0	0	0	66	6	0	174
5:15 PM	40	0	1	0	0	0	0	0	6	60	0	0	0	93	6	0	206
5:30 PM	35	0	5	0	0	0	0	0	5	48	0	0	0	94	5	0	192
5:45 PM	38	0	6	0	0	0	0	0	4	43	0	0	0	71	3	0	165
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	316	0	44	0	0	0	0	0	25	440	0	0	0	601	50	0	1476
APPROACH %'s :	87.78%	0.00%	12.22%	0.00%					5.38%	94.62%	0.00%	0.00%	0.00%	92.32%	7.68%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	169	0	20	0	0	0	0	0	18	212	0	0	0	334	20	0	773
PEAK HR FACTOR :	0.754	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.750	0.883	0.000	0.000	0.000	0.888	0.833	0.000	0.938
	0.815								0.871				0.894				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 58 WB Ramp & National Trails Hwy
City: Barstow
Control: Signalized

Project ID: 21-030063-017
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	SR 58 WB Ramp				SR 58 WB Ramp				National Trails Hwy				National Trails Hwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	0	0	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.5	0.5	1	0	0	0	0	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 58 WB Ramp & National Trails Hwy **Project ID:** 21-030063-017
City: Barstow **Date:** 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	SR 58 WB Ramp		SR 58 WB Ramp		National Trails Hwy		National Trails Hwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	1
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Lenwood Rd & Love's Travel Stop Dwy

Peak Hour Turning Movement Count

ID: 21-030063-008
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Lenwood Rd)

AM	20	71	4	0	90	AM
NOON	0	0	0	0	0	NOON
PM	13	94	1	0	174	PM

EASTBOUND (Love's Travel Stop Dwy)

AM	NOON	PM	
42	0	37	
0	0	0	0
10	0	17	0
1	0	0	1
23	0	18	0

WESTBOUND (Love's Travel Stop Dwy)

PM	NOON	AM	
2	0	0	0
0	0	0	1
13	0	1	0
0	0	0	0
6	0	14	

NORTHBOUND (Lenwood Rd)

PM	126	1	24	155	5	PM
NOON	0	0	0	0	0	NOON
AM	97	2	22	80	9	AM

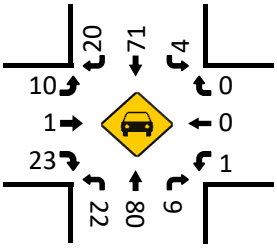
0	2	0	0
0	0	1	1

CONTROL

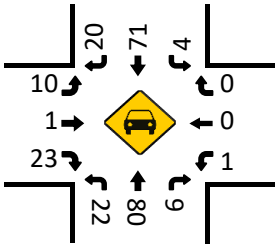
No Control

TEV	243	0	343
	AM	NOON	PM
PHF	0.87		0.89

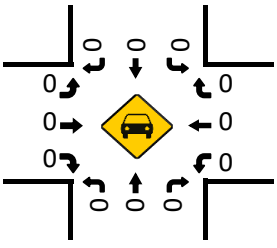
Totals (AM)



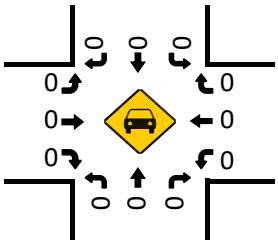
Totals (AM)



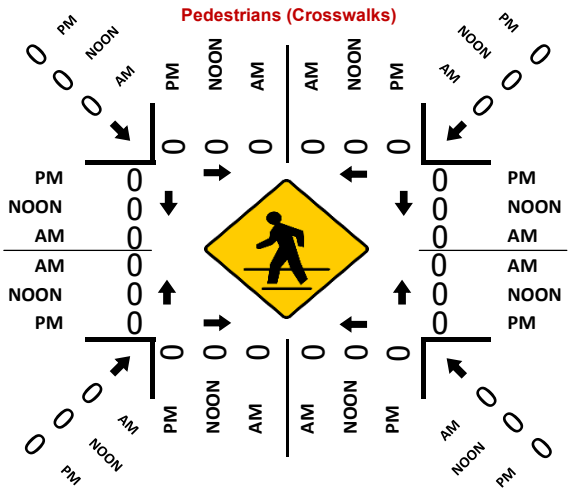
Totals (NOON)



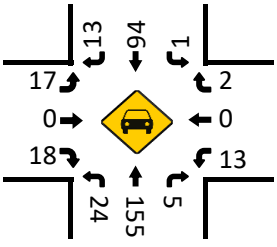
Totals (NOON)



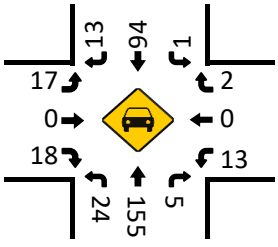
Pedestrians (Crosswalks)



Totals (PM)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Love's Travel Stop Dwy
City: Barstow
Control: No Control

Project ID: 21-030063-008
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Love's Travel Stop Dwy				Love's Travel Stop Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	10	18	4	1	0	10	8	0	4	0	4	0	0	0	0	0	59
7:15 AM	8	20	1	0	0	16	3	0	5	0	6	0	1	0	0	0	60
7:30 AM	1	13	3	0	0	17	3	0	1	0	10	0	0	1	0	0	49
7:45 AM	4	20	5	1	3	26	5	0	2	0	3	0	0	0	0	0	69
8:00 AM	7	18	0	0	0	10	7	0	4	0	8	0	0	0	0	0	54
8:15 AM	5	12	1	1	1	16	5	0	2	1	5	0	1	0	0	0	50
8:30 AM	6	30	3	0	0	19	3	0	2	0	7	0	0	0	0	0	70
8:45 AM	5	12	2	0	0	20	5	0	2	0	6	0	3	0	0	0	55
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	46	143	19	3	4	134	39	0	22	1	49	0	5	1	0	0	466
APPROACH %'s :	21.80%	67.77%	9.00%	1.42%	2.26%	75.71%	22.03%	0.00%	30.56%	1.39%	68.06%	0.00%	83.33%	16.67%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	22	80	9	2	4	71	20	0	10	1	23	0	1	0	0	0	243
PEAK HR FACTOR :	0.786	0.667	0.450	0.500	0.333	0.683	0.714	0.000	0.625	0.250	0.719	0.000	0.250	0.000	0.000	0.000	0.868
	0.724				0.699				0.708				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	35	2	0	0	23	4	0	4	0	7	0	4	0	0	0	87
4:15 PM	12	19	1	0	0	24	4	0	8	0	8	0	0	0	0	0	76
4:30 PM	10	39	2	1	0	26	4	0	5	0	7	0	2	0	0	0	96
4:45 PM	7	30	2	0	0	27	3	0	6	0	4	0	4	0	0	0	83
5:00 PM	4	35	1	0	0	26	2	0	4	0	2	0	2	0	0	0	76
5:15 PM	3	51	0	0	1	15	4	0	2	0	5	0	5	0	2	0	88
5:30 PM	4	44	1	0	0	28	5	0	4	0	5	0	2	0	1	0	94
5:45 PM	8	30	1	0	0	28	5	0	2	1	6	0	1	1	0	0	83
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	56	283	10	1	1	197	31	0	35	1	44	0	20	1	3	0	683
APPROACH %'s :	16.00%	80.86%	2.86%	0.29%	0.44%	86.03%	13.54%	0.00%	43.75%	1.25%	55.00%	0.00%	83.33%	4.17%	12.50%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	24	155	5	1	1	94	13	0	17	0	18	0	13	0	2	0	343
PEAK HR FACTOR :	0.600	0.760	0.625	0.250	0.250	0.870	0.813	0.000	0.708	0.000	0.643	0.000	0.650	0.000	0.250	0.000	0.893
	0.856				0.900				0.729				0.536				

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Love's Travel Stop Dwy
City: Barstow
Control: No Control

Project ID: 21-030063-008
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Love's Travel Stop Dwy				Love's Travel Stop Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Love's Travel Stop Dwy **Project ID:** 21-030063-008
City: Barstow **Date:** 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lenwood Rd		Lenwood Rd		Love's Travel Stop Dwy		Love's Travel Stop Dwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	1	0	0	2
APPROACH %'s :					50.00%	50.00%			
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Lenwood Rd & High Desert Rd

Peak Hour Turning Movement Count

ID: 21-030063-007
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS

AM: 08:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 05:00 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (Lenwood Rd)

AM	5	96	0	0	123	AM
NOON	0	0	0	0	0	NOON
PM	4	130	0	0	167	PM

EASTBOUND (High Desert Rd)

AM	NOON	PM	
58	0	68	
0	0	0	0
3	0	1	1
0	0	0	1
76	0	63	0

WESTBOUND (High Desert Rd)

	PM	NOON	AM
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
	0	0	0

NORTHBOUND (Lenwood Rd)

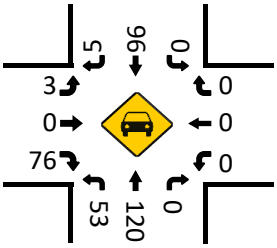
PM	194	1	64	166	0	PM
NOON	0	0	0	0	0	NOON
AM	174	2	53	120	0	AM

CONTROL

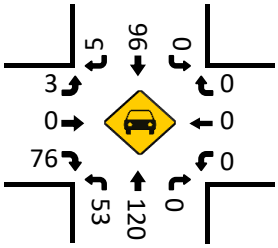
1-Way Stop(EB)

TEV	355 AM	0 NOON	429 PM
PHF	0.79		0.93

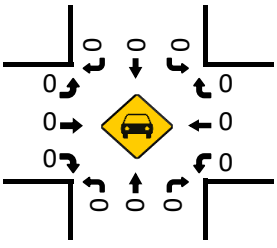
Totals (AM)



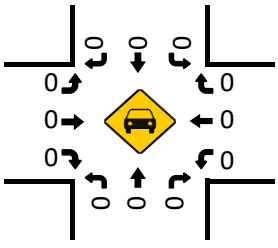
Totals (AM)



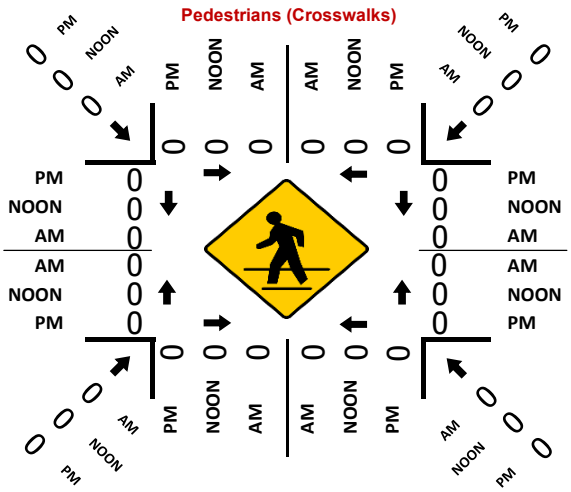
Totals (NOON)



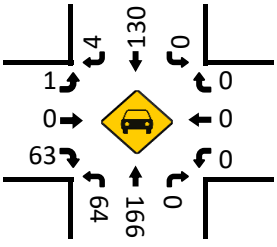
Totals (NOON)



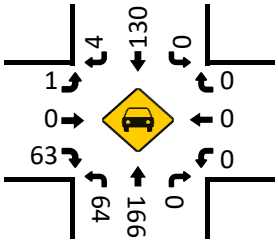
Pedestrians (Crosswalks)



Totals (PM)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & High Desert Rd
City: Barstow
Control: 1-Way Stop(EB)

Project ID: 21-030063-007
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Lenwood Rd				Lenwood Rd				High Desert Rd				High Desert Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	1	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	7	24	0	0	0	17	1	0	2	0	15	0	0	0	0	0	66
7:15 AM	9	32	0	0	0	16	0	0	0	0	17	0	0	0	0	0	74
7:30 AM	10	21	0	1	0	32	0	0	0	0	13	0	0	0	0	0	77
7:45 AM	14	20	0	0	0	23	1	0	2	0	8	0	0	0	0	0	68
8:00 AM	17	33	0	0	0	23	2	0	1	0	16	0	0	0	0	0	92
8:15 AM	12	33	0	1	0	18	0	0	0	0	23	0	0	0	0	0	87
8:30 AM	6	22	0	1	0	17	1	0	1	0	15	0	0	0	0	0	63
8:45 AM	18	32	0	0	0	38	2	0	1	0	22	0	0	0	0	0	113
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	93	217	0	3	0	184	7	0	7	0	129	0	0	0	0	0	640
APPROACH %'s :	29.71%	69.33%	0.00%	0.96%	0.00%	96.34%	3.66%	0.00%	5.15%	0.00%	94.85%	0.00%					
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	53	120	0	2	0	96	5	0	3	0	76	0	0	0	0	0	355
PEAK HR FACTOR :	0.736	0.909	0.000	0.500	0.000	0.632	0.625	0.000	0.750	0.000	0.826	0.000	0.000	0.000	0.000	0.000	0.785
	0.875				0.631				0.859								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	1	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	19	38	0	1	0	32	1	0	0	0	19	0	0	0	0	0	110
4:15 PM	9	42	0	0	0	33	0	0	1	0	15	0	0	0	0	0	100
4:30 PM	19	34	0	0	0	33	2	0	0	0	16	0	0	0	0	0	104
4:45 PM	17	52	0	0	0	32	1	0	0	0	13	0	0	0	0	0	115
5:00 PM	8	39	0	1	0	26	0	0	2	0	11	0	0	0	0	0	87
5:15 PM	10	47	0	0	0	29	2	0	0	0	10	0	0	0	0	0	98
5:30 PM	11	55	0	0	0	31	3	0	1	0	19	0	0	0	0	0	120
5:45 PM	13	37	0	1	0	36	0	0	3	0	6	0	0	0	0	0	96
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	106	344	0	3	0	252	9	0	7	0	109	0	0	0	0	0	830
APPROACH %'s :	23.40%	75.94%	0.00%	0.66%	0.00%	96.55%	3.45%	0.00%	6.03%	0.00%	93.97%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	64	166	0	1	0	130	4	0	1	0	63	0	0	0	0	0	429
PEAK HR FACTOR :	0.842	0.798	0.000	0.250	0.000	0.985	0.500	0.000	0.250	0.000	0.829	0.000	0.000	0.000	0.000	0.000	0.933
	0.837				0.957				0.842								

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & High Desert Rd
City: Barstow
Control: 1-Way Stop(EB)

Project ID: 21-030063-007
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Lenwood Rd				Lenwood Rd				High Desert Rd				High Desert Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	1	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	1	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & High Desert Rd
City: Barstow
Project ID: 21-030063-007
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lenwood Rd		Lenwood Rd		High Desert Rd		High Desert Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2	2
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	2	2
APPROACH %'s :							0.00%	100.00%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	2	0	0	2	0	4
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	2	0	0	2	0	4
APPROACH %'s :			0.00%	100.00%			100.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Truck Freightliner Service Point Dwy & Lenwood Rd

Peak Hour Turning Movement Count

ID: 21-030063-006
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND — Truck Freightliner Service Point Dwy

AM	8	0	11	0	17	AM
NOON	0	0	0	0	0	NOON
PM	6	0	4	0	23	PM

EASTBOUND — Lenwood Rd

AM	NOON	PM	
153	0	256	⇦
0	0	0	↶ 0
1	0	6	↰ 0
148	0	173	→ 2
10	0	13	↷ 0
AM	NOON	PM	

WESTBOUND — Lenwood Rd

PM	NOON	AM	
17	0	16	0 ↷
244	0	139	2 ←
79	0	43	1 ↰
1	0	0	0 ↶
223	0	234	⇨
PM	NOON	AM	

NORTHBOUND — Truck Freightliner Service Point Dwy

PM	92	0	6	0	45	PM
NOON	0	0	0	0	0	NOON
AM	53	0	6	0	75	AM

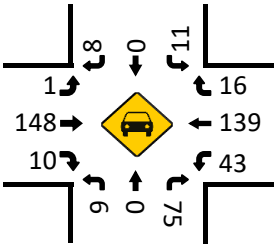
CONTROL

1-Way Stop(NB)

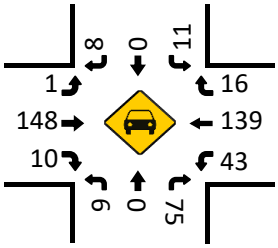
	AM	NOON	PM
TEV	457	0	594
PHF	0.94	NOON	0.89

Turning movements at the intersection: 0 ↷, 1 ↶, 0 ↰, 0 →, 0 ⇦, 0 ↶, 2 ←, 1 ↰, 0 ↶, 0 ⇨, 0 ↶, 0 ↑, 1 ↱, 0 ↷

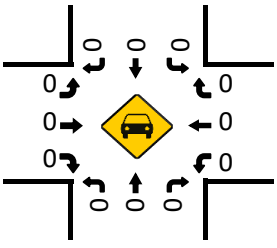
Totals (AM)



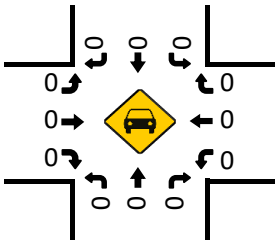
Totals (AM)



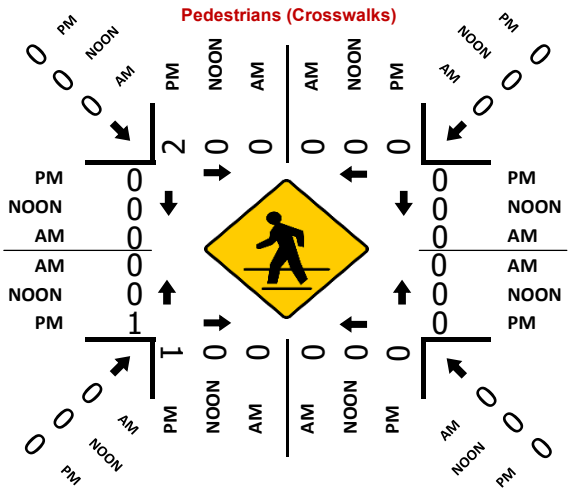
Totals (NOON)



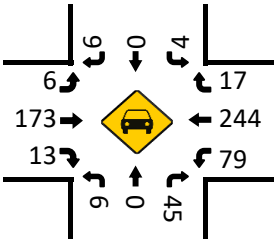
Totals (NOON)



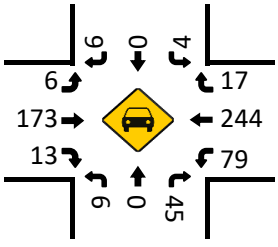
Pedestrians (Crosswalks)



Totals (PM)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Truck Freightliner Service Point Dwy & Lenwood Rd
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-006
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Truck Freightliner Service Point Dwy				Truck Freightliner Service Point Dwy				Lenwood Rd				Lenwood Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	11	0	2	0	2	0	2	37	2	0	13	25	4	0	100
7:15 AM	0	0	14	0	1	0	0	0	0	43	5	0	6	40	3	0	112
7:30 AM	2	0	24	0	0	0	1	0	1	33	4	0	8	34	3	0	110
7:45 AM	0	0	19	0	5	0	3	0	0	32	1	0	17	35	2	0	114
8:00 AM	4	0	18	0	5	0	4	0	0	40	0	0	12	30	8	0	121
8:15 AM	0	0	21	0	3	0	2	1	0	33	2	0	6	37	3	0	108
8:30 AM	1	0	8	0	1	0	2	0	1	42	2	0	8	39	0	0	104
8:45 AM	1	1	16	0	1	0	0	0	0	45	1	0	16	38	2	0	121
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	10	1	131	0	18	0	14	1	4	305	17	0	86	278	25	0	890
APPROACH %'s :	7.04%	0.70%	92.25%	0.00%	54.55%	0.00%	42.42%	3.03%	1.23%	93.56%	5.21%	0.00%	22.11%	71.47%	6.43%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	6	0	75	0	11	0	8	0	1	148	10	0	43	139	16	0	457
PEAK HR FACTOR :	0.375	0.000	0.781	0.000	0.550	0.000	0.500	0.000	0.250	0.860	0.500	0.000	0.632	0.869	0.500	0.000	0.944
	0.779				0.528				0.828				0.917				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	17	0	0	0	1	0	0	47	4	0	17	51	0	0	137
4:15 PM	2	0	17	0	0	0	0	0	0	43	3	0	15	59	0	2	141
4:30 PM	0	0	10	0	0	0	0	0	2	45	1	0	19	50	3	0	130
4:45 PM	2	0	14	0	1	0	4	0	4	45	4	0	19	60	4	1	158
5:00 PM	2	0	15	0	2	0	0	0	0	43	2	0	11	54	2	0	131
5:15 PM	1	0	7	0	0	0	0	0	2	39	4	0	22	61	2	0	138
5:30 PM	1	0	9	0	1	0	2	0	0	46	3	0	27	69	9	0	167
5:45 PM	0	0	17	0	4	0	1	0	1	41	2	0	20	48	1	0	135
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	8	0	106	0	8	0	8	0	9	349	23	0	150	452	21	3	1137
APPROACH %'s :	7.02%	0.00%	92.98%	0.00%	50.00%	0.00%	50.00%	0.00%	2.36%	91.60%	6.04%	0.00%	23.96%	72.20%	3.35%	0.48%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	6	0	45	0	4	0	6	0	6	173	13	0	79	244	17	1	594
PEAK HR FACTOR :	0.750	0.000	0.750	0.000	0.500	0.000	0.375	0.000	0.375	0.940	0.813	0.000	0.731	0.884	0.472	0.250	0.889
	0.750				0.500				0.906				0.812				

National Data & Surveying Services Intersection Turning Movement Count

Location: Truck Freightliner Service Point Dwy & Lenwood Rd
City: Barstow
Control: 1-Way Stop(NB)

Project ID: 21-030063-006
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Truck Freightliner Service Point Dwy				Truck Freightliner Service Point Dwy				Lenwood Rd				Lenwood Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Truck Freightliner Service Point Dwy & Lenwood Rd **Project ID:** 21-030063-006
City: Barstow **Date:** 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Truck Freightliner Service Point Dwy		Truck Freightliner Service Point Dwy		Lenwood Rd		Lenwood Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	1
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	1	0	0	0	0	1	2
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	2	0	0	0	0	0	1	0	3
5:15 PM	0	0	1	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	1	3	0	0	0	1	1	8
APPROACH %'s :	66.67%	33.33%	100.00%	0.00%			50.00%	50.00%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	2	0	1	0	0	0	1	0	4
PEAK HR FACTOR :	0.250		0.250				0.250		0.333
	0.250		0.250				0.250		

Prepared by National Data & Surveying Services

Commerce Pkwy & Lenwood Rd

Peak Hour Turning Movement Count

ID: 21-030063-005
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 04:00 PM - 05:00 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (Commerce Pkwy)

AM	16	5	106	0	89	AM
NOON	0	0	0	0	0	NOON
PM	13	3	127	0	102	PM
	1	0.5	1.5	0		

EASTBOUND (Lenwood Rd)

AM	NOON	PM	
208	0	301	
0	0	0	0
13	0	12	1
207	0	218	2
10	0	13	0

WESTBOUND (Lenwood Rd)

PM	NOON	AM	
89	0	74	0.5
274	0	186	2.5
50	0	41	1
0	0	1	0
411	0	355	

NORTHBOUND (Commerce Pkwy)

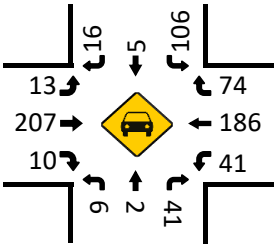
PM	66	0	14	1	66	PM
NOON	0	0	0	0	0	NOON
AM	57	1	6	2	41	AM
	0	1	1	1		

CONTROL

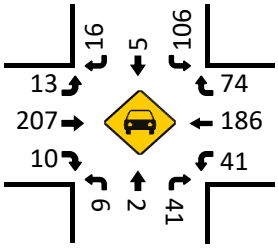
Signalized

TEV	709 AM	0 NOON	880 PM
PHF	0.95		0.97

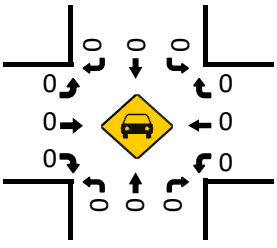
Totals (AM)



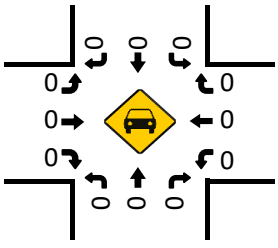
Totals (AM)



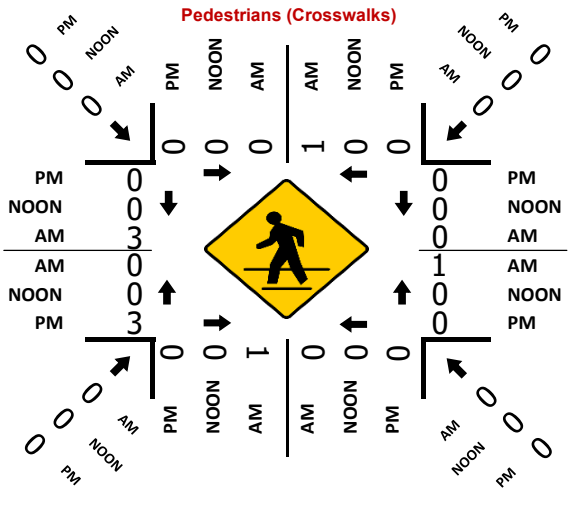
Totals (NOON)



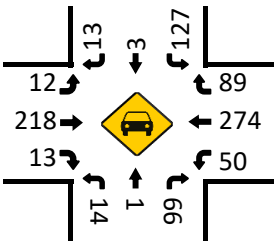
Totals (NOON)



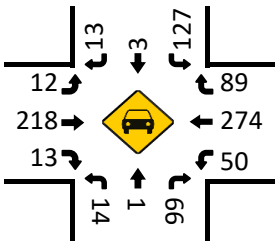
Pedestrians (Crosswalks)



Totals (PM)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Commerce Pkwy & Lenwood Rd
City: Barstow
Control: Signalized

Project ID: 21-030063-005
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Commerce Pkwy				Commerce Pkwy				Lenwood Rd				Lenwood Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1.5	0.5	1	0	1	2	0	0	1	2.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	6	0	33	0	6	0	1	44	2	0	8	43	16	0	160
7:15 AM	0	2	8	0	22	1	8	0	4	55	3	0	11	33	19	0	166
7:30 AM	2	1	14	0	24	0	7	0	4	47	1	0	6	38	18	0	162
7:45 AM	1	0	7	0	25	1	3	0	3	55	1	0	17	48	25	0	186
8:00 AM	1	0	9	0	30	2	7	0	3	49	4	0	12	47	14	0	178
8:15 AM	1	1	18	1	26	0	1	0	2	52	4	0	7	41	15	1	170
8:30 AM	3	1	7	0	25	2	5	0	5	51	1	0	5	50	20	0	175
8:45 AM	3	0	6	0	20	0	6	1	3	52	3	0	7	34	22	0	157
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	12	5	75	1	205	6	43	1	25	405	19	0	73	334	149	1	1354
APPROACH %'s :	12.90%	5.38%	80.65%	1.08%	80.39%	2.35%	16.86%	0.39%	5.57%	90.20%	4.23%	0.00%	13.11%	59.96%	26.75%	0.18%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	6	2	41	1	106	5	16	0	13	207	10	0	41	186	74	1	709
PEAK HR FACTOR :	0.500	0.500	0.569	0.250	0.883	0.625	0.571	0.000	0.650	0.941	0.625	0.000	0.603	0.930	0.740	0.250	0.953
	0.595				0.814				0.975				0.839				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1.5	0.5	1	0	1	2	0	0	1	2.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	0	21	0	27	0	2	0	5	54	6	0	15	70	24	0	227
4:15 PM	4	1	16	0	33	3	5	0	1	62	1	0	12	63	23	0	224
4:30 PM	5	0	16	0	38	0	0	0	4	41	4	0	15	73	20	0	216
4:45 PM	2	0	13	0	29	0	6	0	2	61	2	0	8	68	22	0	213
5:00 PM	2	1	9	0	26	1	4	0	3	47	2	0	6	54	27	0	182
5:15 PM	8	2	6	0	39	0	5	0	0	48	2	0	9	87	21	0	227
5:30 PM	0	2	6	0	16	0	2	0	2	54	5	0	10	89	13	0	199
5:45 PM	1	0	13	0	23	1	3	0	0	52	2	0	9	68	28	0	200
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	25	6	100	0	231	5	27	0	17	419	24	0	84	572	178	0	1688
APPROACH %'s :	19.08%	4.58%	76.34%	0.00%	87.83%	1.90%	10.27%	0.00%	3.70%	91.09%	5.22%	0.00%	10.07%	68.59%	21.34%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	14	1	66	0	127	3	13	0	12	218	13	0	50	274	89	0	880
PEAK HR FACTOR :	0.700	0.250	0.786	0.000	0.836	0.250	0.542	0.000	0.600	0.879	0.542	0.000	0.833	0.938	0.927	0.000	0.969
	0.844				0.872				0.935				0.947				

National Data & Surveying Services Intersection Turning Movement Count

Location: Commerce Pkwy & Lenwood Rd
City: Barstow
Control: Signalized

Project ID: 21-030063-005
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Commerce Pkwy				Commerce Pkwy				Lenwood Rd				Lenwood Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1.5	0.5	1	0	1	2	0	0	1	2.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1.5	0.5	1	0	1	2	0	0	1	2.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Commerce Pkwy & Lenwood Rd
City: Barstow
Project ID: 21-030063-005
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Commerce Pkwy		Commerce Pkwy		Lenwood Rd		Lenwood Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	2	0	0	0	1	3
7:30 AM	1	0	0	1	0	0	3	0	5
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	2	3
8:30 AM	0	1	1	0	0	0	0	1	3
8:45 AM	2	0	0	2	0	0	2	0	6
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	1	1	5	1	0	5	4	20
APPROACH %'s :	75.00%	25.00%	16.67%	83.33%	100.00%	0.00%	55.56%	44.44%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	1	1	0	1	0	0	3	6
PEAK HR FACTOR :		0.250	0.250		0.250			0.375	0.500
	0.250		0.250		0.250		0.375		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	2	0	2
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	4	0	0	0	0	0	5	9
5:15 PM	0	0	0	0	2	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	1	0	0	0	0	2	4
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	5	1	0	2	0	3	7	18
APPROACH %'s :	0.00%	100.00%	100.00%	0.00%	100.00%	0.00%	30.00%	70.00%	
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	3	0	3
PEAK HR FACTOR :							0.375		0.375
							0.375		

Prepared by National Data & Surveying Services

I-15 SB Off Ramps & Lenwood Rd

Peak Hour Turning Movement Count

ID: 21-030063-009
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (I-15 SB Off Ramps)

AM	185	0	178	0	0	AM
NOON	0	0	0	0	0	NOON
PM	244	0	365	0	0	PM

EASTBOUND (Lenwood Rd)

AM	NOON	PM	
342	0	459	⇦
0	0	0	↶ 0
0	0	0	↱ 0
194	0	253	→ 2
0	0	0	↷ 0

WESTBOUND (Lenwood Rd)

PM	NOON	AM	
0	0	0	0 ↷
215	0	157	2 ←
0	0	0	0 ↶
0	0	0	0 ↶
618	0	372	⇨

NORTHBOUND (I-15 SB Off Ramps)

PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

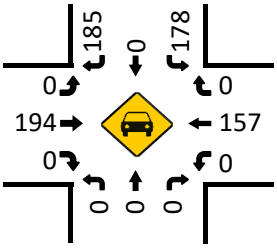
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CONTROL

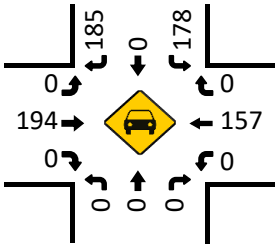
Signalized

TEV	714 AM	0 NOON	1077 PM
PHF	0.92		0.91

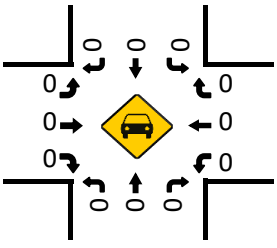
Totals (AM)



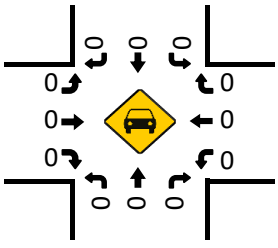
Totals (AM)



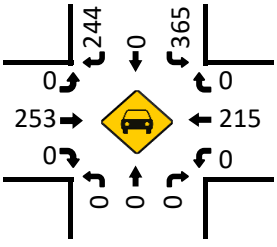
Totals (NOON)



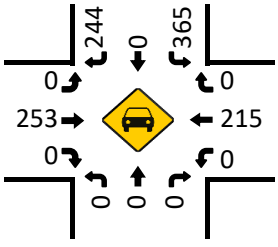
Totals (NOON)



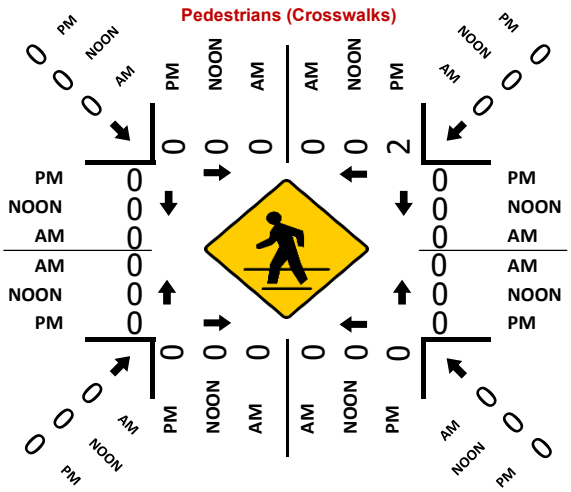
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0
0
0
0
0
0
0
0
0

National Data & Surveying Services Intersection Turning Movement Count

Location: I-15 SB Off Ramps & Lenwood Rd
City: Barstow
Control: Signalized

Project ID: 21-030063-009
Date: 8/4/2021

Data - Totals

NS/EW Streets:	I-15 SB Off Ramps				I-15 SB Off Ramps				Lenwood Rd				Lenwood Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	2	0	1	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	29	0	46	0	0	46	0	0	0	37	0	0	158
7:15 AM	0	0	0	0	28	0	34	0	0	47	0	0	0	35	0	0	144
7:30 AM	0	0	0	0	33	0	40	0	0	52	0	0	0	33	0	0	158
7:45 AM	0	0	0	0	47	0	47	0	0	50	0	0	0	49	0	0	193
8:00 AM	0	0	0	0	46	0	45	0	0	46	0	0	0	42	0	0	179
8:15 AM	0	0	0	0	36	0	50	0	0	54	0	0	0	24	0	0	164
8:30 AM	0	0	0	0	49	0	43	0	0	44	0	0	0	42	0	0	178
8:45 AM	0	0	0	0	44	0	36	0	0	48	0	0	0	32	0	0	160
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	312	0	341	0	0	387	0	0	0	294	0	0	1334
APPROACH %'s :					47.78%	0.00%	52.22%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	178	0	185	0	0	194	0	0	0	157	0	0	714
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.908	0.000	0.925	0.000	0.000	0.898	0.000	0.000	0.000	0.801	0.000	0.000	0.925
					0.965				0.898				0.801				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	2	0	1	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	96	0	54	0	0	61	0	0	0	60	0	0	271
4:15 PM	0	0	0	0	96	0	61	0	0	70	0	0	0	44	0	0	271
4:30 PM	0	0	0	0	88	0	81	0	0	61	0	0	0	65	0	0	295
4:45 PM	0	0	0	0	85	0	48	0	0	61	0	0	0	46	0	0	240
5:00 PM	0	0	0	0	100	0	53	0	0	51	0	0	0	52	0	0	256
5:15 PM	0	0	0	0	87	0	62	0	0	53	0	0	0	61	0	0	263
5:30 PM	0	0	0	0	70	0	36	0	0	57	0	0	0	54	0	0	217
5:45 PM	0	0	0	0	89	0	57	0	0	53	0	0	0	55	0	0	254
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	711	0	452	0	0	467	0	0	0	437	0	0	2067
APPROACH %'s :					61.13%	0.00%	38.87%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	365	0	244	0	0	253	0	0	0	215	0	0	1077
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.951	0.000	0.753	0.000	0.000	0.904	0.000	0.000	0.000	0.827	0.000	0.000	0.913
					0.901				0.904				0.827				

National Data & Surveying Services Intersection Turning Movement Count

Location: I-15 SB Off Ramps & Lenwood Rd
City: Barstow
Control: Signalized

Project ID: 21-030063-009
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	I-15 SB Off Ramps				I-15 SB Off Ramps				Lenwood Rd				Lenwood Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	2	0	1	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	2	0	1	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: I-15 SB Off Ramps & Lenwood Rd **Project ID:** 21-030063-009
City: Barstow **Date:** 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	I-15 SB Off Ramps		I-15 SB Off Ramps		Lenwood Rd		Lenwood Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	2	0	0	0	0	0	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	0	0	0	0	0	0	0	2
APPROACH %'s :	100.00%	0.00%							
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	0	0	2
5:15 PM	2	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	4	0	0	0	0	0	0	6
APPROACH %'s :	33.33%	66.67%							
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	2	0	0	0	0	0	0	2
PEAK HR FACTOR :		0.250							0.250
	0.250								

Prepared by National Data & Surveying Services

I-15 NB Off Ramps & Lenwood Rd

Peak Hour Turning Movement Count

ID: 21-030063-010
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (I-15 NB Off Ramps)

AM	159	0	4	0	142	AM
NOON	0	0	0	0	0	NOON
PM	232	0	32	0	299	PM

EASTBOUND (Lenwood Rd)

AM	NOON	PM	
544	0	856	
0	0	0	0
57	0	134	2
157	0	328	3
0	0	0	0
AM	NOON	PM	

WESTBOUND (Lenwood Rd)

PM	NOON	AM	
82	0	25	0.5
496	0	284	2.5
0	0	0	0
0	0	0	0
529	0	331	
PM	NOON	AM	

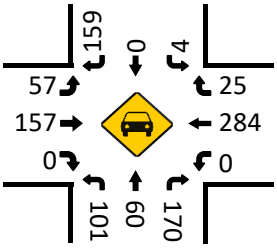
NORTHBOUND (I-15 NB Off Ramps)

PM	0	0	128	83	169	PM
NOON	0	0	0	0	0	NOON
AM	0	0	101	60	170	AM

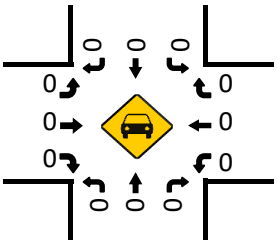
2	0	1	0
0	1.5	0.5	2

CONTROL			
Signalized			
TEV	1017 AM	0 NOON	1684 PM
PHF	0.92		0.95

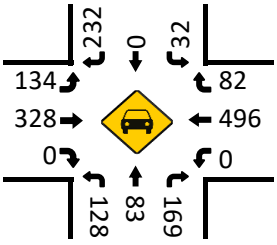
Totals (AM)



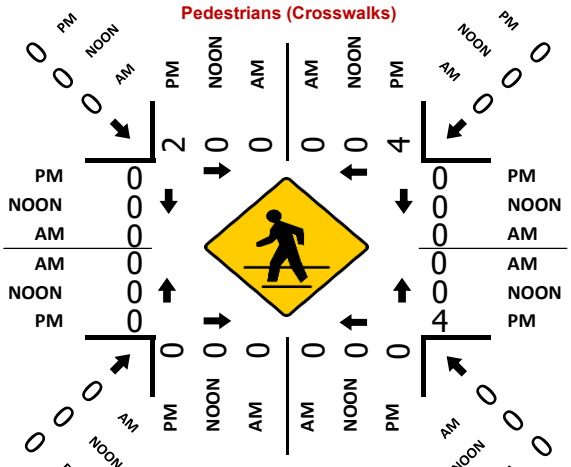
Totals (NOON)



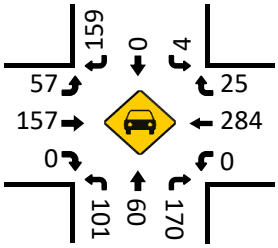
Totals (PM)



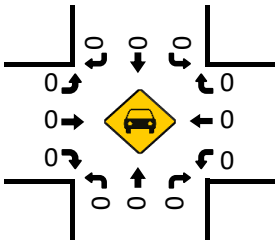
Pedestrians (Crosswalks)



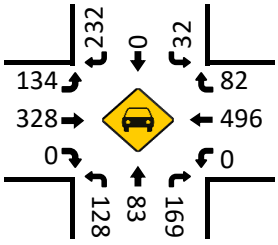
Totals (AM)



Totals (NOON)



Totals (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: I-15 NB Off Ramps & Lenwood Rd
City: Barstow
Control: Signalized

Project ID: 21-030063-010
Date: 8/4/2021

Data - Totals

NS/EW Streets:	I-15 NB Off Ramps				I-15 NB Off Ramps				Lenwood Rd				Lenwood Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5	0.5	2	0	1	0	2	0	2	3	0	0	0	2.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	24	18	42	0	3	0	28	0	7	23	0	0	0	55	5	0	205
7:15 AM	23	11	29	0	4	0	40	0	6	25	0	0	0	68	8	0	214
7:30 AM	21	15	47	0	4	0	31	0	18	26	0	0	0	67	2	0	231
7:45 AM	34	10	43	0	1	0	43	0	10	42	0	0	0	75	4	0	262
8:00 AM	21	15	47	0	1	0	34	0	20	37	0	0	0	67	6	0	248
8:15 AM	14	17	43	0	2	0	40	0	15	35	0	0	0	54	12	0	232
8:30 AM	32	18	37	0	0	0	42	0	12	43	0	0	0	88	3	0	275
8:45 AM	22	14	43	0	1	0	39	0	25	42	0	0	0	61	12	0	259
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	191	118	331	0	16	0	297	0	113	273	0	0	0	535	52	0	1926
APPROACH %'s :	29.84%	18.44%	51.72%	0.00%	5.11%	0.00%	94.89%	0.00%	29.27%	70.73%	0.00%	0.00%	0.00%	91.14%	8.86%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	101	60	170	0	4	0	159	0	57	157	0	0	0	284	25	0	1017
PEAK HR FACTOR :	0.743	0.833	0.904	0.000	0.500	0.000	0.924	0.000	0.713	0.913	0.000	0.000	0.000	0.807	0.521	0.000	0.925
	0.951				0.926				0.939				0.849				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5	0.5	2	0	1	0	2	0	2	3	0	0	0	2.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	39	20	35	0	9	0	57	0	29	89	0	0	0	145	19	0	442
4:15 PM	30	28	44	0	4	0	63	0	40	75	0	0	0	126	20	0	430
4:30 PM	36	17	46	0	6	0	56	0	36	90	0	0	0	110	24	0	421
4:45 PM	23	18	44	0	13	0	56	0	29	74	0	0	0	115	19	0	391
5:00 PM	24	26	46	0	10	0	48	0	29	95	0	0	0	136	11	0	425
5:15 PM	29	19	54	0	10	0	73	0	28	70	0	0	0	109	15	0	407
5:30 PM	24	12	47	0	14	0	46	0	36	74	0	0	0	131	26	0	410
5:45 PM	32	22	54	0	9	0	49	0	27	82	0	0	0	101	19	0	395
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	237	162	370	0	75	0	448	0	254	649	0	0	0	973	153	0	3321
APPROACH %'s :	30.82%	21.07%	48.11%	0.00%	14.34%	0.00%	85.66%	0.00%	28.13%	71.87%	0.00%	0.00%	0.00%	86.41%	13.59%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	128	83	169	0	32	0	232	0	134	328	0	0	0	496	82	0	1684
PEAK HR FACTOR :	0.821	0.741	0.918	0.000	0.615	0.000	0.921	0.000	0.838	0.911	0.000	0.000	0.000	0.855	0.854	0.000	0.952
	0.931				0.957				0.917				0.881				

National Data & Surveying Services Intersection Turning Movement Count

Location: I-15 NB Off Ramps & Lenwood Rd
City: Barstow
Control: Signalized

Project ID: 21-030063-010
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	I-15 NB Off Ramps				I-15 NB Off Ramps				Lenwood Rd				Lenwood Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5	0.5	2	0	1	0	2	0	2	3	0	0	0	2.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5	0.5	2	0	1	0	2	0	2	3	0	0	0	2.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%													
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: I-15 NB Off Ramps & Lenwood Rd **Project ID:** 21-030063-010
City: Barstow **Date:** 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	I-15 NB Off Ramps		I-15 NB Off Ramps		Lenwood Rd		Lenwood Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	2	0	0	2	0	0	0	4
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	2	2	0	0	2	0	0	0	6
5:00 PM	0	2	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	6	0	0	4	0	0	0	12
APPROACH %'s :	25.00%	75.00%			100.00%	0.00%			
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	2	4	0	0	4	0	0	0	10
PEAK HR FACTOR :	0.250	0.500			0.500				0.417
	0.375				0.500				

Prepared by National Data & Surveying Services

Lenwood Rd & Jasper Rd

Peak Hour Turning Movement Count

ID: 21-030063-011
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:00 AM - 08:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Lenwood Rd)

	L	T	R	U	Total	
AM	0	52	2	0	53	AM
NOON	0	0	0	0	0	NOON
PM	0	57	3	0	79	PM

EASTBOUND (Jasper Rd)

	L	T	R	U	
AM	0	0	1	0	
NOON	0	0	0	0	
PM	0	1	1	0	

	AM	NOON	PM
L	0	0	0
T	5	0	2
R	3	0	5

WESTBOUND (Jasper Rd)

	L	T	R	U	
AM	0	27	0	0	
NOON	0	0	0	0	
PM	0	26	0	0	

	AM	NOON	PM
L	3	0	3
T	0	0	0
R	27	0	13

NORTHBOUND (Lenwood Rd)

	L	T	R	U	Total	
AM	82	0	5	50	10	AM
NOON	0	0	0	0	0	NOON
PM	89	1	2	75	24	PM

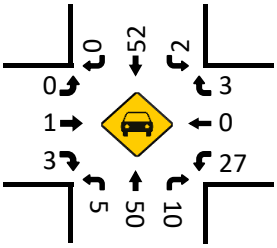
	AM	NOON	PM
L	0	1	1
T	0	1	1
R	0	1	1

CONTROL

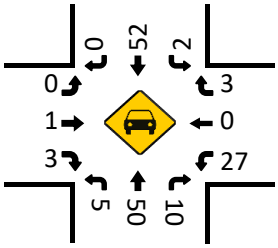
2-Way Stop(EB/WB)

	AM	NOON	PM
TEV	153	0	197
PHF	0.85		0.95

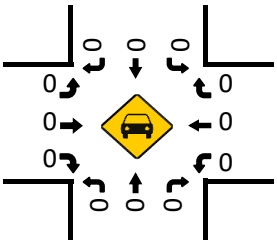
Totals (AM)



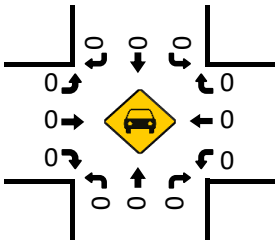
Totals (AM)



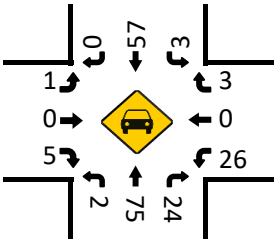
Totals (NOON)



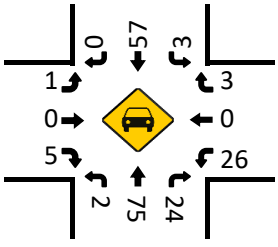
Totals (NOON)



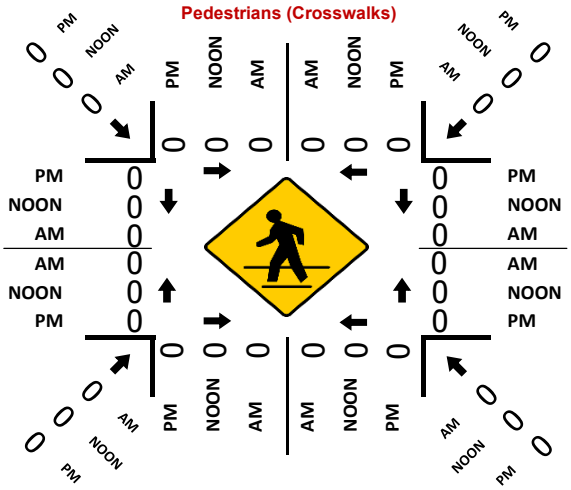
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Jasper Rd
City: Barstow
Control: 2-Way Stop(EB/WB)

Project ID: 21-030063-011
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Jasper Rd				Jasper Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	14	3	0	1	16	0	0	0	0	0	0	7	0	2	0	45
7:15 AM	1	9	3	0	0	16	0	0	0	1	0	0	4	0	0	0	34
7:30 AM	0	17	2	0	1	11	0	0	0	0	0	0	6	0	1	0	38
7:45 AM	2	10	2	0	0	9	0	0	0	0	3	0	10	0	0	0	36
8:00 AM	0	10	7	0	0	10	0	0	0	0	2	0	8	0	0	0	37
8:15 AM	2	8	3	0	0	8	0	0	0	0	1	0	2	0	1	0	25
8:30 AM	2	9	5	0	1	4	0	0	0	0	2	0	2	0	1	0	26
8:45 AM	2	13	5	0	0	10	0	0	0	0	0	0	7	0	0	0	37
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	11	90	30	0	3	84	0	0	0	1	8	0	46	0	5	0	278
APPROACH %'s :	8.40%	68.70%	22.90%	0.00%	3.45%	96.55%	0.00%	0.00%	0.00%	11.11%	88.89%	0.00%	90.20%	0.00%	9.80%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	5	50	10	0	2	52	0	0	0	1	3	0	27	0	3	0	153
PEAK HR FACTOR :	0.625	0.735	0.833	0.000	0.500	0.813	0.000	0.000	0.000	0.250	0.250	0.000	0.675	0.000	0.375	0.000	0.850
	0.855				0.794				0.333				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	11	4	0	0	10	0	0	0	0	0	0	3	0	0	0	28
4:15 PM	0	21	6	0	0	11	0	0	0	0	2	0	10	0	1	0	51
4:30 PM	1	18	11	1	1	13	0	0	0	0	0	0	6	0	1	0	52
4:45 PM	0	22	5	0	1	14	0	0	0	0	0	0	3	0	0	0	45
5:00 PM	1	14	2	0	1	19	0	0	1	0	3	0	7	0	1	0	49
5:15 PM	0	11	7	0	0	8	1	0	0	0	0	0	4	0	0	0	31
5:30 PM	1	16	9	0	2	13	0	0	0	0	1	0	7	0	1	0	50
5:45 PM	0	24	9	0	1	14	0	0	0	0	0	0	8	0	0	0	56
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	137	53	1	6	102	1	0	1	0	6	0	48	0	4	0	362
APPROACH %'s :	1.55%	70.62%	27.32%	0.52%	5.50%	93.58%	0.92%	0.00%	14.29%	0.00%	85.71%	0.00%	92.31%	0.00%	7.69%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	2	75	24	1	3	57	0	0	1	0	5	0	26	0	3	0	197
PEAK HR FACTOR :	0.500	0.852	0.545	0.250	0.750	0.750	0.000	0.000	0.250	0.000	0.417	0.000	0.650	0.000	0.750	0.000	0.947
	0.823				0.750				0.375				0.659				

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Jasper Rd
City: Barstow
Control: 2-Way Stop(EB/WB)

Project ID: 21-030063-011
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Jasper Rd				Jasper Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Jasper Rd
City: Barstow
Project ID: 21-030063-011
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lenwood Rd		Lenwood Rd		Jasper Rd		Jasper Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:00 AM - 08:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Lenwood Rd & Cam del Sol

Peak Hour Turning Movement Count

ID: 21-030063-012
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:00 AM - 08:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Lenwood Rd)

AM	0	36	2	0	42	AM
NOON	0	0	0	0	0	NOON
PM	0	44	2	0	54	PM

EASTBOUND (Cam del Sol)

AM	NOON	PM
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

AM NOON PM

WESTBOUND (Cam del Sol)

PM	NOON	AM
2	0	3
0	0	0
16	0	18
1	0	0
30	0	16

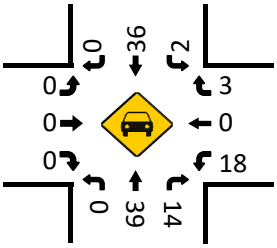
PM NOON AM

NORTHBOUND (Lenwood Rd)

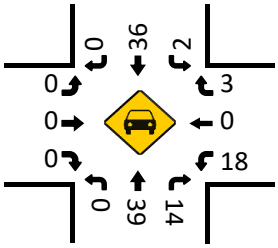
PM	60	0	0	52	27	PM
NOON	0	0	0	0	0	NOON
AM	54	0	0	39	14	AM

CONTROL			
1-Way Stop(WB)			
TEV	112 AM	0 NOON	144 PM
PHF	0.88		0.97

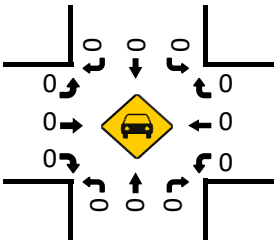
Totals (AM)



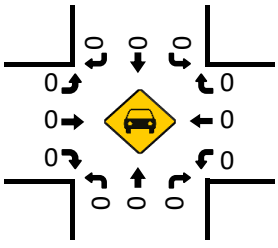
Totals (AM)



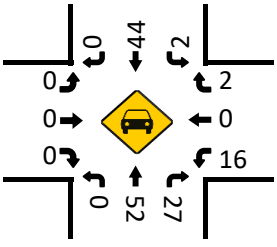
Totals (NOON)



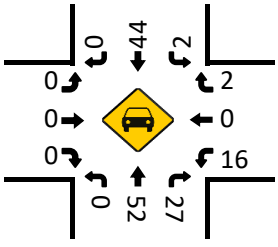
Totals (NOON)



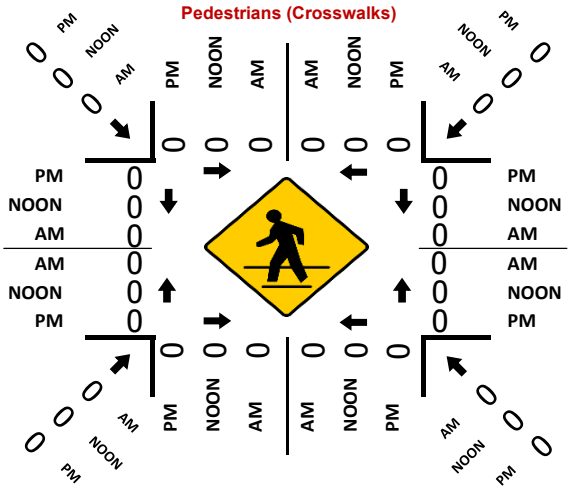
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Cam del Sol
City: Barstow
Control: 1-Way Stop(WB)

Project ID: 21-030063-012
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Cam del Sol				Cam del Sol				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	14	2	0	0	9	0	0	0	0	0	0	7	0	0	0	32
7:15 AM	0	6	2	0	1	12	0	0	0	0	0	0	4	0	1	0	26
7:30 AM	0	12	7	0	0	6	0	0	0	0	0	0	6	0	0	0	31
7:45 AM	0	7	3	0	1	9	0	0	0	0	0	0	1	0	2	0	23
8:00 AM	0	8	1	0	0	6	0	0	0	0	0	0	3	0	1	0	19
8:15 AM	0	8	2	0	0	4	0	0	0	0	0	0	4	0	0	0	18
8:30 AM	0	8	2	0	0	7	0	0	0	0	0	0	1	0	0	0	18
8:45 AM	0	9	2	0	0	3	0	0	0	0	0	0	4	0	0	0	18
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	72	21	0	2	56	0	0	0	0	0	0	30	0	4	0	185
APPROACH %'s :	0.00%	77.42%	22.58%	0.00%	3.45%	96.55%	0.00%	0.00%					88.24%	0.00%	11.76%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	39	14	0	2	36	0	0	0	0	0	0	18	0	3	0	112
PEAK HR FACTOR :	0.000	0.696	0.500	0.000	0.500	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.643	0.000	0.375	0.000	0.875
	0.697				0.731								0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	7	5	0	1	8	0	0	0	0	0	0	2	0	0	0	23
4:15 PM	0	15	7	0	1	4	0	0	0	0	0	0	8	0	0	0	35
4:30 PM	0	12	7	0	1	11	0	0	0	0	0	0	2	0	1	1	35
4:45 PM	0	14	8	0	0	11	0	0	0	0	0	0	4	0	0	0	37
5:00 PM	0	11	5	0	0	18	0	0	0	0	0	0	2	0	1	0	37
5:15 PM	0	6	5	0	0	5	0	0	0	0	0	0	4	0	1	0	21
5:30 PM	0	13	3	0	0	8	0	0	0	0	0	0	7	0	1	0	32
5:45 PM	0	17	8	0	2	7	0	0	0	0	0	0	9	0	1	0	44
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	95	48	0	5	72	0	0	0	0	0	0	38	0	5	1	264
APPROACH %'s :	0.00%	66.43%	33.57%	0.00%	6.49%	93.51%	0.00%	0.00%					86.36%	0.00%	11.36%	2.27%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	52	27	0	2	44	0	0	0	0	0	0	16	0	2	1	144
PEAK HR FACTOR :	0.000	0.867	0.844	0.000	0.500	0.611	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.250	0.973
	0.898				0.639								0.594				

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Cam del Sol
City: Barstow
Control: 1-Way Stop(WB)

Project ID: 21-030063-012
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Cam del Sol				Cam del Sol				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Cam del Sol
City: Barstow
Project ID: 21-030063-012
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lenwood Rd		Lenwood Rd		Cam del Sol		Cam del Sol		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	1
APPROACH %'s :					100.00%	0.00%			
PEAK HR :	07:00 AM - 08:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Lenwood Rd & Agate Rd

Peak Hour Turning Movement Count

ID: 21-030063-013
City: Barstow

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:00 AM - 08:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Lenwood Rd)

AM	0	7	0	0	1	AM
NOON	0	0	0	0	0	NOON
PM	0	33	9	0	47	PM

EASTBOUND (Agate Rd)

AM	NOON	PM	
1	0	0	
0	0	0	0
0	0	0	0
0	0	0	1
2	0	0	0
AM	NOON	PM	

WESTBOUND (Agate Rd)

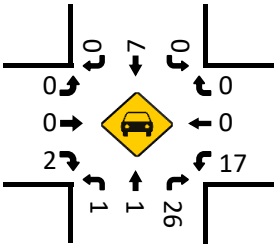
PM	NOON	AM	
4	0	0	0
0	0	0	1
14	0	17	0
0	0	2	0
21	0	28	
PM	NOON	AM	

NORTHBOUND (Lenwood Rd)

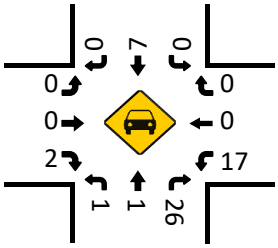
PM	47	0	0	43	12	PM
NOON	0	0	0	0	0	NOON
AM	35	9	1	1	26	AM

CONTROL			
1-Way Stop(WB)			
TEV	65 AM	0 NOON	115 PM
PHF	0.77		0.87

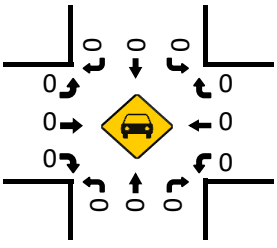
Totals (AM)



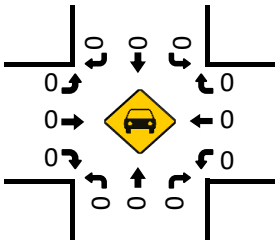
Totals (AM)



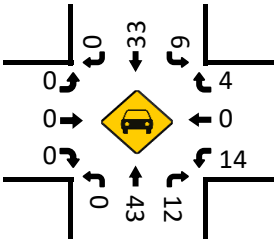
Totals (NOON)



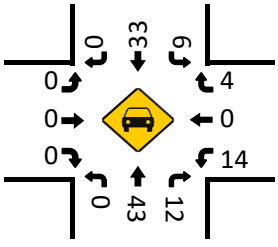
Totals (NOON)



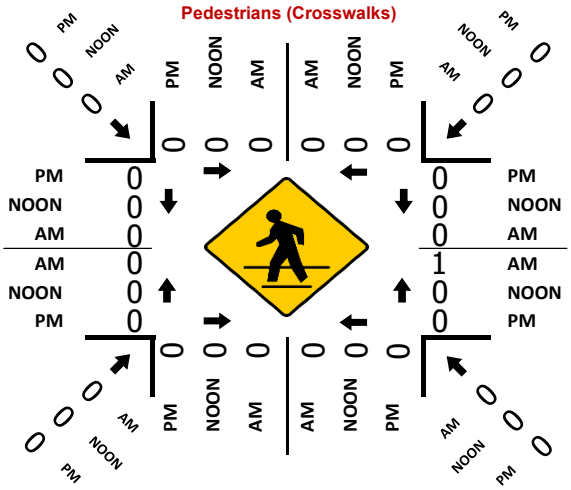
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Agate Rd
City: Barstow
Control: 1-Way Stop(WB)

Project ID: 21-030063-013
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Agate Rd				Agate Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	6	4	0	0	0	0	0	0	0	0	4	0	0	0	14
7:15 AM	0	0	6	2	0	4	0	0	0	0	0	0	5	0	0	1	18
7:30 AM	0	1	6	3	0	1	0	0	0	0	0	0	1	0	0	0	12
7:45 AM	1	0	8	0	0	2	0	0	0	0	2	0	7	0	0	1	21
8:00 AM	0	0	8	1	0	1	0	0	0	0	0	0	2	0	0	0	12
8:15 AM	0	2	5	1	1	0	0	0	0	0	1	0	2	0	2	0	14
8:30 AM	1	0	4	1	1	1	0	0	0	0	0	0	4	0	0	0	12
8:45 AM	0	0	7	0	0	0	0	0	0	1	1	0	3	1	0	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	3	50	12	2	9	0	0	0	1	4	0	28	1	2	2	116
APPROACH %'s :	2.99%	4.48%	74.63%	17.91%	18.18%	81.82%	0.00%	0.00%	0.00%	20.00%	80.00%	0.00%	84.85%	3.03%	6.06%	6.06%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	1	1	26	9	0	7	0	0	0	0	2	0	17	0	0	2	65
PEAK HR FACTOR :	0.250	0.250	0.813	0.563	0.000	0.438	0.000	0.000	0.000	0.000	0.250	0.000	0.607	0.000	0.000	0.500	0.774
	0.925				0.438				0.250				0.594				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	4	4	0	5	4	0	0	0	0	0	0	5	0	0	0	22
4:15 PM	0	12	2	0	1	5	0	0	0	0	0	0	1	0	1	0	22
4:30 PM	0	9	4	0	2	9	0	0	0	0	0	0	3	0	1	0	28
4:45 PM	0	11	4	0	5	7	0	0	0	0	0	0	5	0	0	0	32
5:00 PM	0	11	2	0	1	12	0	0	0	0	0	0	5	0	2	0	33
5:15 PM	0	2	4	0	0	3	0	0	0	0	1	0	1	1	1	0	13
5:30 PM	0	10	4	0	3	7	1	0	0	0	0	0	5	0	0	0	30
5:45 PM	0	9	9	0	0	4	0	0	0	0	0	0	3	0	2	0	27
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	68	33	0	17	51	1	0	0	0	1	0	28	1	7	0	207
APPROACH %'s :	0.00%	67.33%	32.67%	0.00%	24.64%	73.91%	1.45%	0.00%	0.00%	0.00%	100.00%	0.00%	77.78%	2.78%	19.44%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	43	12	0	9	33	0	0	0	0	0	0	14	0	4	0	115
PEAK HR FACTOR :	0.000	0.896	0.750	0.000	0.450	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.700	0.000	0.500	0.000	0.871
	0.917				0.808								0.643				

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Agate Rd
City: Barstow
Control: 1-Way Stop(WB)

Project ID: 21-030063-013
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Agate Rd				Agate Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Agate Rd
City: Barstow
Project ID: 21-030063-013
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lenwood Rd		Lenwood Rd		Agate Rd		Agate Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	1
APPROACH %'s :					100.00%	0.00%			
PEAK HR :	07:00 AM - 08:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	1
PEAK HR FACTOR :					0.250				0.250
					0.250				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Lenwood Rd & Community Blvd

Peak Hour Turning Movement Count

ID: 21-030063-014
City: Hinkley

Day: Wednesday
Date: 8/4/2021

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Lenwood Rd)

AM	13	0	16	2	38	AM
NOON	0	0	0	0	0	NOON
PM	24	0	17	3	64	PM

EASTBOUND (Community Blvd)

AM	NOON	PM	
26	0	61	
0	0	1	0
18	0	42	0
13	0	22	1
1	0	0	0

WESTBOUND (Community Blvd)

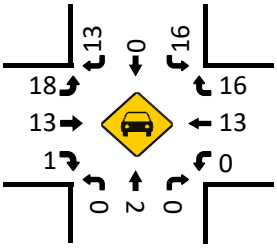
PM	NOON	AM	
19	0	16	0
36	0	13	1
0	0	0	0
2	0	0	0
41	0	29	

NORTHBOUND (Lenwood Rd)

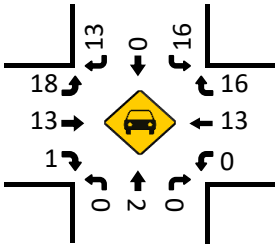
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	1	0	0	2	0	AM

CONTROL			
2-Way Stop(EB/WB)			
TEV	94	0	166
	AM	NOON	PM
PHF	0.76		0.72

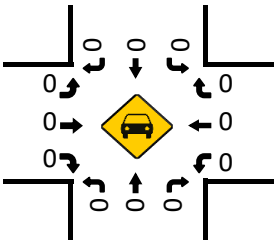
Totals (AM)



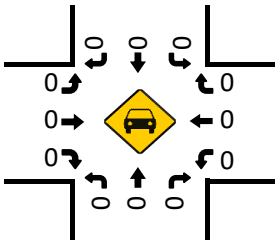
Totals (AM)



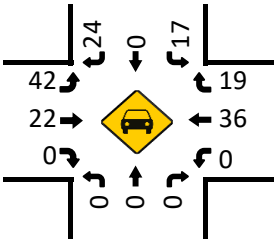
Totals (NOON)



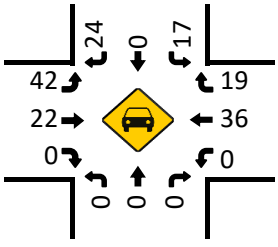
Totals (NOON)



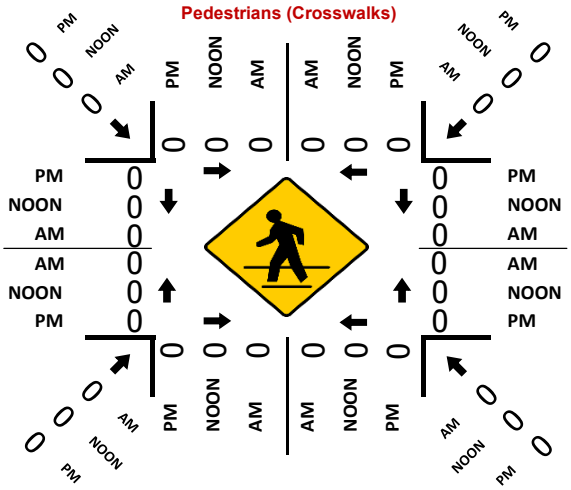
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Community Blvd
City: Hinkley
Control: 2-Way Stop(EB/WB)

Project ID: 21-030063-014
Date: 8/4/2021

Data - Totals

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Community Blvd				Community Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	2	1	0	3	1	0	0	3	3	0	14
7:15 AM	0	0	0	0	4	0	2	0	4	1	0	0	0	4	4	0	19
7:30 AM	0	2	0	0	1	0	5	0	2	3	0	0	0	2	1	0	16
7:45 AM	0	0	0	0	3	0	3	1	7	6	0	0	0	5	6	0	31
8:00 AM	0	0	0	0	8	0	3	1	5	3	1	0	0	2	5	0	28
8:15 AM	1	0	0	0	1	0	2	0	1	4	0	1	0	2	3	0	15
8:30 AM	0	0	1	0	3	0	3	2	4	0	0	0	0	2	3	0	18
8:45 AM	0	0	0	0	4	0	2	0	4	1	0	0	0	1	2	0	14
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	2	1	0	25	0	22	5	27	21	2	1	0	21	27	0	155
APPROACH %'s :	25.00%	50.00%	25.00%	0.00%	48.08%	0.00%	42.31%	9.62%	52.94%	41.18%	3.92%	1.96%	0.00%	43.75%	56.25%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	2	0	0	16	0	13	2	18	13	1	0	0	13	16	0	94
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.500	0.000	0.650	0.500	0.643	0.542	0.250	0.000	0.000	0.650	0.667	0.000	0.758
		0.250				0.646				0.615				0.659			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	5	0	8	0	20	6	0	1	0	9	8	1	58
4:15 PM	0	0	0	0	5	0	4	1	5	7	0	0	0	6	4	1	33
4:30 PM	0	0	0	0	3	0	6	0	10	6	0	0	0	13	2	0	40
4:45 PM	0	0	0	0	4	0	6	2	7	3	0	0	0	8	5	0	35
5:00 PM	0	0	0	0	3	0	3	1	4	4	0	0	0	5	6	0	26
5:15 PM	0	0	0	0	7	0	3	1	5	1	0	0	0	7	8	0	32
5:30 PM	0	1	0	0	5	0	5	1	2	3	0	0	0	8	4	0	29
5:45 PM	0	0	0	0	3	0	6	1	8	8	0	0	0	10	3	2	41
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	35	0	41	7	61	38	0	1	0	66	40	4	294
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	42.17%	0.00%	49.40%	8.43%	61.00%	38.00%	0.00%	1.00%	0.00%	60.00%	36.36%	3.64%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	17	0	24	3	42	22	0	1	0	36	19	2	166
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.850	0.000	0.750	0.375	0.525	0.786	0.000	0.250	0.000	0.692	0.594	0.500	0.716
						0.846				0.602				0.792			

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Community Blvd
City: Hinkley
Control: 2-Way Stop(EB/WB)

Project ID: 21-030063-014
Date: 8/4/2021

Data - Bikes

NS/EW Streets:	Lenwood Rd				Lenwood Rd				Community Blvd				Community Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & Community Blvd
City: Hinkley
Project ID: 21-030063-014
Date: 8/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lenwood Rd		Lenwood Rd		Community Blvd		Community Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	1	1	0	0	1	1	2	2	8
8:45 AM	0	0	0	0	0	1	1	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	1	0	0	1	2	3	2	10
APPROACH %'s :	50.00%	50.00%			33.33%	66.67%	60.00%	40.00%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

NDS - December 2021

Intersections 27, 28, 29, 30

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & SR 58 WB Ramps
City: Barstow
Control: 3-Way Stop(NB/EB/WB)

Project ID: 21-020361-001
Date: 12/16/2021

Data - Totals

NS/EW Streets:	Lenwood Rd				Lenwood Rd				SR 58 WB Ramps				SR 58 WB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	4	0	0	0	0	0	0	1	4	0	1	3	0	0	13
7:15 AM	1	0	4	0	0	0	0	0	0	0	4	0	1	1	0	0	11
7:30 AM	1	0	3	0	0	0	0	0	0	0	3	0	1	2	0	0	10
7:45 AM	2	0	2	0	0	0	0	0	0	1	4	0	1	3	0	0	13
8:00 AM	3	0	3	0	0	0	0	0	0	0	4	0	1	0	0	0	11
8:15 AM	4	0	1	0	0	0	0	0	0	0	7	0	2	4	0	0	18
8:30 AM	2	0	4	0	0	0	0	0	0	1	5	0	4	0	0	0	16
8:45 AM	5	0	3	0	0	0	0	0	0	0	5	0	1	2	0	0	16
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	18	0	24	0	0	0	0	0	0	3	36	0	12	15	0	0	108
APPROACH %'s :	42.86%	0.00%	57.14%	0.00%					0.00%	7.69%	92.31%	0.00%	44.44%	55.56%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	14	0	11	0	0	0	0	0	0	1	21	0	8	6	0	0	61
PEAK HR FACTOR :	0.700	0.000	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.750	0.000	0.500	0.375	0.000	0.000	0.847
	0.781								0.786				0.583				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	0	6	0	0	0	0	0	0	3	3	0	2	1	0	0	19
4:15 PM	9	0	4	0	0	0	0	0	0	5	9	0	2	4	0	0	33
4:30 PM	1	0	5	0	0	0	0	0	0	11	7	0	4	5	0	0	33
4:45 PM	3	0	3	0	0	0	0	0	0	1	6	0	5	3	0	0	21
5:00 PM	8	0	2	0	0	0	0	0	0	3	9	0	4	2	0	0	28
5:15 PM	2	0	4	0	0	0	0	0	0	2	4	0	2	6	0	0	20
5:30 PM	3	0	1	0	0	0	0	0	0	1	7	0	0	2	0	0	14
5:45 PM	4	0	6	0	0	0	0	0	0	2	5	0	2	6	0	0	25
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	34	0	31	0	0	0	0	0	0	28	50	0	21	29	0	0	193
APPROACH %'s :	52.31%	0.00%	47.69%	0.00%					0.00%	35.90%	64.10%	0.00%	42.00%	58.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	21	0	14	0	0	0	0	0	0	20	31	0	15	14	0	0	115
PEAK HR FACTOR :	0.583	0.000	0.700	0.000	0.000	0.000	0.000	0.000	0.000	0.455	0.861	0.000	0.750	0.700	0.000	0.000	0.871
	0.673								0.708				0.806				

Prepared by National Data & Surveying Services

Lenwood Rd & SR 58 WB Ramps

Peak Hour Turning Movement Count

ID: 21-020361-001
City: Barstow

Day: Thursday
Date: 12/16/2021

PEAK HOURS

AM: 08:00 AM - 09:00 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

CONTROL: 3-Way Stop(NB/EB/WB)

	AM	NOON	PM
TEV	61	0	115
PHF	0.85		0.87

SOUTHBOUND (Lenwood Rd)

	Left	Thru	Thru	Right	Total	
AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (SR 58 WB Ramps)

	AM	NOON	PM
Thru	20	0	35
Left	0	0	0
Thru	0	0	0
Right	1	0	20
Right	21	0	31

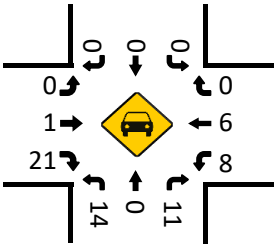
WESTBOUND (SR 58 WB Ramps)

	PM	NOON	AM
Right	0	0	0
Left	14	0	6
Left	15	0	8
Thru	0	0	0
Thru	34	0	12

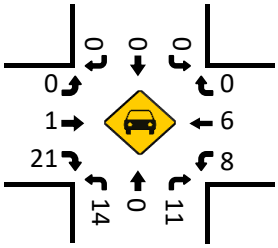
NORTHBOUND (Lenwood Rd)

	Left	Thru	Thru	Right	Total	
PM	46	0	21	0	14	PM
NOON	0	0	0	0	0	NOON
AM	29	0	14	0	11	AM

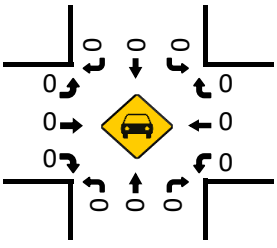
Totals (AM)



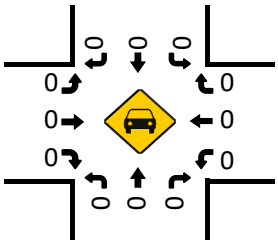
Total (AM)



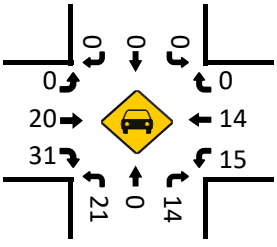
Totals (NOON)



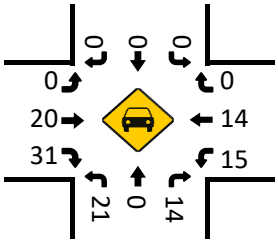
Total (NOON)



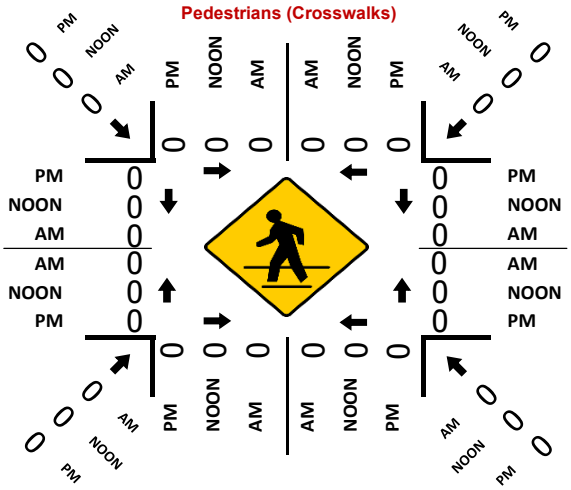
Totals (PM)



Total (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & SR 58 EB Ramps
City: Barstow
Control: 3-Way Stop(NB/SB/EB)

Project ID: 21-020361-002
Date: 12/16/2021

Data - Totals

NS/EW Streets:	Lenwood Rd				Lenwood Rd				SR 58 EB Ramps				SR 58 EB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	1	0.5	0.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	4	3	0	0	3	0	0	0	0	2	0	0	0	0	0	12
7:15 AM	0	5	1	0	3	2	0	0	0	0	0	0	0	0	0	0	11
7:30 AM	0	5	2	0	4	2	0	0	0	0	2	0	0	0	0	0	15
7:45 AM	0	4	4	0	2	2	0	0	1	0	8	0	0	0	0	0	21
8:00 AM	0	4	5	0	4	2	0	0	0	0	4	0	0	0	0	0	19
8:15 AM	0	5	2	0	4	3	0	0	1	0	3	0	0	0	0	0	18
8:30 AM	0	4	1	0	4	6	0	0	1	0	5	0	0	0	0	0	21
8:45 AM	0	7	4	0	1	6	0	0	2	0	0	0	0	0	0	0	20
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	38	22	0	22	26	0	0	5	0	24	0	0	0	0	0	137
APPROACH %'s :	0.00%	63.33%	36.67%	0.00%	45.83%	54.17%	0.00%	0.00%	17.24%	0.00%	82.76%	0.00%					
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	17	12	0	14	13	0	0	3	0	20	0	0	0	0	0	79
PEAK HR FACTOR :	0.000	0.850	0.600	0.000	0.875	0.542	0.000	0.000	0.750	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.940
		0.806				0.675				0.639							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	1	0.5	0.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	13	4	0	2	3	0	0	2	0	4	0	0	0	0	0	28
4:15 PM	0	9	4	0	3	8	0	0	0	0	4	0	0	0	0	0	28
4:30 PM	0	5	5	1	0	9	0	0	0	1	5	0	0	0	0	0	26
4:45 PM	0	8	4	0	3	10	0	0	2	0	7	0	0	0	0	0	34
5:00 PM	0	6	3	0	4	7	0	0	1	1	5	0	0	0	0	0	27
5:15 PM	0	4	4	0	3	5	0	0	1	0	7	0	0	0	0	0	24
5:30 PM	0	6	2	0	5	2	0	0	0	0	5	0	0	0	0	0	20
5:45 PM	0	8	1	0	2	4	0	0	0	1	3	0	0	0	0	0	19
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	59	27	1	22	48	0	0	6	3	40	0	0	0	0	0	206
APPROACH %'s :	0.00%	67.82%	31.03%	1.15%	31.43%	68.57%	0.00%	0.00%	12.24%	6.12%	81.63%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	35	17	1	8	30	0	0	4	1	20	0	0	0	0	0	116
PEAK HR FACTOR :	0.000	0.673	0.850	0.250	0.667	0.750	0.000	0.000	0.500	0.250	0.714	0.000	0.000	0.000	0.000	0.000	0.853
		0.779				0.731				0.694							

Prepared by National Data & Surveying Services

Lenwood Rd & SR 58 EB Ramps

Peak Hour Turning Movement Count

ID: 21-020361-002
City: Barstow

Day: Thursday
Date: 12/16/2021

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Lenwood Rd)

AM	0	13	14	0	20	AM
NOON	0	0	0	0	0	NOON
PM	0	30	8	0	39	PM

EASTBOUND (SR 58 EB Ramps)

AM	NOON	PM	
0	0	0	
0	0	0	0
3	0	4	1
0	0	1	0.5
20	0	20	0.5
AM	NOON	PM	

WESTBOUND (SR 58 EB Ramps)

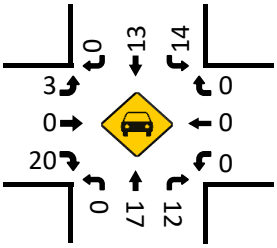
PM	NOON	AM	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
26	0	26	
PM	NOON	AM	

NORTHBOUND (Lenwood Rd)

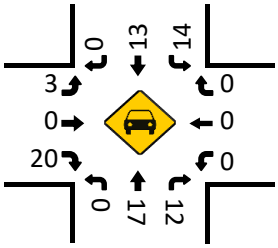
PM	51	1	0	35	17	PM
NOON	0	0	0	0	0	NOON
AM	33	0	0	17	12	AM

CONTROL			
3-Way Stop(NB/SB/EB)			
TEV	79 AM	0 NOON	116 PM
PHF	0.94		0.85

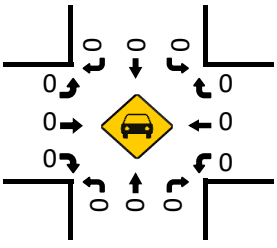
Totals (AM)



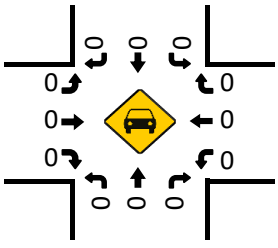
Total (AM)



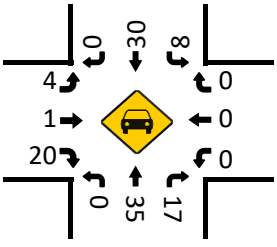
Totals (NOON)



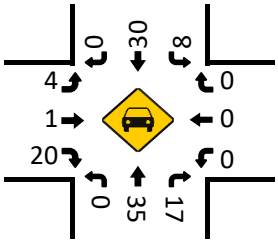
Total (NOON)



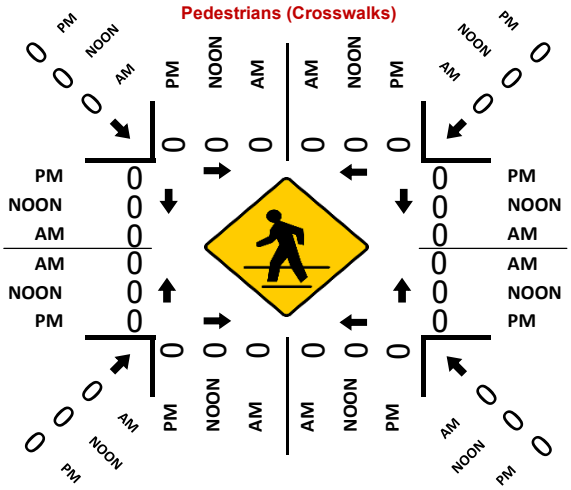
Totals (PM)



Total (PM)



Pedestrians (Crosswalks)



NDS - November 2022

Intersection 3

National Data & Surveying Services Intersection Turning Movement Count

Location: Lenwood Rd & National Trails Hwy
City: Barstow
Control: Signalized

Project ID: 22-030069-001
Date: 11/10/2022

Data - Totals

AM

NS/EW Streets:	Lenwood Rd				Lenwood Rd				National Trails Hwy				National Trails Hwy				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	1	1	0	1	1.5	0.5	0	1	1.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	6	4	0	3	9	1	0	4	25	7	0	12	10	7	0	88
7:15 AM	2	9	8	0	10	10	4	0	0	25	3	0	11	11	11	0	104
7:30 AM	1	5	12	0	11	13	1	0	3	20	7	0	14	15	5	0	107
7:45 AM	4	9	9	0	4	14	0	0	8	44	11	0	8	16	5	0	132
8:00 AM	6	12	11	0	12	12	3	0	4	28	6	0	10	16	5	0	125
8:15 AM	5	7	7	0	21	12	3	0	0	19	1	0	6	17	9	0	107
8:30 AM	4	4	11	0	15	12	1	0	0	40	7	0	14	10	13	0	131
8:45 AM	2	6	5	0	11	9	4	0	1	24	8	0	14	21	11	0	116
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	24	58	67	0	87	91	17	0	20	225	50	0	89	116	66	0	910
APPROACH %'s :	16.11%	38.93%	44.97%	0.00%	44.62%	46.67%	8.72%	0.00%	6.78%	76.27%	16.95%	0.00%	32.84%	42.80%	24.35%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	19	32	38	0	52	50	7	0	12	131	25	0	38	59	32	0	495
PEAK HR FACTOR :	0.792	0.667	0.864	0.000	0.619	0.893	0.583	0.000	0.375	0.744	0.568	0.000	0.679	0.868	0.615	0.000	0.938
	0.767				0.757				0.667				0.872				

NOON

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	1	1	0	1	1.5	0.5	0	1	1.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	4	9	13	0	9	12	1	0	2	23	6	0	12	22	12	0	125
12:15 PM	6	10	12	0	9	3	0	0	2	25	4	0	11	19	8	0	109
12:30 PM	4	7	11	0	10	10	2	0	4	13	7	0	7	18	6	0	99
12:45 PM	4	16	10	0	12	8	2	0	4	16	5	0	7	14	7	0	105
1:00 PM	4	13	11	0	8	14	3	0	3	25	5	0	5	9	8	0	108
1:15 PM	10	9	13	0	14	13	7	0	3	27	7	0	9	23	9	0	144
1:30 PM	9	6	7	0	10	14	2	0	2	21	4	0	15	24	18	0	132
1:45 PM	6	9	7	0	16	8	4	0	3	22	2	0	17	21	15	0	130
2:00 PM	8	8	17	0	9	11	2	0	3	15	10	0	14	12	14	0	123
2:15 PM	9	13	20	0	8	13	5	0	0	13	7	0	10	33	9	0	140
2:30 PM	14	8	18	0	14	22	2	0	3	23	5	0	16	23	13	0	161
2:45 PM	9	9	16	0	10	16	5	0	4	34	5	0	14	40	11	0	173
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	87	117	155	0	129	144	35	0	33	257	67	0	137	258	130	0	1549
APPROACH %'s :	24.23%	32.59%	43.18%	0.00%	41.88%	46.75%	11.36%	0.00%	9.24%	71.99%	18.77%	0.00%	26.10%	49.14%	24.76%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL :	40	38	71	0	41	62	14	0	10	85	27	0	54	108	47	0	597
PEAK HR FACTOR :	0.714	0.731	0.888	0.000	0.732	0.705	0.700	0.000	0.625	0.625	0.675	0.000	0.844	0.675	0.839	0.000	0.863
	0.887				0.770				0.709				0.804				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	1	1	0	1	1.5	0.5	0	1	1.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	8	12	0	8	4	7	0	1	24	7	0	12	35	13	0	139
4:15 PM	8	9	14	0	17	17	4	0	2	23	5	0	8	30	15	0	152
4:30 PM	6	9	17	0	8	17	4	0	1	20	11	0	12	35	18	0	158
4:45 PM	11	11	19	0	13	24	9	0	2	14	8	0	9	36	17	0	173
5:00 PM	7	7	16	0	8	18	9	0	2	18	4	0	11	29	9	0	138
5:15 PM	7	16	11	0	14	9	7	0	2	33	11	0	8	39	20	0	177
5:30 PM	2	14	14	0	8	6	1	0	3	17	15	0	13	27	9	0	129
5:45 PM	10	9	6	0	10	11	6	0	2	14	14	0	10	26	13	0	131
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	59	83	109	0	86	106	47	0	15	163	75	0	83	257	114	0	1197
APPROACH %'s :	23.51%	33.07%	43.43%	0.00%	35.98%	44.35%	19.67%	0.00%	5.93%	64.43%	29.64%	0.00%	18.28%	56.61%	25.11%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	31	43	63	0	43	68	29	0	7	85	34	0	40	139	64	0	646
PEAK HR FACTOR :	0.705	0.672	0.829	0.000	0.768	0.708	0.806	0.000	0.875	0.644	0.773	0.000	0.833	0.891	0.800	0.000	0.912
	0.835				0.761				0.685				0.907				

Prepared by National Data & Surveying Services

Lenwood Rd & National Trails Hwy

Peak Hour Turning Movement Count

ID: 22-030069-001
City: Barstow

Day: Thursday
Date: 11/10/2022

PEAK HOURS

AM	07:45 AM - 08:45 AM
NOON	02:00 PM - 03:00 PM
PM	04:30 PM - 05:30 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	12:00 PM - 03:00 PM
PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	495	597	646
PHF	0.94	0.86	0.91

SOUTHBOUND (Lenwood Rd)

	Left	Thru	Right	U-Turn	Total	
AM	7	50	52	0	76	AM
NOON	14	62	41	0	95	NOON
PM	29	68	43	0	114	PM

EASTBOUND (National Trails Hwy)

AM	NOON	PM	
85	162	199	
0	0	0	0
12	10	7	1
131	85	85	1.5
25	27	34	0.5

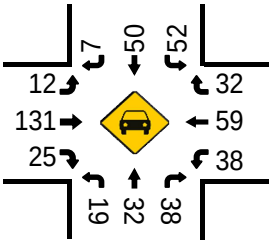
WESTBOUND (National Trails Hwy)

	PM	NOON	AM
0.5	64	47	32
1.5	139	108	59
1	40	54	38
0	0	0	0
	191	197	221

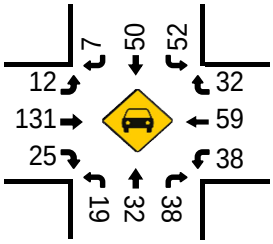
NORTHBOUND (Lenwood Rd)

	Left	Thru	Right	U-Turn	Total	
PM	142	0	31	43	63	PM
NOON	143	0	40	38	71	NOON
AM	113	0	19	32	38	AM

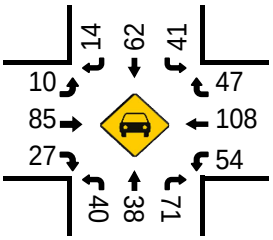
Totals (AM)



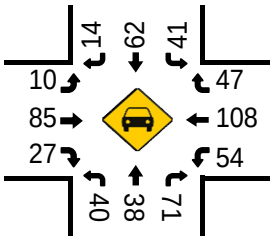
Totals (AM)



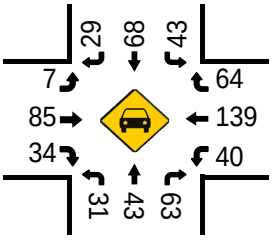
Totals (NOON)



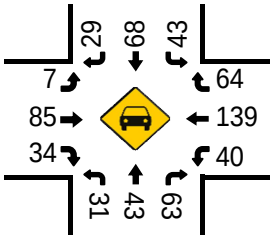
Totals (NOON)



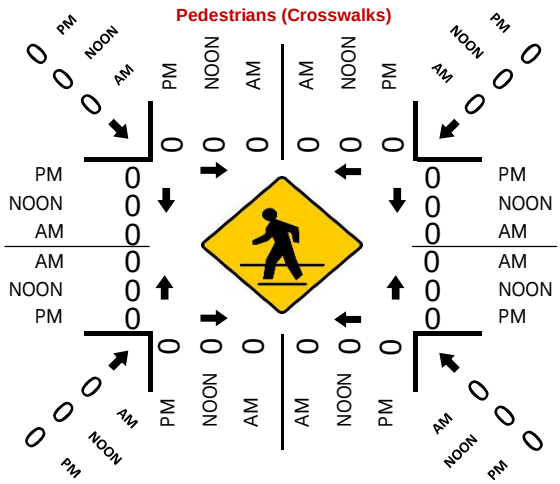
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



Field Data Services of Arizona, Inc. - April 2023

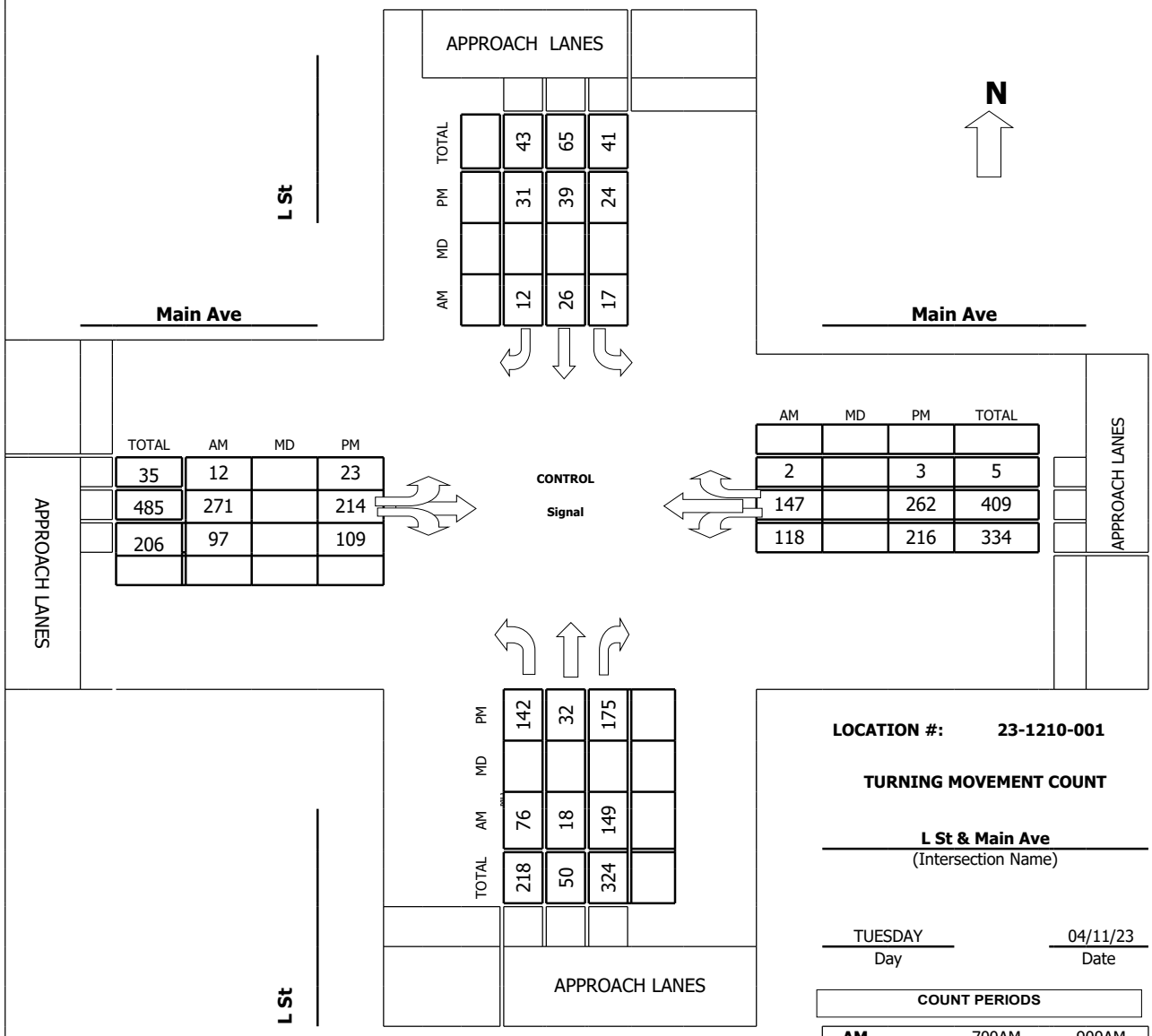
Intersections 31-44

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.315.6745

Project #: 23-1210-001

TMC SUMMARY OF L St & Main Ave



LOCATION #: 23-1210-001

TURNING MOVEMENT COUNT

L St & Main Ave
(Intersection Name)

TUESDAY (Day) 04/11/23 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: L St DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Main Ave DAY: TUESDAY PROJECT# 23-1210-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	2	0	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	17	3	47	6	5	3	4	46	17	30	29	0	207
7:15 AM	14	8	33	6	5	4	2	31	16	27	24	0	170
7:30 AM	12	4	46	8	4	4	5	44	11	21	26	2	187
7:45 AM	26	4	64	4	8	2	2	53	13	19	15	1	211
8:00 AM	20	8	28	5	3	0	1	41	11	25	30	1	173
8:15 AM	11	2	31	4	9	2	3	76	33	21	35	1	228
8:30 AM	15	4	40	2	9	5	3	78	32	32	37	0	257
8:45 AM	30	4	50	6	5	5	5	76	21	40	45	0	287
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	145	37	339	41	48	25	25	445	154	215	241	5	1720
Approach %	27.83	7.10	65.07	35.96	42.11	21.93	4.01	71.31	24.68	46.64	52.28	1.08	
App/Depart	521	/	67	114	/	417	624	/	825	461	/	411	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	76	18	149	17	26	12	12	271	97	118	147	2	945
Approach %	31.28	7.41	61.32	30.91	47.27	21.82	3.16	71.32	25.53	44.19	55.06	0.75	
PEAK HR. FACTOR:		0.723			0.859			0.841			0.785		0.823

CONTROL: Signal
COMMENT 1:
GPS: 34.891530, -117.057508

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745
veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: L St
0
E-W STREET: Main Ave

DATE: 04/11/23
DAY: TUESDAY

LOCATION: Barstow
PROJECT# 23-1210-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	2	0	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	36	7	55	10	8	6	6	59	28	51	85	1	352
4:15 PM	36	7	37	4	11	10	1	65	28	59	66	1	325
4:30 PM	36	8	46	6	8	4	9	46	27	63	56	0	309
4:45 PM	34	10	37	4	12	11	7	44	26	43	55	1	284
5:00 PM	30	3	45	7	14	11	4	42	17	46	62	1	282
5:15 PM	21	5	44	3	9	4	3	49	23	45	68	0	274
5:30 PM	33	5	46	2	4	6	1	52	19	41	64	1	274
5:45 PM	24	6	37	3	11	6	6	55	27	34	64	1	274
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	250	51	347	39	77	58	37	412	195	382	520	6	2374
Approach %	38.58	7.87	53.55	22.41	44.25	33.33	5.75	63.98	30.28	42.07	57.27	0.66	
App/Depart	648	/	94	174	/	654	644	/	798	908	/	828	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	142	32	175	24	39	31	23	214	109	216	262	3	1270
Approach %	40.69	9.17	50.14	25.53	41.49	32.98	6.65	61.85	31.50	44.91	54.47	0.62	
PEAK HR. FACTOR:		0.890			0.870			0.920			0.878		0.902

CONTROL: Signal
COMMENT 1: 0
GPS: 34.891530, -117.057508

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

Pedestrian & Bicycle Study

N-S STREET: L St
E-W STREET: Main Ave

Date: 04/11/23
Day: TUESDAY

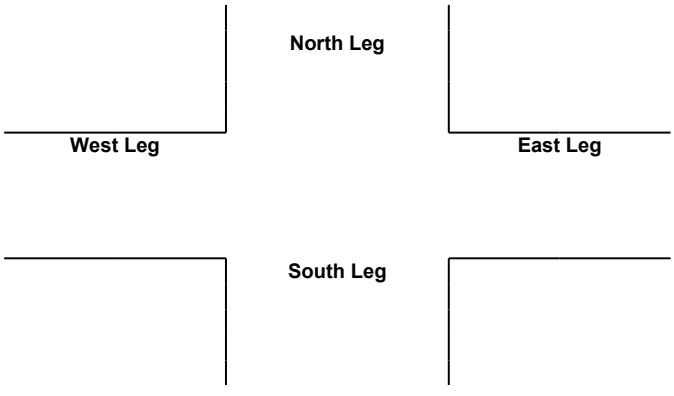
City: Barstow
Project #: 23-1210-001

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	1	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**1**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	1	0
8:30 AM	1	0	0	0
8:45 AM	0	0	0	0
TOTAL	**1**	**0**	**1**	**0**

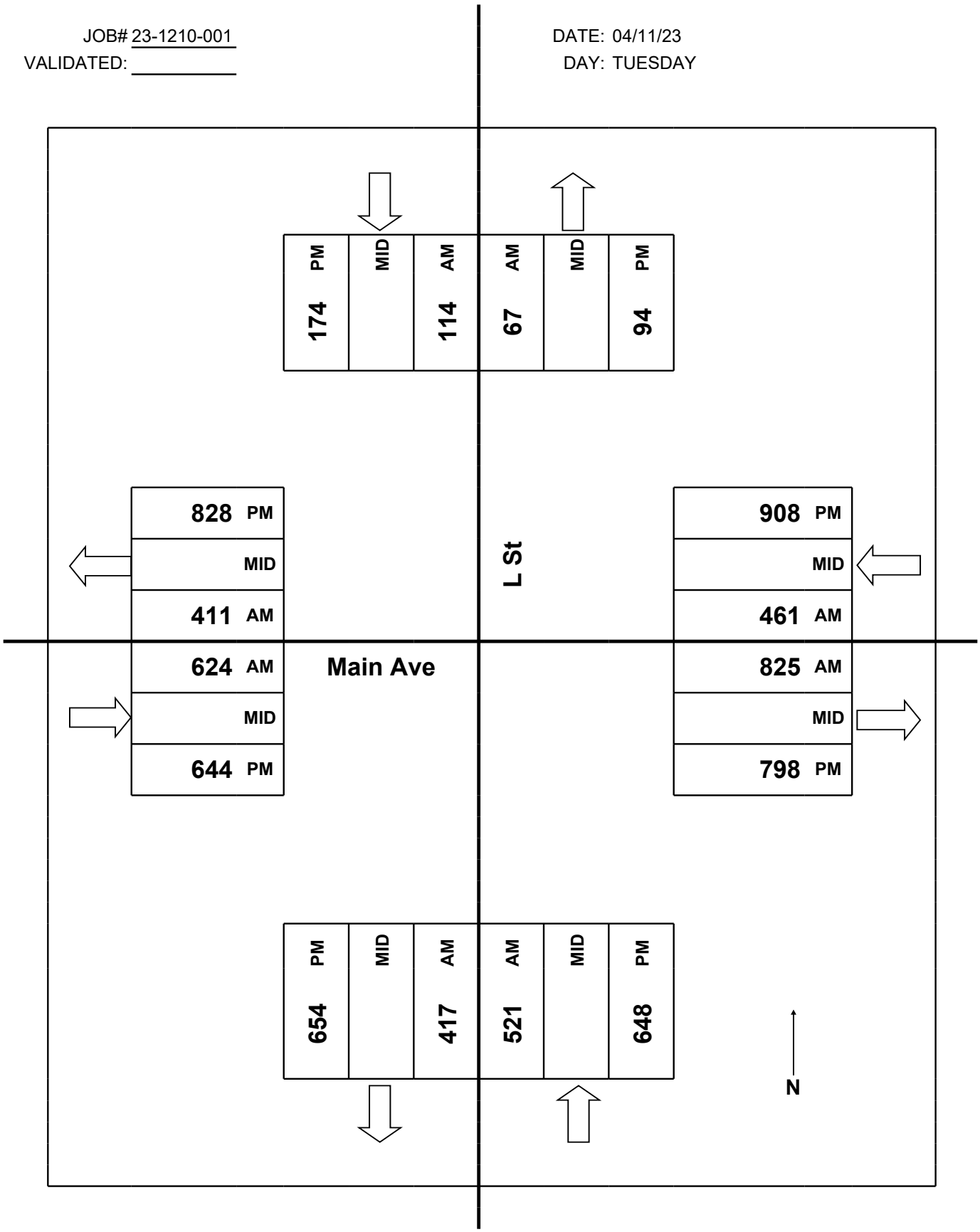
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	1	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**0**	**1**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**



JOB# 23-1210-001
VALIDATED: _____

DATE: 04/11/23
DAY: TUESDAY

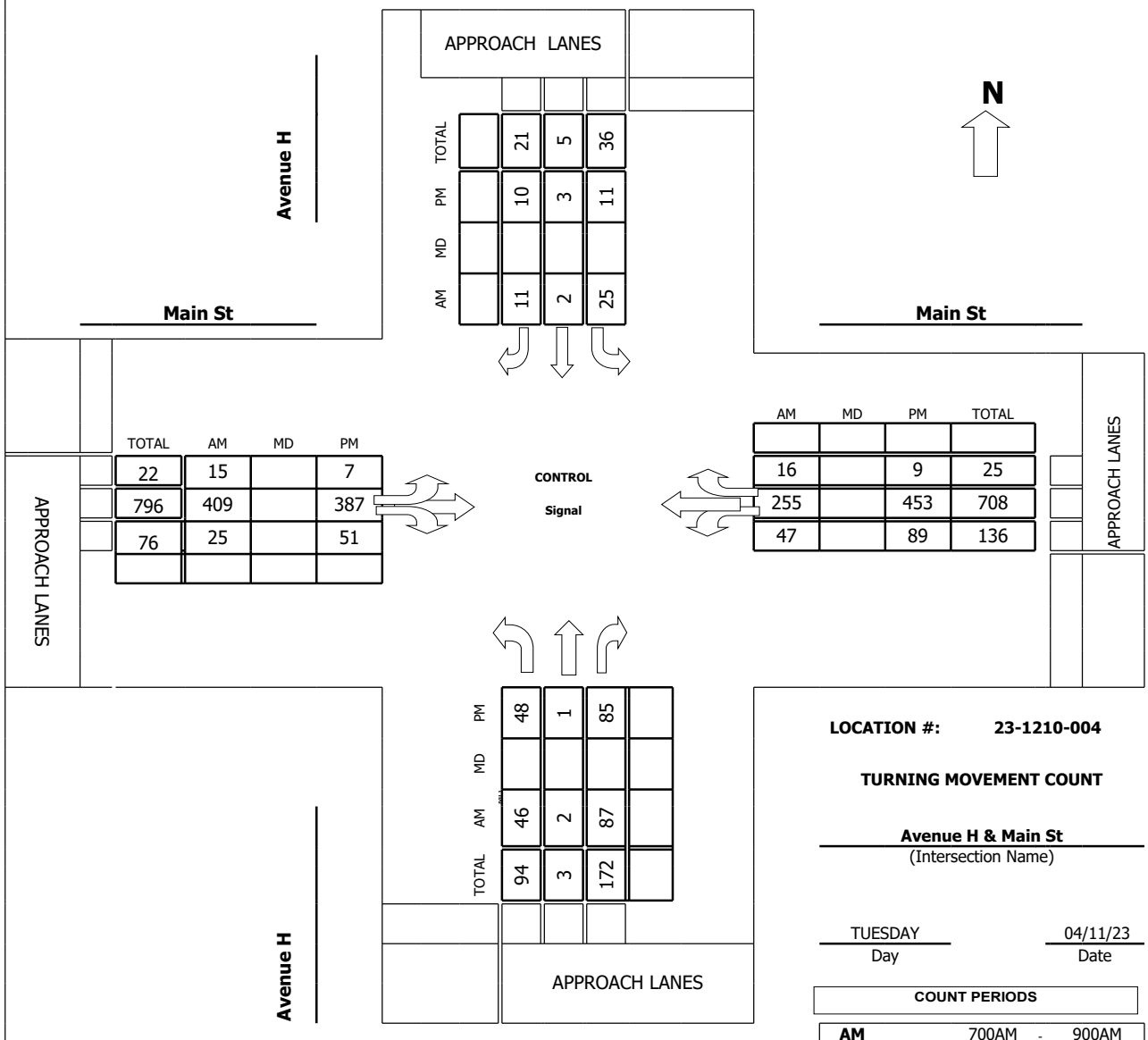


Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.315.6745

Project #: 23-1210-004

TMC SUMMARY OF Avenue H & Main St



LOCATION #: 23-1210-004

TURNING MOVEMENT COUNT

Avenue H & Main St
(Intersection Name)

TUESDAY (Day) 04/11/23 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Avenue H DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Main St DAY: TUESDAY PROJECT# 23-1210-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	0.5	0.5	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	5	0	29	13	17	3	3	90	6	13	52	0	231
7:15 AM	5	2	12	4	1	2	0	53	7	5	53	1	145
7:30 AM	4	0	11	1	0	3	5	82	9	11	50	1	177
7:45 AM	10	4	20	4	1	3	5	94	5	6	40	6	198
8:00 AM	6	1	15	3	0	3	5	73	1	8	50	4	169
8:15 AM	14	0	15	12	0	4	4	98	6	14	52	2	221
8:30 AM	10	0	32	5	1	3	4	110	6	9	82	3	265
8:45 AM	16	1	25	5	1	1	2	128	12	16	71	7	285
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	70	8	159	47	21	22	28	728	52	82	450	24	1691
Approach %	29.54	3.38	67.09	52.22	23.33	24.44	3.47	90.10	6.44	14.75	80.94	4.32	
App/Depart	237	/	60	90	/	155	808	/	934	556	/	542	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	46	2	87	25	2	11	15	409	25	47	255	16	940
Approach %	34.07	1.48	64.44	65.79	5.26	28.95	3.34	91.09	5.57	14.78	80.19	5.03	
PEAK HR. FACTOR:		0.804			0.594			0.790			0.846		0.825

CONTROL: Signal
COMMENT 1:
GPS: 34.894092, -117.047547

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745
veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Avenue H
0
E-W STREET: Main St

DATE: 04/11/23
DAY: TUESDAY

LOCATION: Barstow
PROJECT# 23-1210-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	0.5	0.5	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	18	0	27	5	2	3	2	107	19	19	119	5	326
4:15 PM	5	0	13	2	0	2	1	104	7	25	124	4	287
4:30 PM	13	1	25	4	0	2	2	87	13	26	119	0	292
4:45 PM	12	0	20	0	1	3	2	89	12	19	91	0	249
5:00 PM	9	1	12	2	1	1	2	81	7	19	114	3	252
5:15 PM	5	1	4	2	1	2	1	79	13	13	104	6	231
5:30 PM	9	2	11	3	0	5	1	86	9	13	100	2	241
5:45 PM	5	1	16	2	0	0	2	92	14	12	99	4	247
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	76	6	128	20	5	18	13	725	94	146	870	24	2125
Approach %	36.19	2.86	60.95	46.51	11.63	41.86	1.56	87.14	11.30	14.04	83.65	2.31	
App/Depart	210	/	43	43	/	245	832	/	873	1040	/	964	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	48	1	85	11	3	10	7	387	51	89	453	9	1154
Approach %	35.82	0.75	63.43	45.83	12.50	41.67	1.57	86.97	11.46	16.15	82.21	1.63	
PEAK HR. FACTOR:		0.744			0.600			0.869			0.900		0.885

CONTROL: Signal
COMMENT 1: 0
GPS: 34.894092, -117.047547

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

Pedestrian & Bicycle Study

N-S STREET: Avenue H
E-W STREET: Main St

Date: 04/11/23
Day: TUESDAY

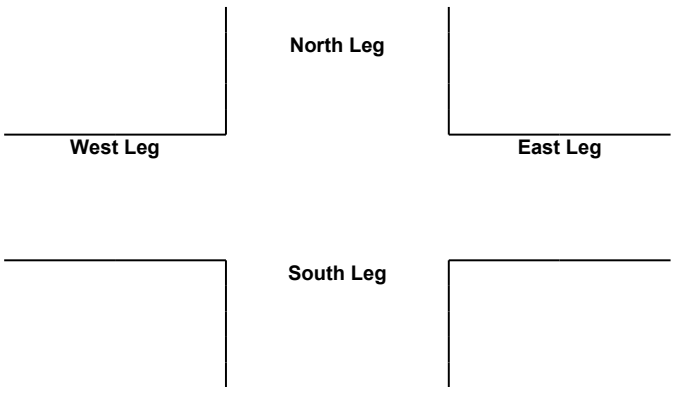
City: Barstow
Project #: 23-1210-004

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	2	0	1	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	1	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	1	0	1	0
TOTAL	**3**	**1**	**2**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

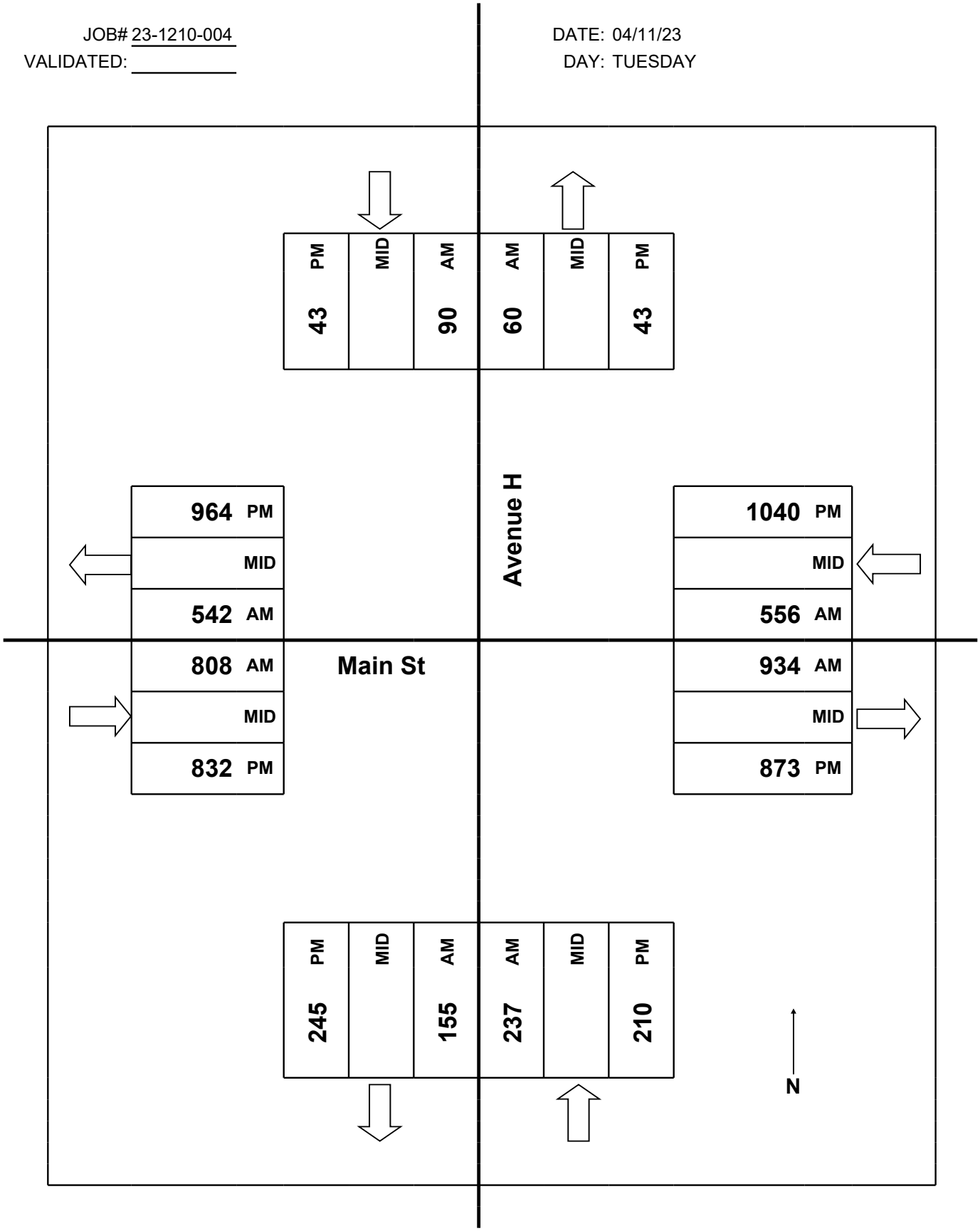
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	1	0	1	0
4:15 PM	0	0	0	0
4:30 PM	0	5	5	0
4:45 PM	0	0	0	0
5:00 PM	1	0	0	0
5:15 PM	0	2	0	0
5:30 PM	0	1	0	0
5:45 PM	0	1	1	0
TOTAL	**2**	**9**	**7**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**



JOB# 23-1210-004
VALIDATED: _____

DATE: 04/11/23
DAY: TUESDAY

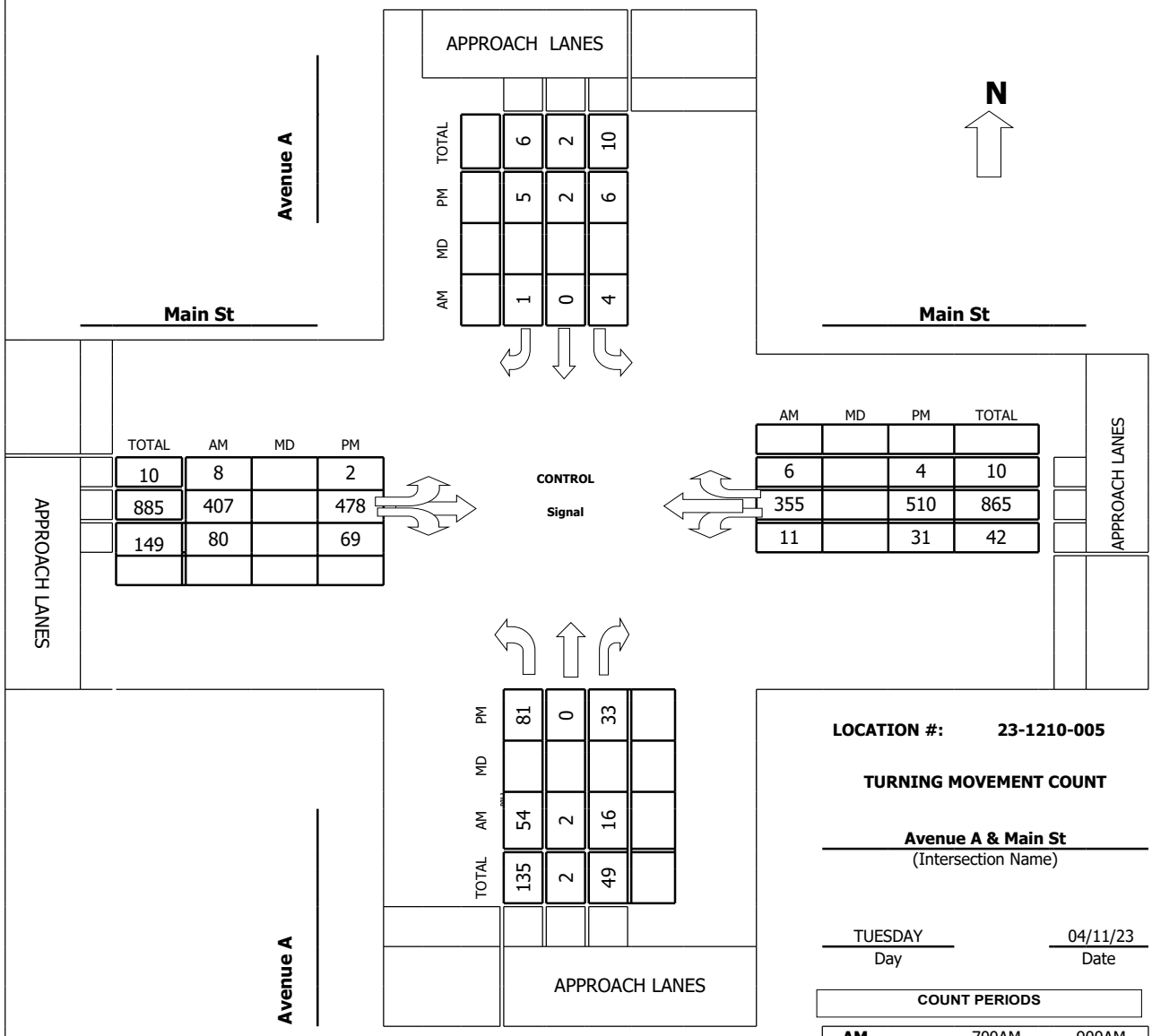


Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.315.6745

Project #: 23-1210-005

TMC SUMMARY OF Avenue A & Main St



LOCATION #: 23-1210-005

TURNING MOVEMENT COUNT

Avenue A & Main St
(Intersection Name)

TUESDAY (Day) 04/11/23 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Avenue A DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Main St DAY: TUESDAY PROJECT# 23-1210-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0.5	0.5	1	0.5	0.5	1	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	24	0	7	0	0	0	2	72	62	1	50	1	219
7:15 AM	11	1	1	0	0	0	2	49	12	2	53	1	132
7:30 AM	7	0	1	1	1	0	1	69	16	2	65	0	163
7:45 AM	6	1	4	1	0	1	4	78	16	2	49	1	163
8:00 AM	11	0	3	2	0	0	6	64	12	2	75	0	175
8:15 AM	10	0	5	1	0	1	0	102	18	2	69	1	209
8:30 AM	17	0	5	0	0	0	1	107	24	5	110	3	272
8:45 AM	16	2	3	1	0	0	1	134	26	2	101	2	288
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	102	4	29	6	1	2	17	675	186	18	572	9	1621
Approach %	75.56	2.96	21.48	66.67	11.11	22.22	1.94	76.88	21.18	3.01	95.49	1.50	
App/Depart	135	/	30	9	/	205	878	/	710	599	/	676	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	54	2	16	4	0	1	8	407	80	11	355	6	944
Approach %	75.00	2.78	22.22	80.00	0.00	20.00	1.62	82.22	16.16	2.96	95.43	1.61	
PEAK HR. FACTOR:		0.818			0.625			0.769			0.788		0.819

CONTROL: Signal
COMMENT 1:
GPS: 34.897455, -117.034622

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Avenue A
0
E-W STREET: Main St

DATE: 04/11/23
DAY: TUESDAY

LOCATION: Barstow
PROJECT# 23-1210-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0.5	0.5	1	0.5	0.5	1	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	33	0	13	2	0	1	1	126	27	11	120	0	334
4:15 PM	15	0	4	0	0	1	1	127	18	1	149	1	317
4:30 PM	16	0	11	2	0	0	0	110	13	9	123	1	285
4:45 PM	17	0	5	2	2	3	0	115	11	10	118	2	285
5:00 PM	14	0	13	3	0	4	3	126	6	6	117	0	292
5:15 PM	12	0	6	0	0	2	1	89	12	4	116	0	242
5:30 PM	11	0	2	2	0	1	2	104	11	6	117	1	257
5:45 PM	19	0	8	1	0	1	2	99	14	1	100	1	246
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	137	0	62	12	2	13	10	896	112	48	960	6	2258
Approach %	68.84	0.00	31.16	44.44	7.41	48.15	0.98	88.02	11.00	4.73	94.67	0.59	
App/Depart	199	/	16	27	/	162	1018	/	970	1014	/	1110	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	81	0	33	6	2	5	2	478	69	31	510	4	1221
Approach %	71.05	0.00	28.95	46.15	15.38	38.46	0.36	87.07	12.57	5.69	93.58	0.73	
PEAK HR. FACTOR:		0.620			0.464			0.891			0.902		0.914

CONTROL: Signal
COMMENT 1: 0
GPS: 34.897455, -117.034622

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

Pedestrian & Bicycle Study

N-S STREET: Avenue A
E-W STREET: Main St

Date: 04/11/23
Day: TUESDAY

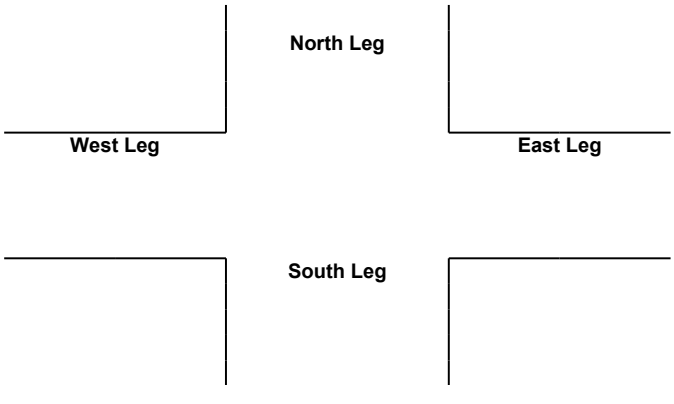
City: Barstow
Project #: 23-1210-005

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	1	1	2	0
7:30 AM	0	1	1	0
7:45 AM	2	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	1	0	0
8:45 AM	0	0	1	0
TOTAL	**3**	**3**	**4**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

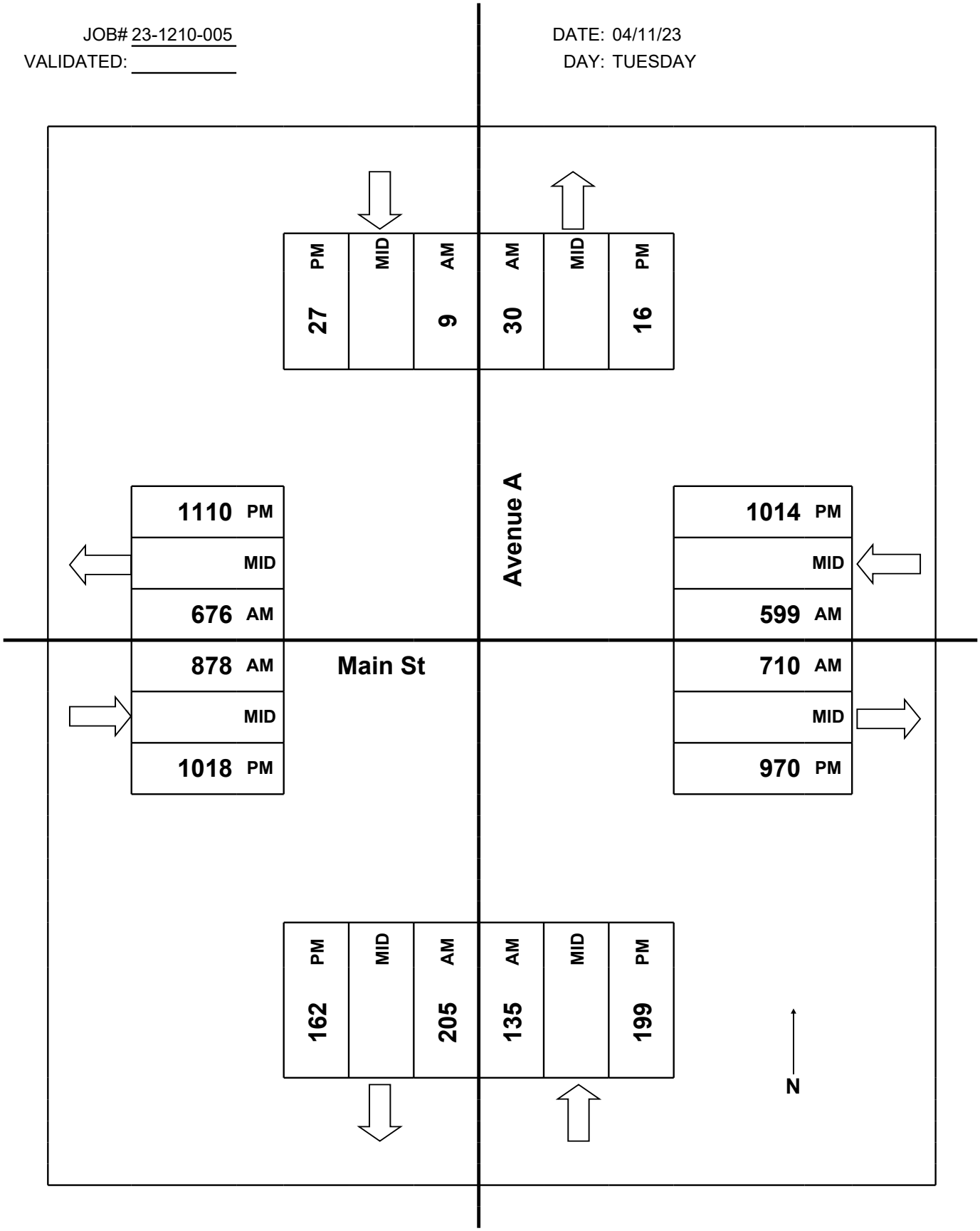
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	2	0	0
4:15 PM	0	1	0	0
4:30 PM	1	1	1	2
4:45 PM	0	0	0	0
5:00 PM	0	1	0	0
5:15 PM	0	2	0	0
5:30 PM	0	1	0	0
5:45 PM	0	3	0	0
TOTAL	**1**	**11**	**1**	**2**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	1	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**1**	**0**	**0**



JOB# 23-1210-005
VALIDATED: _____

DATE: 04/11/23
DAY: TUESDAY

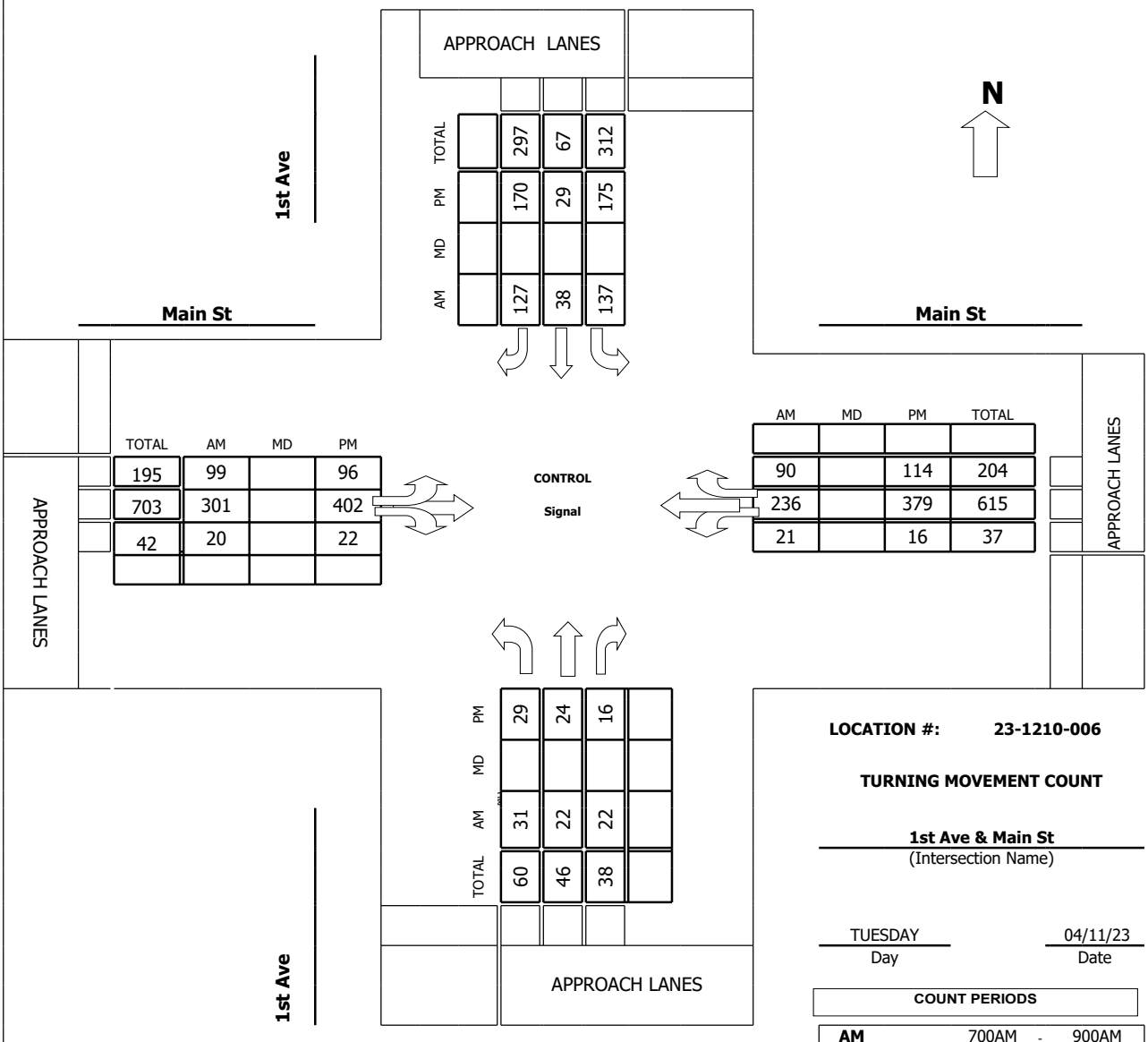


Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.315.6745

Project #: 23-1210-006

TMC SUMMARY OF 1st Ave & Main St



LOCATION #: 23-1210-006

TURNING MOVEMENT COUNT

1st Ave & Main St
(Intersection Name)

TUESDAY (Day) 04/11/23 (Date)

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: 1st Ave DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Main St DAY: TUESDAY PROJECT# 23-1210-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	1	0	1	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	8	17	11	15	34	18	20	48	7	15	26	13	232
7:15 AM	6	9	7	15	2	15	15	36	1	2	37	12	157
7:30 AM	3	1	0	19	0	28	21	45	5	3	39	9	173
7:45 AM	2	1	4	25	3	16	20	51	4	4	39	20	189
8:00 AM	7	6	8	23	6	25	21	45	0	2	49	19	211
8:15 AM	5	2	2	28	6	21	30	70	8	5	51	26	254
8:30 AM	9	7	5	38	14	42	22	79	8	3	69	27	323
8:45 AM	10	7	7	48	12	39	26	107	4	11	67	18	356
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	50	50	44	211	77	204	175	481	37	45	377	144	1895
Approach %	34.72	34.72	30.56	42.89	15.65	41.46	25.25	69.41	5.34	7.95	66.61	25.44	
App/Depart	144	/	369	492	/	159	693	/	736	566	/	631	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	31	22	22	137	38	127	99	301	20	21	236	90	1144
Approach %	41.33	29.33	29.33	45.36	12.58	42.05	23.57	71.67	4.76	6.05	68.01	25.94	
PEAK HR. FACTOR:		0.781			0.763			0.766			0.876		0.803

CONTROL: Signal
COMMENT 1: Slightly offset intersection
GPS: 34.898750, -117.027484

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: 1st Ave
E-W STREET: Main St
0
DATE: 04/11/23
DAY: TUESDAY
LOCATION: Barstow
PROJECT# 23-1210-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	1	0	1	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	8	13	8	45	13	41	30	100	9	4	89	23	383
4:15 PM	8	2	3	42	3	43	24	102	6	3	105	39	380
4:30 PM	8	3	2	50	9	53	23	106	5	2	89	25	375
4:45 PM	5	6	3	38	4	33	19	94	2	7	96	27	334
5:00 PM	7	4	5	34	1	33	36	117	3	3	86	22	351
5:15 PM	8	0	4	32	3	27	25	69	1	1	72	29	271
5:30 PM	7	2	2	27	3	31	24	80	4	3	89	18	290
5:45 PM	1	1	2	23	0	23	26	79	3	7	77	26	268
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	52	31	29	291	36	284	207	747	33	30	703	209	2652
Approach %	46.43	27.68	25.89	47.63	5.89	46.48	20.97	75.68	3.34	3.18	74.63	22.19	
App/Depart	112	/	447	611	/	99	987	/	1067	942	/	1039	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	29	24	16	175	29	170	96	402	22	16	379	114	1472
Approach %	42.03	34.78	23.19	46.79	7.75	45.45	18.46	77.31	4.23	3.14	74.46	22.40	
PEAK HR. FACTOR:		0.595			0.835			0.935			0.866		0.961

CONTROL: Signal
COMMENT 1: Slightly offset intersection
GPS: 34.898750, -117.027484

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

Pedestrian & Bicycle Study

N-S STREET: 1st Ave
E-W STREET: Main St

Date: 04/11/23
Day: TUESDAY

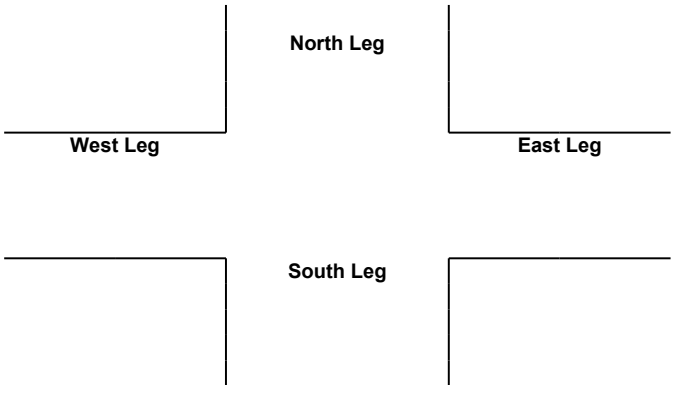
City: Barstow
Project #: 23-1210-006

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	1	1	0
7:15 AM	0	0	0	0
7:30 AM	0	1	0	0
7:45 AM	1	1	1	0
8:00 AM	0	1	2	0
8:15 AM	0	1	3	0
8:30 AM	0	1	0	0
8:45 AM	0	0	0	0
TOTAL	**1**	**6**	**7**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	1	0	0	0
8:45 AM	0	0	0	0
TOTAL	**1**	**0**	**0**	**0**

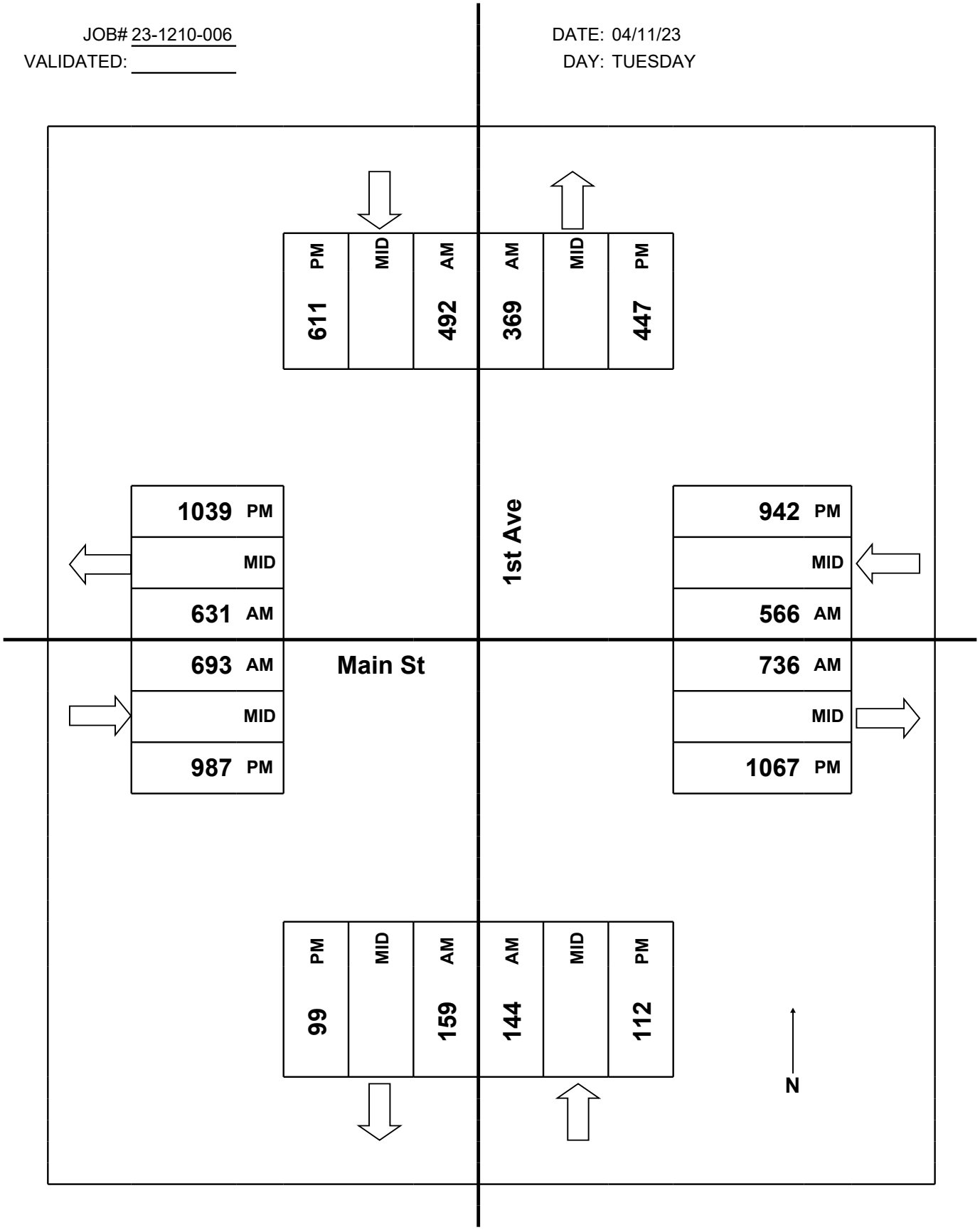
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	4	2	0
4:15 PM	1	2	1	0
4:30 PM	0	0	0	0
4:45 PM	0	4	1	0
5:00 PM	0	0	1	0
5:15 PM	0	1	0	0
5:30 PM	0	0	1	0
5:45 PM	2	0	0	0
TOTAL	**3**	**11**	**6**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	1	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**1**	**0**	**0**



JOB# 23-1210-006
VALIDATED: _____

DATE: 04/11/23
DAY: TUESDAY

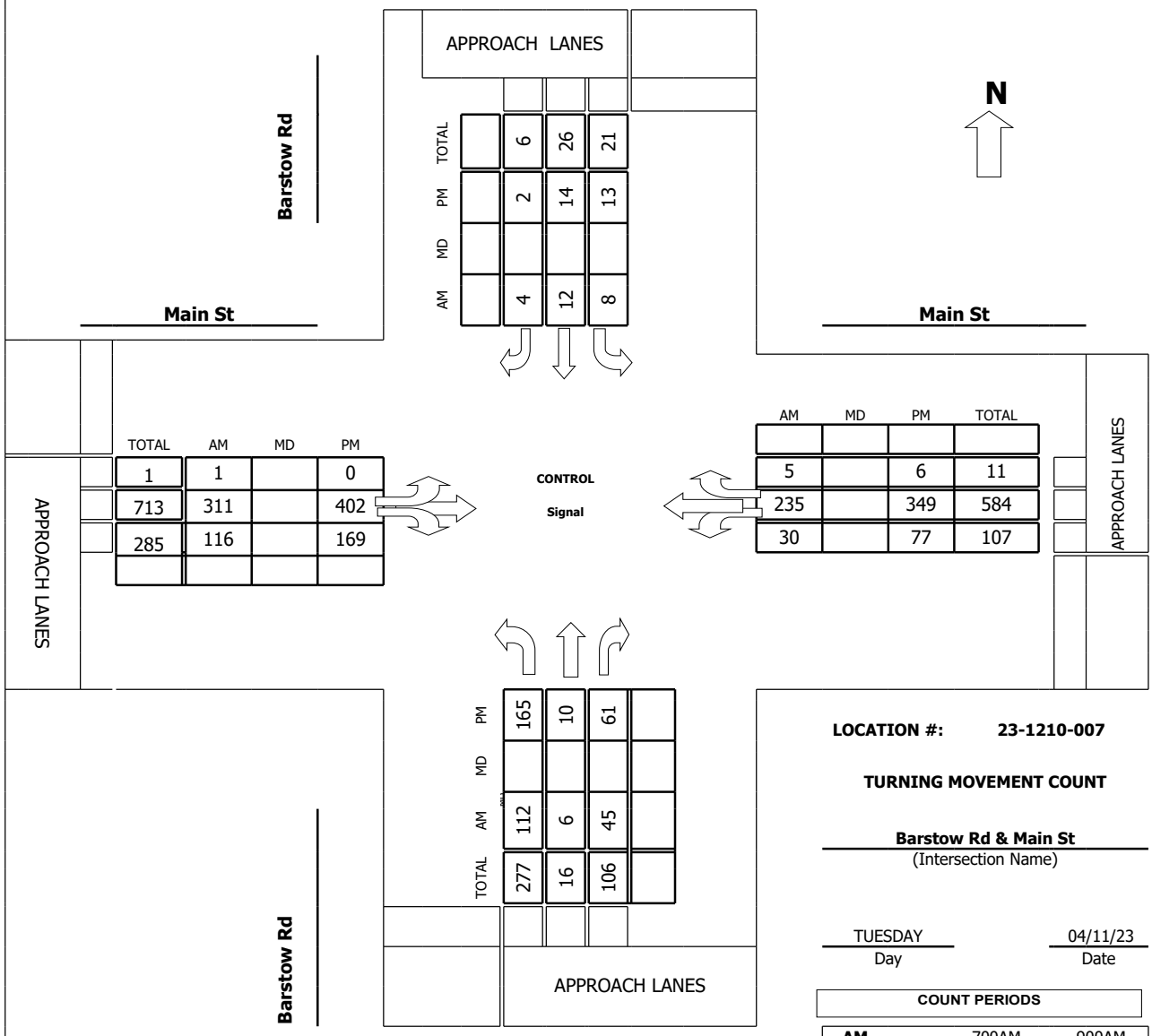


Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.315.6745

Project #: 23-1210-007

TMC SUMMARY OF Barstow Rd & Main St



LOCATION #: 23-1210-007

TURNING MOVEMENT COUNT

Barstow Rd & Main St
(Intersection Name)

TUESDAY (Day) 04/11/23 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Main St DAY: TUESDAY PROJECT# 23-1210-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	1	0	0	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	17	1	11	0	3	0	0	53	15	6	41	3	150
7:15 AM	15	0	6	1	1	1	1	37	13	4	42	1	122
7:30 AM	14	1	8	1	1	0	0	39	20	3	38	0	125
7:45 AM	26	3	15	2	2	0	0	57	18	14	49	2	188
8:00 AM	22	2	8	3	3	1	1	57	19	4	44	2	166
8:15 AM	35	1	7	4	3	1	0	82	24	7	57	0	221
8:30 AM	27	1	19	0	4	1	0	72	29	3	64	1	221
8:45 AM	28	2	11	1	2	1	0	100	44	16	70	2	277
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	184	11	85	12	19	5	2	497	182	57	405	11	1470
Approach %	65.71	3.93	30.36	33.33	52.78	13.89	0.29	72.98	26.73	12.05	85.62	2.33	
App/Depart	280	/	24	36	/	258	681	/	594	473	/	594	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	112	6	45	8	12	4	1	311	116	30	235	5	885
Approach %	68.71	3.68	27.61	33.33	50.00	16.67	0.23	72.66	27.10	11.11	87.04	1.85	
PEAK HR. FACTOR:		0.867			0.750			0.743			0.767		0.799

CONTROL: Signal
COMMENT 1: North leg is driveway that is slightly offset
GPS: 34.898722, -117.022997

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745
veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd 0 DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Main St DAY: TUESDAY PROJECT# 23-1210-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	1	0	0	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	46	4	12	3	2	0	0	106	36	17	95	2	323
4:15 PM	41	1	14	5	6	1	0	93	55	21	97	3	337
4:30 PM	35	2	15	2	3	1	0	102	38	21	79	1	299
4:45 PM	43	3	20	3	3	0	0	101	40	18	78	0	309
5:00 PM	35	0	17	5	0	1	0	89	46	18	77	3	291
5:15 PM	40	3	20	5	4	4	1	76	36	19	76	3	287
5:30 PM	25	5	15	1	3	4	1	69	42	13	81	3	262
5:45 PM	35	2	20	2	7	1	0	69	32	10	85	2	265
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	300	20	133	26	28	12	2	705	325	137	668	17	2373
Approach %	66.23	4.42	29.36	39.39	42.42	18.18	0.19	68.31	31.49	16.67	81.27	2.07	
App/Depart	453	/	39	66	/	490	1032	/	864	822	/	980	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	165	10	61	13	14	2	0	402	169	77	349	6	1268
Approach %	69.92	4.24	25.85	44.83	48.28	6.90	0.00	70.40	29.60	17.82	80.79	1.39	
PEAK HR. FACTOR:		0.894			0.604			0.965			0.893		0.941

CONTROL: Signal
COMMENT 1: North leg is driveway that is slightly offset
GPS: 34.898722, -117.022997

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

Pedestrian & Bicycle Study

N-S STREET: Barstow Rd
E-W STREET: Main St

Date: 04/11/23
Day: TUESDAY

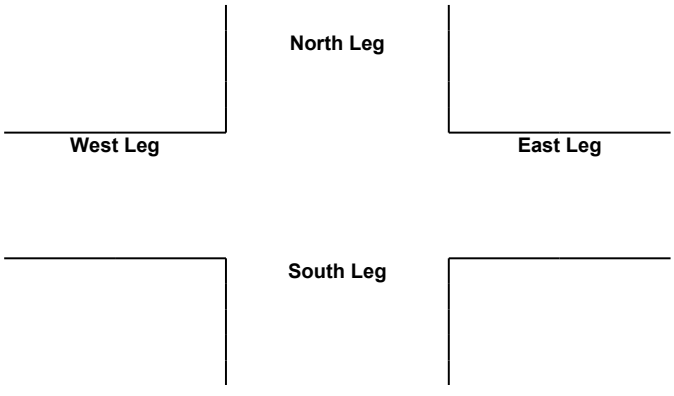
City: Barstow
Project #: 23-1210-007

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	1	0	0	0
7:15 AM	0	0	0	0
7:30 AM	2	0	0	0
7:45 AM	0	0	1	0
8:00 AM	0	1	0	0
8:15 AM	1	1	2	1
8:30 AM	0	0	0	0
8:45 AM	0	0	1	1
TOTAL	**4**	**2**	**4**	**2**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

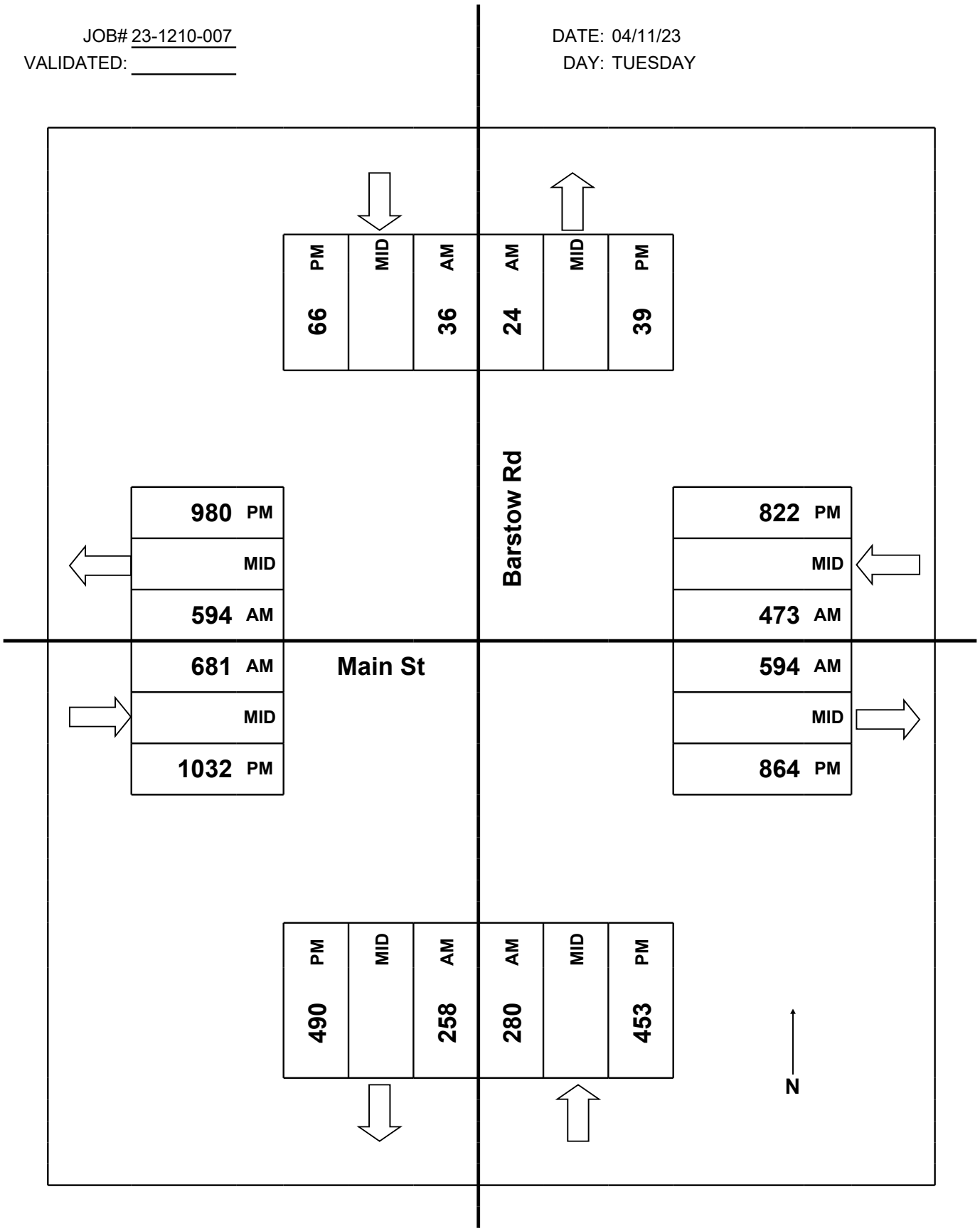
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	1	1
4:15 PM	0	0	0	0
4:30 PM	0	1	0	0
4:45 PM	0	4	2	0
5:00 PM	0	0	0	0
5:15 PM	0	0	2	1
5:30 PM	0	0	2	0
5:45 PM	0	0	0	0
TOTAL	**0**	**5**	**7**	**2**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**



JOB# 23-1210-007
VALIDATED: _____

DATE: 04/11/23
DAY: TUESDAY

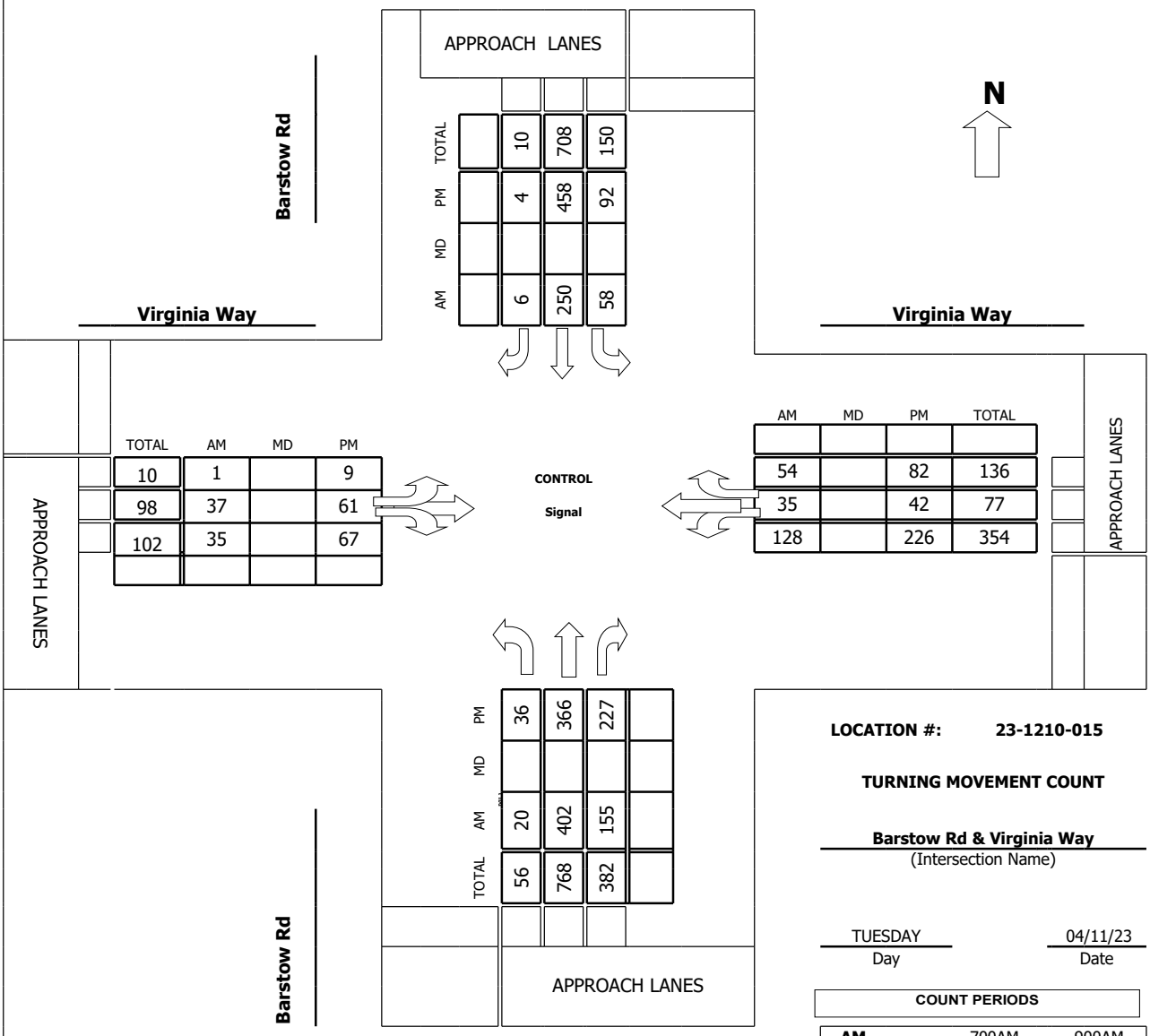


Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.315.6745

Project #: 23-1210-015

TMC SUMMARY OF Barstow Rd & Virginia Way



LOCATION #: 23-1210-015

TURNING MOVEMENT COUNT

Barstow Rd & Virginia Way
(Intersection Name)

TUESDAY (Day) 04/11/23 (Date)

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Virginia Way DAY: TUESDAY PROJECT# 23-1210-015

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	2	0	1	1	0	1	0.5	0.5	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	13	122	34	14	97	1	1	13	10	21	14	16	356
7:15 AM	20	81	23	9	50	1	1	4	8	23	9	4	233
7:30 AM	10	82	33	7	35	1	0	7	5	13	2	7	202
7:45 AM	8	109	51	9	40	0	0	4	6	18	2	5	252
8:00 AM	5	114	36	14	52	0	0	1	6	31	6	11	276
8:15 AM	4	90	38	11	49	0	1	10	5	32	4	14	258
8:30 AM	5	96	45	10	67	4	0	15	7	34	6	14	303
8:45 AM	6	102	36	23	82	2	0	11	17	31	19	15	344
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	71	796	296	97	472	9	3	65	64	203	62	86	2224
Approach %	6.10	68.44	25.45	16.78	81.66	1.56	2.27	49.24	48.48	57.83	17.66	24.50	
App/Depart	1163	/	885	578	/	739	132	/	458	351	/	142	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	20	402	155	58	250	6	1	37	35	128	35	54	1181
Approach %	3.47	69.67	26.86	18.47	79.62	1.91	1.37	50.68	47.95	58.99	16.13	24.88	
PEAK HR. FACTOR:		0.931			0.734			0.652			0.835		0.858

CONTROL: Signal
COMMENT 1:
GPS: 34.888132, -117.022903

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd 0 DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Virginia Way DAY: TUESDAY PROJECT# 23-1210-015

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	2	0	1	1	0	1	0.5	0.5	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	12	96	57	21	116	2	3	24	23	39	8	23	424
4:15 PM	10	85	61	26	124	1	3	16	17	66	12	16	437
4:30 PM	7	94	51	22	138	1	2	8	13	65	14	24	439
4:45 PM	7	91	58	23	80	0	1	13	14	56	8	19	370
5:00 PM	6	68	46	19	124	1	1	9	16	50	7	21	368
5:15 PM	10	66	71	21	101	1	0	7	11	58	11	27	384
5:30 PM	17	71	56	21	95	2	1	4	17	49	12	24	369
5:45 PM	13	87	59	14	92	1	1	7	11	53	4	11	353
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	82	658	459	167	870	9	12	88	122	436	76	165	3144
Approach %	6.84	54.88	38.28	15.97	83.17	0.86	5.41	39.64	54.95	64.40	11.23	24.37	
App/Depart	1199	/	835	1046	/	1428	222	/	714	677	/	167	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	36	366	227	92	458	4	9	61	67	226	42	82	1670
Approach %	5.72	58.19	36.09	16.61	82.67	0.72	6.57	44.53	48.91	64.57	12.00	23.43	
PEAK HR. FACTOR:		0.953			0.860			0.685			0.850		0.951

CONTROL: Signal
COMMENT 1: 0
GPS: 34.888132, -117.022903

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

Pedestrian & Bicycle Study

N-S STREET: Barstow Rd
E-W STREET: Virginia Way

Date: 04/11/23
Day: TUESDAY

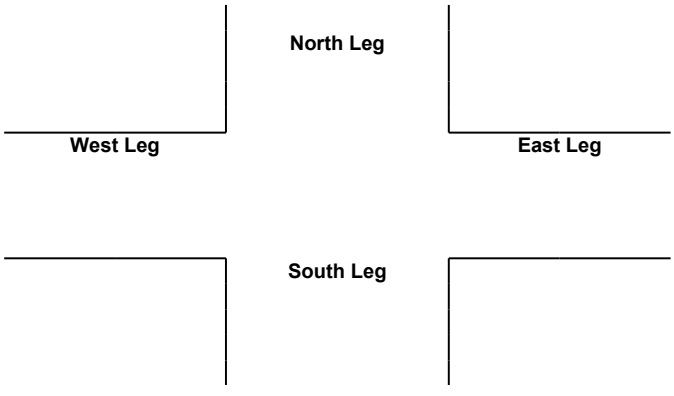
City: Barstow
Project #: 23-1210-015

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	1	1	1	3
7:15 AM	0	0	1	0
7:30 AM	0	0	0	2
7:45 AM	2	0	2	0
8:00 AM	1	0	0	0
8:15 AM	1	0	1	0
8:30 AM	1	0	1	0
8:45 AM	1	0	4	0
TOTAL	**7**	**1**	**10**	**5**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

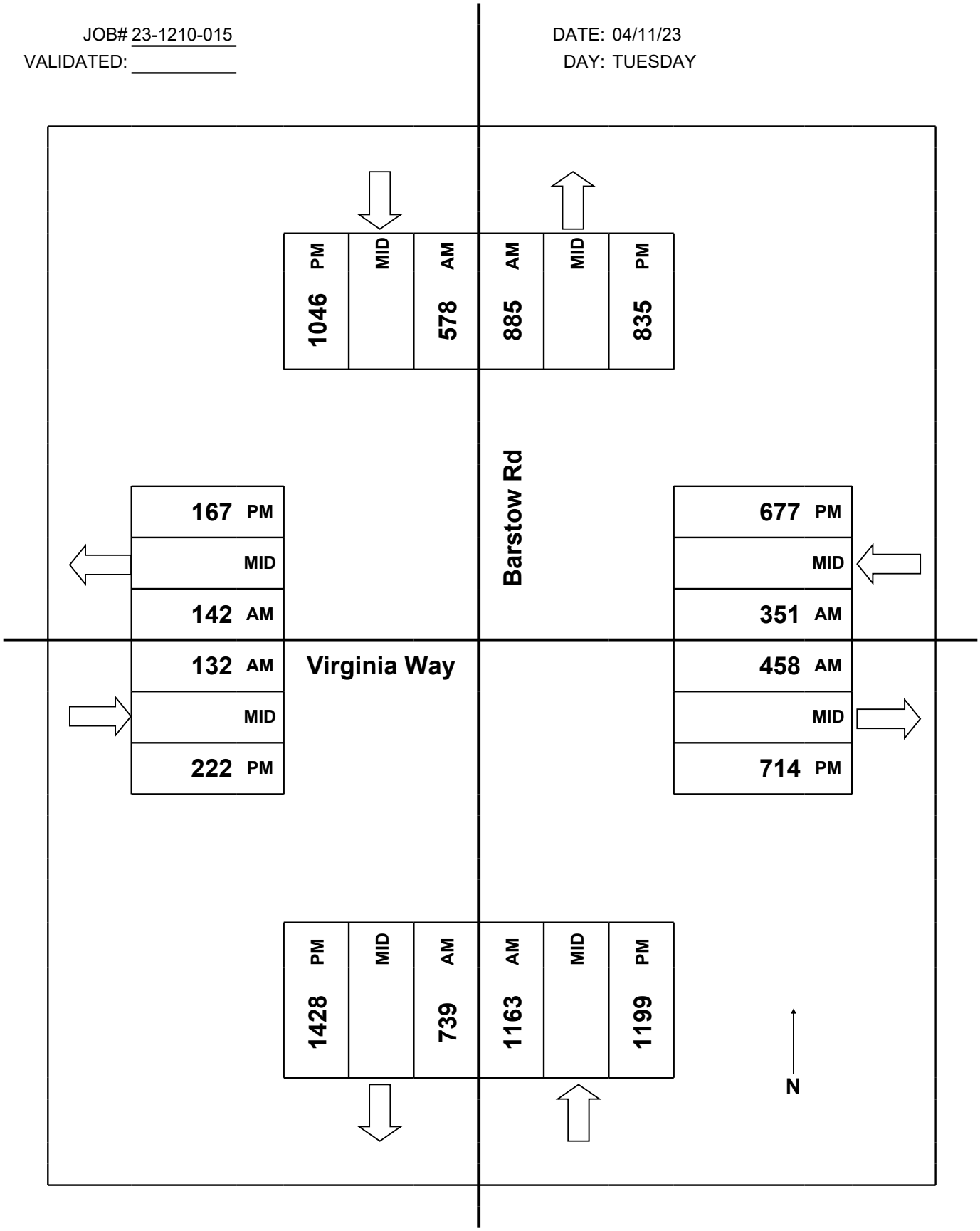
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	3	0	1	1
4:30 PM	0	0	0	0
4:45 PM	0	0	1	0
5:00 PM	2	0	2	0
5:15 PM	3	0	0	0
5:30 PM	3	0	2	0
5:45 PM	2	0	2	0
TOTAL	**13**	**0**	**8**	**1**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**



JOB# 23-1210-015
VALIDATED: _____

DATE: 04/11/23
DAY: TUESDAY

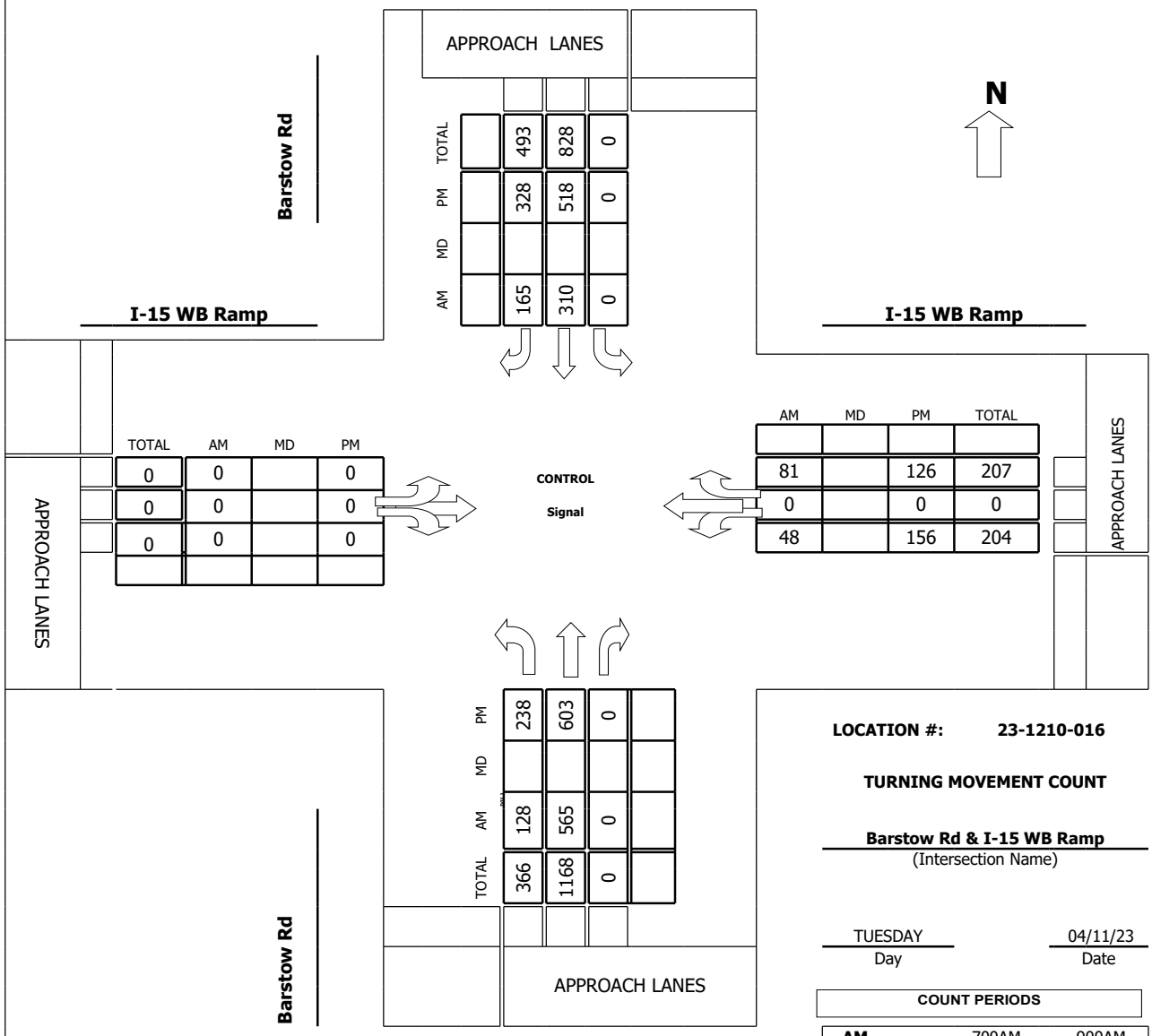


Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.315.6745

Project #: 23-1210-016

TMC SUMMARY OF Barstow Rd & I-15 WB Ramp



LOCATION #: 23-1210-016

TURNING MOVEMENT COUNT

Barstow Rd & I-15 WB Ramp
(Intersection Name)

TUESDAY (Day) 04/11/23 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd DATE: 04/11/23 LOCATION: Barstow

E-W STREET: I-15 WB Ramp DAY: TUESDAY PROJECT# 23-1210-016

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	2	1	0	0	0	0.5	0.5	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	35	193	0	0	120	46	0	0	0	14	0	21	429
7:15 AM	41	136	0	0	76	36	0	0	0	9	0	15	313
7:30 AM	31	123	0	0	36	31	0	0	0	8	0	13	242
7:45 AM	33	152	0	0	39	37	0	0	0	4	0	25	290
8:00 AM	33	132	0	0	59	36	0	0	0	7	0	23	290
8:15 AM	27	127	0	0	56	39	0	0	0	16	0	16	281
8:30 AM	42	157	0	0	77	47	0	0	0	16	0	14	353
8:45 AM	26	149	0	0	118	43	0	0	0	9	0	28	373
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	268	1169	0	0	581	315	0	0	0	83	0	155	2571
Approach %	18.65	81.35	0.00	0.00	64.84	35.16	####	####	####	34.87	0.00	65.13	
App/Depart	1437	/	1324	896	/	664	0	/	0	238	/	583	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	128	565	0	0	310	165	0	0	0	48	0	81	1297
Approach %	18.47	81.53	0.00	0.00	65.26	34.74	####	####	####	37.21	0.00	62.79	
PEAK HR. FACTOR:		0.871			0.738			0.000			0.872		0.869

CONTROL: Signal
COMMENT 1:
GPS: 34.886681, -117.022927

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd
0
E-W STREET: I-15 WB Ramp

DATE: 04/11/23
DAY: TUESDAY

LOCATION: Barstow
PROJECT# 23-1210-016

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	2	1	0	0	0	0.5	0.5	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	54	164	0	0	112	70	0	0	0	51	0	34	485
4:15 PM	61	153	0	0	184	71	0	0	0	41	0	26	536
4:30 PM	64	144	0	0	126	111	0	0	0	36	0	38	519
4:45 PM	59	142	0	0	96	76	0	0	0	28	0	28	429
5:00 PM	74	120	0	0	115	93	0	0	0	31	0	25	458
5:15 PM	71	136	0	0	106	74	0	0	0	17	1	24	429
5:30 PM	37	121	0	0	128	59	0	0	0	18	0	33	396
5:45 PM	35	146	0	0	101	68	0	0	0	23	1	25	399
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	455	1126	0	0	968	622	0	0	0	245	2	233	3651
Approach %	28.78	71.22	0.00	0.00	60.88	39.12	####	####	####	51.04	0.42	48.54	
App/Depart	1581	/	1359	1590	/	1213	0	/	0	480	/	1079	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	238	603	0	0	518	328	0	0	0	156	0	126	1969
Approach %	28.30	71.70	0.00	0.00	61.23	38.77	####	####	####	55.32	0.00	44.68	
PEAK HR. FACTOR:		0.964			0.829			0.000			0.829		0.918

CONTROL: Signal
COMMENT 1: 0
GPS: 34.886681, -117.022927

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

Pedestrian & Bicycle Study

N-S STREET: Barstow Rd
E-W STREET: I-15 WB Ramp

Date: 04/11/23
Day: TUESDAY

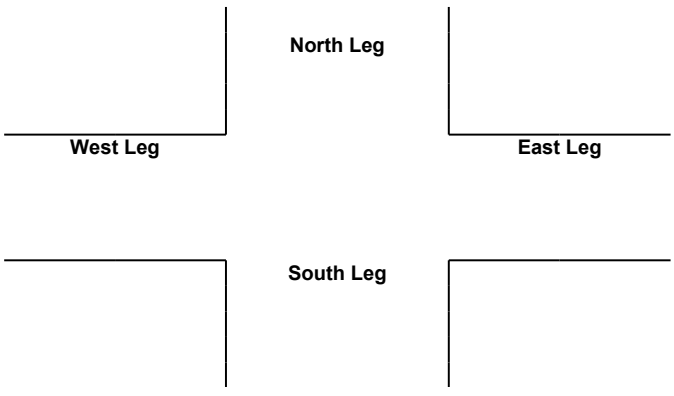
City: Barstow
Project #: 23-1210-016

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	1	0
7:30 AM	0	0	1	1
7:45 AM	0	0	2	0
8:00 AM	0	0	1	0
8:15 AM	0	0	1	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**6**	**1**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

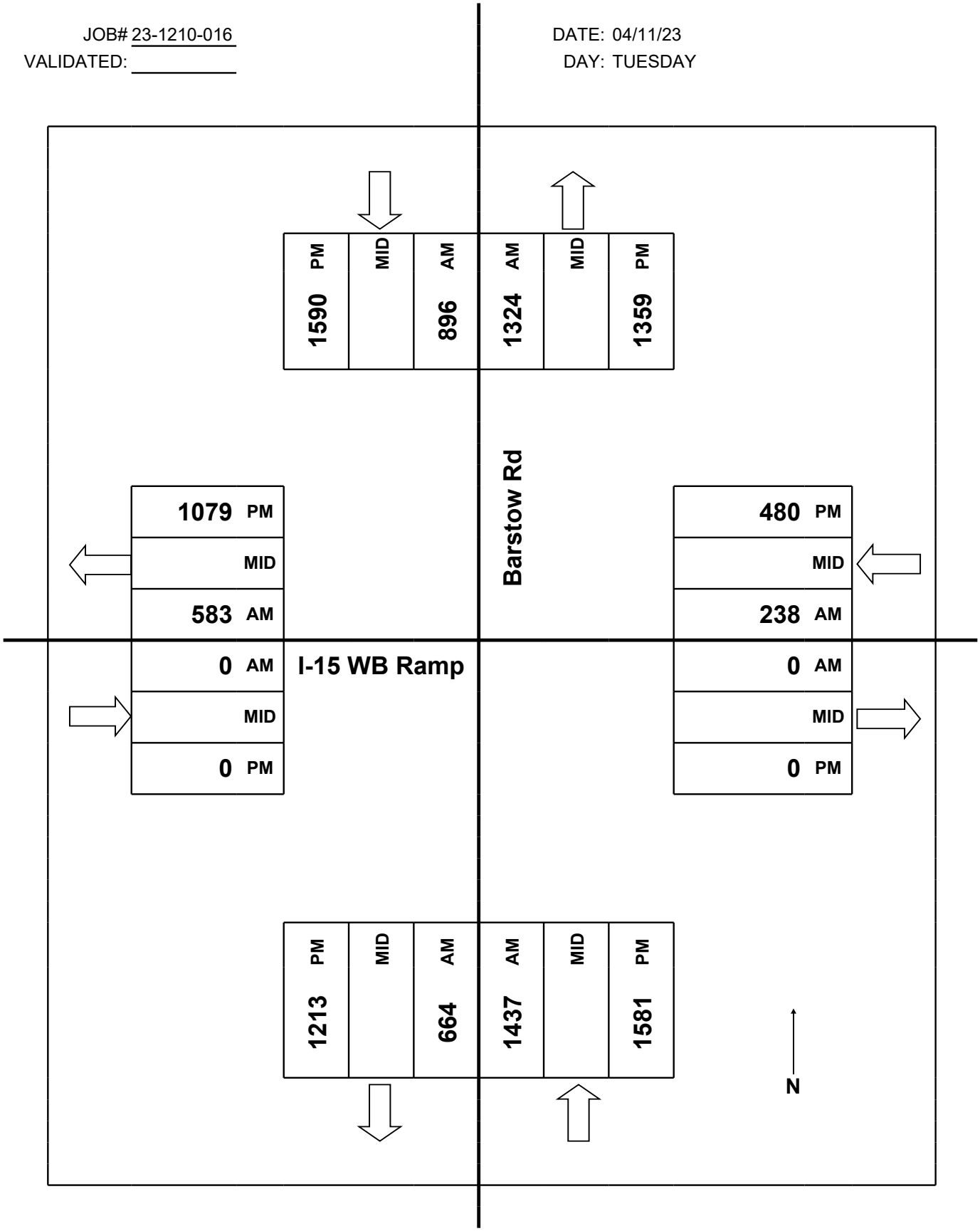
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	3	0
4:15 PM	0	0	2	2
4:30 PM	0	0	1	0
4:45 PM	0	0	2	0
5:00 PM	0	0	7	0
5:15 PM	0	0	2	0
5:30 PM	0	0	3	0
5:45 PM	0	0	4	0
TOTAL	**0**	**0**	**24**	**2**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**



JOB# 23-1210-016
VALIDATED: _____

DATE: 04/11/23
DAY: TUESDAY

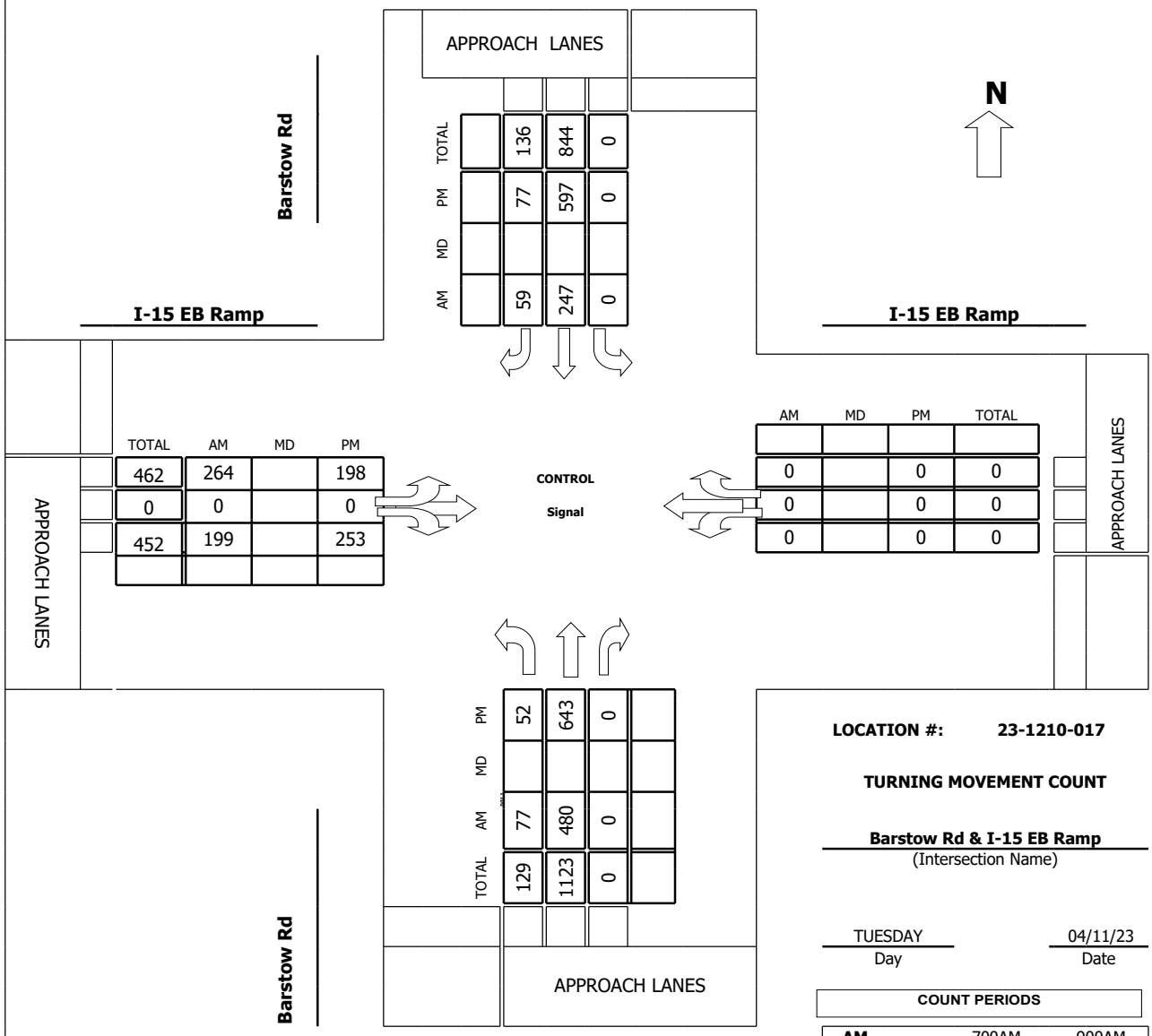


Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.315.6745

Project #: 23-1210-017

TMC SUMMARY OF Barstow Rd & I-15 EB Ramp



LOCATION #: 23-1210-017

TURNING MOVEMENT COUNT

Barstow Rd & I-15 EB Ramp
(Intersection Name)

TUESDAY (Day) 04/11/23 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd DATE: 04/11/23 LOCATION: Barstow

E-W STREET: I-15 EB Ramp DAY: TUESDAY PROJECT# 23-1210-017

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	2	0	1	0	1	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	20	170	0	0	117	17	58	0	57	0	0	0	439
7:15 AM	26	113	0	0	68	17	64	0	37	0	0	0	325
7:30 AM	20	81	0	0	28	16	73	0	51	0	0	0	269
7:45 AM	11	116	0	0	34	9	69	0	54	0	0	0	293
8:00 AM	7	93	0	0	59	7	72	0	37	0	0	0	275
8:15 AM	20	102	0	0	61	11	52	0	40	0	0	0	286
8:30 AM	17	139	0	0	73	20	60	0	50	0	0	0	359
8:45 AM	14	125	0	0	104	23	50	0	48	0	0	0	364
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	135	939	0	0	544	120	498	0	374	0	0	0	2610
Approach %	12.57	87.43	0.00	0.00	81.93	18.07	57.11	0.00	42.89	####	####	####	
App/Depart	1074	/	1437	664	/	918	872	/	0	0	/	255	

AM Peak Hr Begins at: 700 AM

PEAK													
Volumes	77	480	0	0	247	59	264	0	199	0	0	0	1326
Approach %	13.82	86.18	0.00	0.00	80.72	19.28	57.02	0.00	42.98	####	####	####	
PEAK HR. FACTOR:		0.733			0.571			0.933			0.000		0.755

CONTROL: Signal
COMMENT 1:
GPS: 34.884939, -117.022929

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd
0
E-W STREET: I-15 EB Ramp

DATE: 04/11/23
DAY: TUESDAY

LOCATION: Barstow
PROJECT# 23-1210-017

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	2	0	1	0	1	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	12	165	0	0	149	14	53	0	64	0	0	0	457
4:15 PM	17	164	0	0	195	30	50	0	67	0	0	0	523
4:30 PM	11	165	0	0	144	18	43	0	57	0	0	0	438
4:45 PM	12	149	0	0	109	15	52	0	65	0	0	0	402
5:00 PM	13	146	0	0	132	14	48	0	61	0	0	0	414
5:15 PM	15	162	0	0	107	16	45	0	47	0	0	0	392
5:30 PM	11	119	0	0	129	17	39	0	62	0	0	0	377
5:45 PM	6	127	0	0	112	12	54	0	62	0	0	0	373
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	97	1197	0	0	1077	136	384	0	485	0	0	0	3376
Approach %	7.50	92.50	0.00	0.00	88.79	11.21	44.19	0.00	55.81	####	####	####	
App/Depart	1294	/	1581	1213	/	1562	869	/	0	0	/	233	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	52	643	0	0	597	77	198	0	253	0	0	0	1820
Approach %	7.48	92.52	0.00	0.00	88.58	11.42	43.90	0.00	56.10	####	####	####	
PEAK HR. FACTOR:		0.960			0.749			0.964			0.000		0.870

CONTROL: Signal
COMMENT 1: 0
GPS: 34.884939, -117.022929

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

Pedestrian & Bicycle Study

N-S STREET: Barstow Rd
E-W STREET: I-15 EB Ramp

Date: 04/11/23
Day: TUESDAY

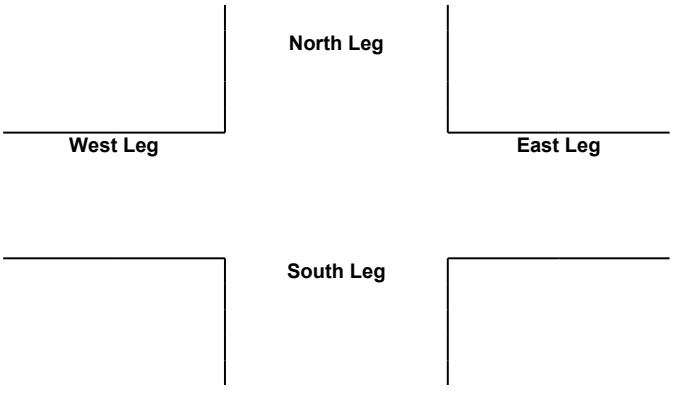
City: Barstow
Project #: 23-1210-017

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	1
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**1**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

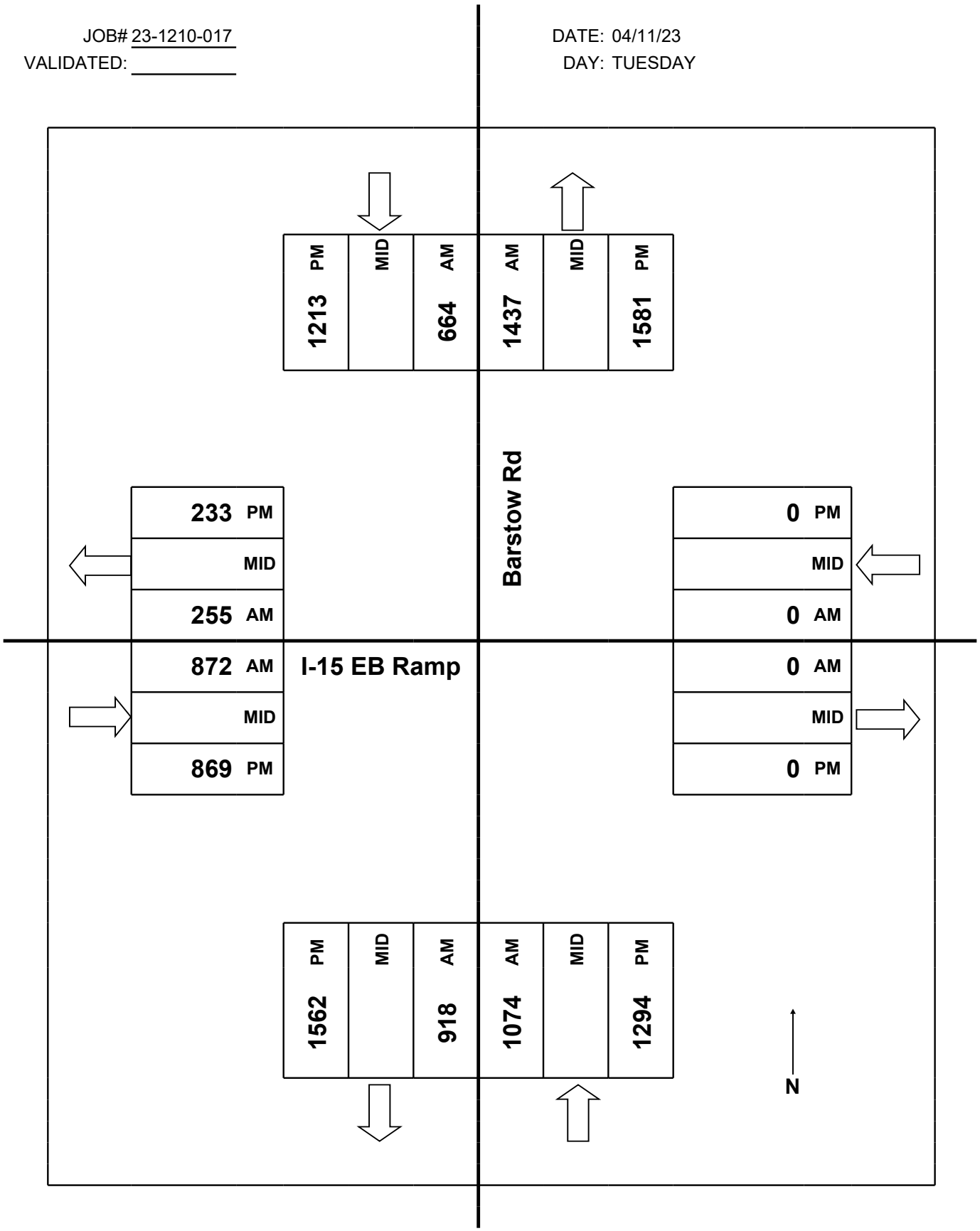
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	2
4:30 PM	0	0	0	0
4:45 PM	0	1	0	0
5:00 PM	0	1	0	0
5:15 PM	0	1	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**3**	**0**	**2**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**



JOB# 23-1210-017
VALIDATED: _____

DATE: 04/11/23
DAY: TUESDAY

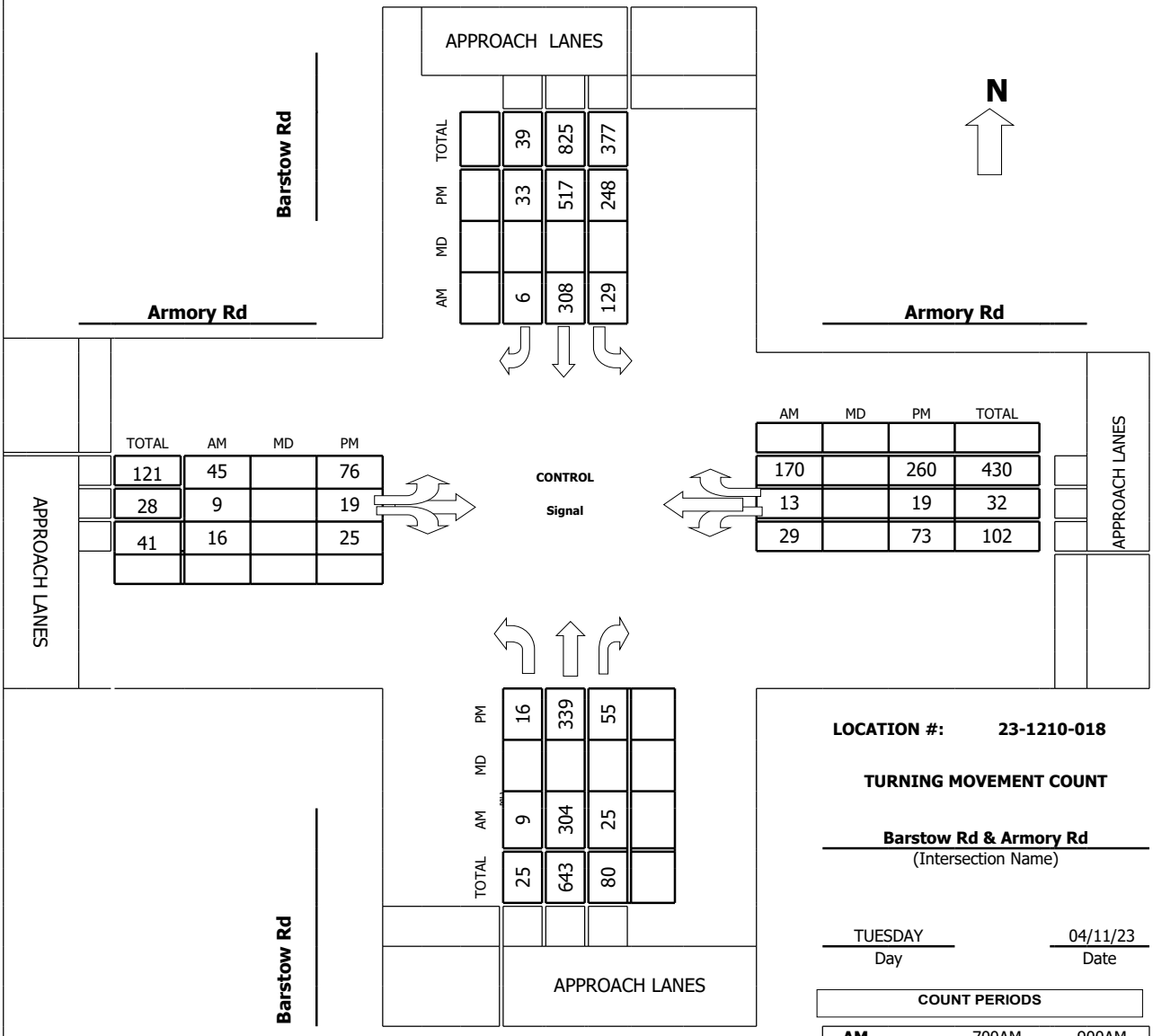


Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.315.6745

Project #: 23-1210-018

TMC SUMMARY OF Barstow Rd & Armory Rd



LOCATION #: 23-1210-018

TURNING MOVEMENT COUNT

Barstow Rd & Armory Rd
(Intersection Name)

TUESDAY (Day) 04/11/23 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Armory Rd DAY: TUESDAY PROJECT# 23-1210-018

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	1	0	1	1.5	0.5	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3	89	6	90	59	3	13	5	1	7	5	89	370
7:15 AM	0	66	2	36	73	3	11	6	3	3	5	48	256
7:30 AM	2	60	3	23	45	1	4	2	1	4	1	35	181
7:45 AM	0	79	5	23	60	0	13	4	3	5	1	40	233
8:00 AM	3	50	6	26	58	1	7	2	3	3	2	38	199
8:15 AM	3	80	8	13	81	2	15	3	9	7	5	31	257
8:30 AM	2	88	6	44	73	0	13	4	3	9	4	53	299
8:45 AM	1	86	5	46	96	3	10	0	1	10	2	48	308
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	14	598	41	301	545	13	86	26	24	48	25	382	2103
Approach %	2.14	91.58	6.28	35.04	63.45	1.51	63.24	19.12	17.65	10.55	5.49	83.96	
App/Depart	653	/	1066	859	/	617	136	/	368	455	/	52	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	9	304	25	129	308	6	45	9	16	29	13	170	1063
Approach %	2.66	89.94	7.40	29.12	69.53	1.35	64.29	12.86	22.86	13.68	6.13	80.19	
PEAK HR. FACTOR:		0.880			0.764			0.648			0.803		0.863

CONTROL: Signal
COMMENT 1:
GPS: 34.884108, -117.022931

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd 0 DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Armory Rd DAY: TUESDAY PROJECT# 23-1210-018

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	1	0	1	1.5	0.5	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	6	81	10	69	119	11	15	6	7	14	4	73	415
4:15 PM	3	95	19	70	161	13	26	3	6	17	7	58	478
4:30 PM	1	85	15	56	124	5	16	7	11	27	5	65	417
4:45 PM	6	78	11	53	113	4	19	3	1	15	3	64	370
5:00 PM	4	90	13	60	109	6	12	5	8	14	11	51	383
5:15 PM	1	89	5	34	101	5	21	2	3	12	7	64	344
5:30 PM	4	62	12	56	126	6	18	6	2	20	6	47	365
5:45 PM	1	76	8	50	110	4	8	6	4	18	8	46	339
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	26	656	93	448	963	54	135	38	42	137	51	468	3111
Approach %	3.35	84.65	12.00	30.58	65.73	3.69	62.79	17.67	19.53	20.88	7.77	71.34	
App/Depart	775	/	1259	1465	/	1142	215	/	579	656	/	131	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	16	339	55	248	517	33	76	19	25	73	19	260	1680
Approach %	3.90	82.68	13.41	31.08	64.79	4.14	63.33	15.83	20.83	20.74	5.40	73.86	
PEAK HR. FACTOR:		0.876			0.818			0.857			0.907		0.879

CONTROL: Signal
COMMENT 1: 0
GPS: 34.884108, -117.022931

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

Pedestrian & Bicycle Study

N-S STREET: Barstow Rd
E-W STREET: Armory Rd

Date: 04/11/23
Day: TUESDAY

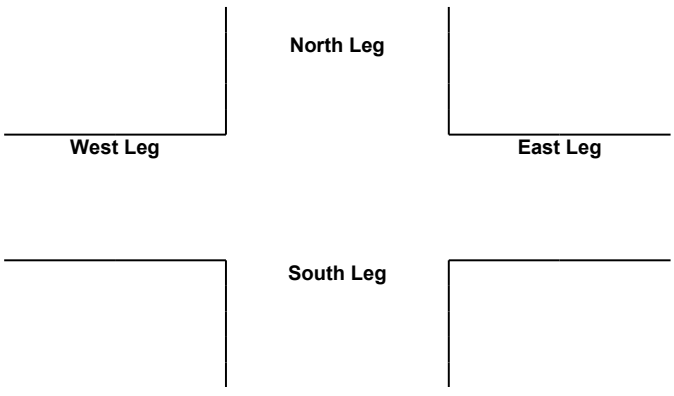
City: Barstow
Project #: 23-1210-018

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	1
7:15 AM	1	0	1	0
7:30 AM	0	0	0	0
7:45 AM	0	0	2	0
8:00 AM	0	0	0	0
8:15 AM	0	0	1	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**1**	**0**	**4**	**1**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

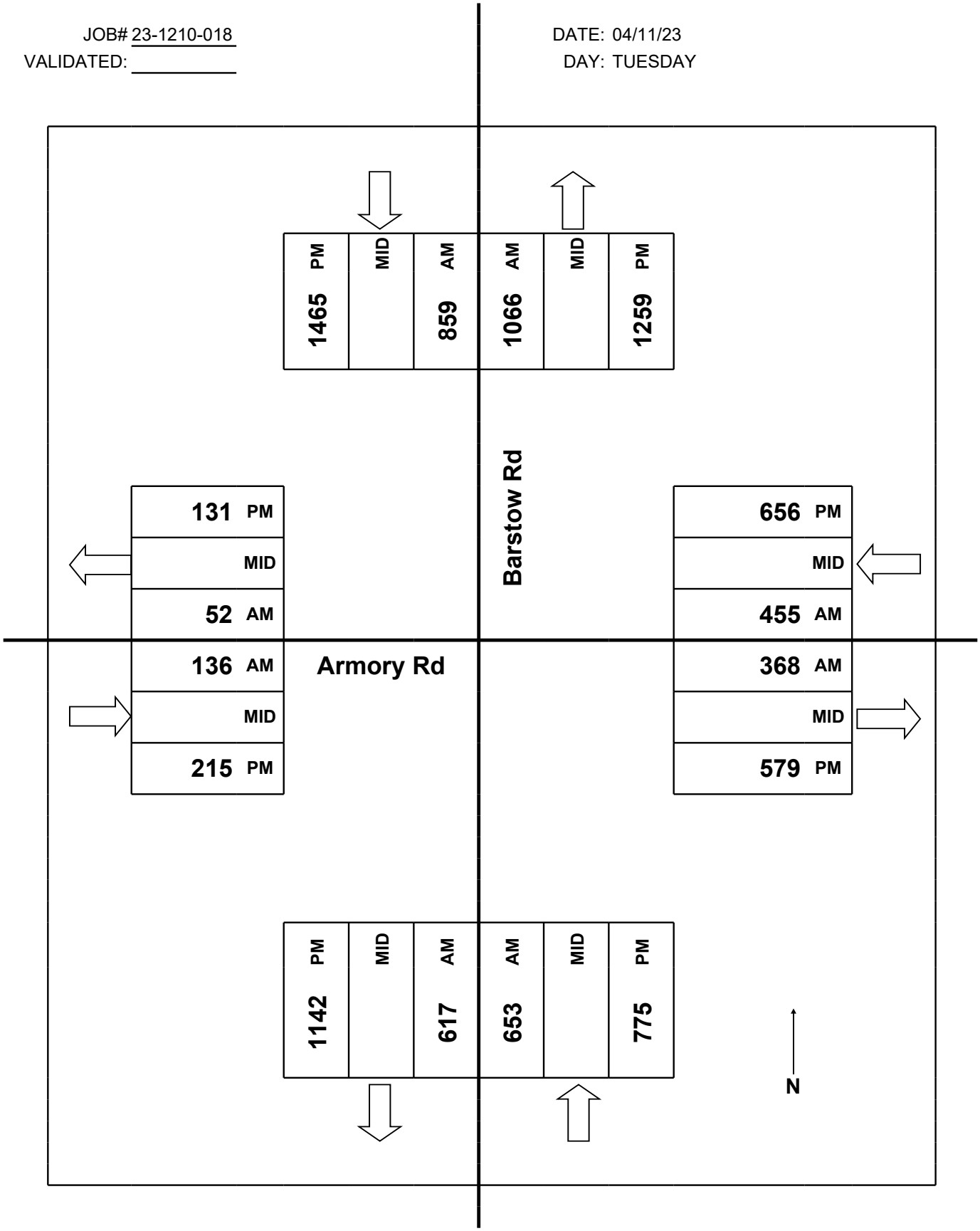
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	5	0
4:15 PM	0	0	0	0
4:30 PM	0	1	2	3
4:45 PM	0	0	2	2
5:00 PM	0	0	4	0
5:15 PM	0	0	0	0
5:30 PM	0	0	1	0
5:45 PM	0	1	2	0
TOTAL	**0**	**2**	**16**	**5**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**



JOB# 23-1210-018
VALIDATED: _____

DATE: 04/11/23
DAY: TUESDAY

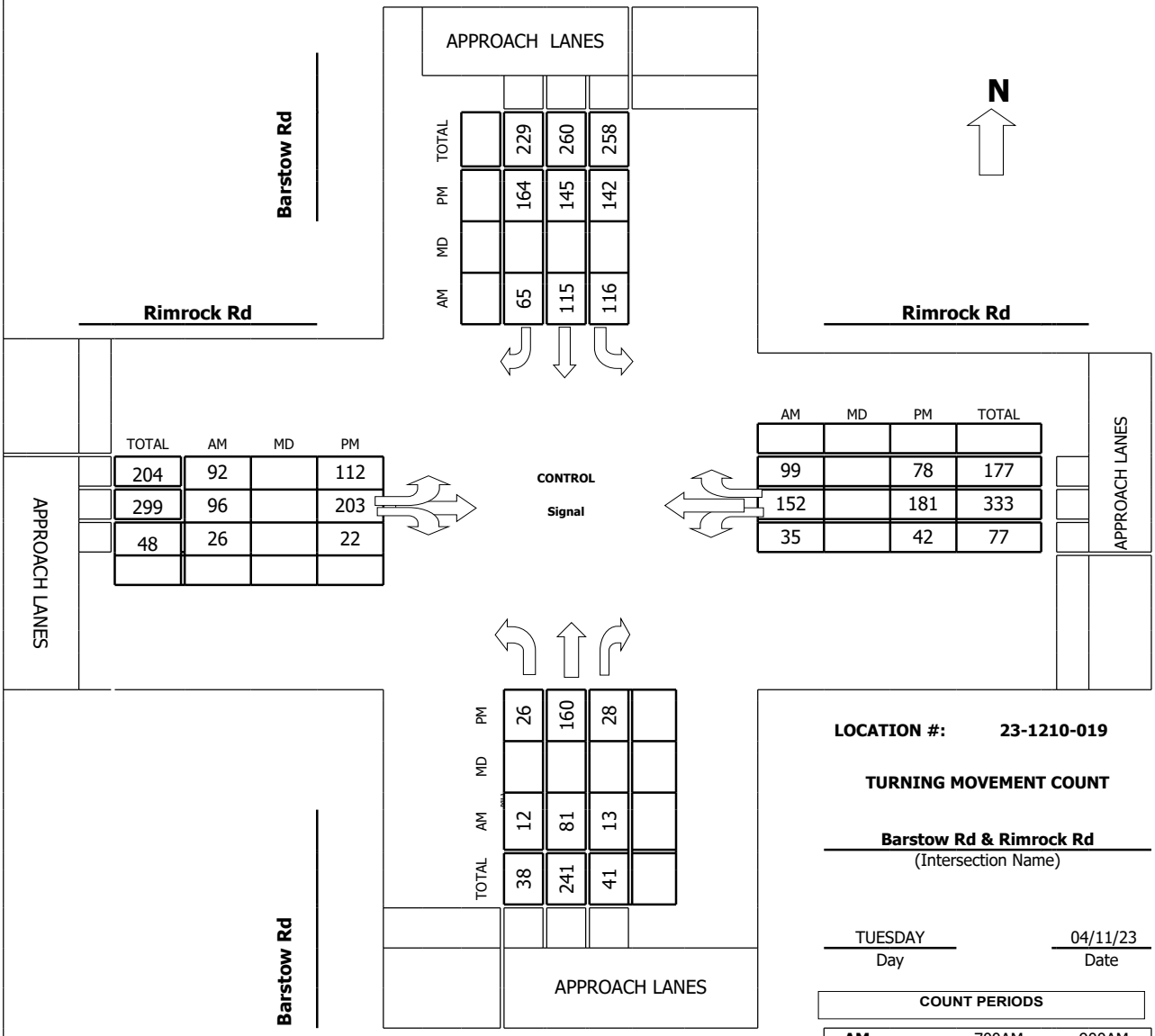


Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.315.6745

Project #: 23-1210-019

TMC SUMMARY OF Barstow Rd & Rimrock Rd



LOCATION #: 23-1210-019

TURNING MOVEMENT COUNT

Barstow Rd & Rimrock Rd
(Intersection Name)

TUESDAY — Day
04/11/23 — Date

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd DATE: 04/11/23 LOCATION: Barstow

E-W STREET: Rimrock Rd DAY: TUESDAY PROJECT# 23-1210-019

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3	12	1	24	26	7	24	35	1	6	15	36	190
7:15 AM	1	14	4	27	25	16	15	18	5	6	15	16	162
7:30 AM	2	23	2	15	14	9	17	24	0	7	20	12	145
7:45 AM	2	17	1	14	42	6	21	28	2	6	23	18	180
8:00 AM	2	18	1	15	21	11	8	19	2	9	20	21	147
8:15 AM	4	22	1	35	29	12	28	22	4	7	28	28	220
8:30 AM	2	22	5	42	28	12	26	26	9	10	48	27	257
8:45 AM	4	19	6	24	37	30	30	29	11	9	56	23	278
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	20	147	21	196	222	103	169	201	34	60	225	181	1579
Approach %	10.64	78.19	11.17	37.62	42.61	19.77	41.83	49.75	8.42	12.88	48.28	38.84	
App/Depart	188	/	497	521	/	316	404	/	418	466	/	348	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	12	81	13	116	115	65	92	96	26	35	152	99	902
Approach %	11.32	76.42	12.26	39.19	38.85	21.96	42.99	44.86	12.15	12.24	53.15	34.62	
PEAK HR. FACTOR:		0.914			0.813			0.764			0.813		0.811

CONTROL: Signal
COMMENT 1:
GPS: 34.876868, -117.022928

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

N-S STREET: Barstow Rd
0
E-W STREET: Rimrock Rd

DATE: 04/11/23
DAY: TUESDAY

LOCATION: Barstow
PROJECT# 23-1210-019

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	4	50	5	33	28	29	25	47	5	12	40	22	300
4:15 PM	7	41	6	53	46	43	28	49	2	10	49	22	356
4:30 PM	6	32	5	32	36	50	37	48	8	8	44	17	323
4:45 PM	9	37	12	24	35	42	22	59	7	12	48	17	324
5:00 PM	4	51	10	34	33	27	21	47	7	9	33	13	289
5:15 PM	10	34	20	34	28	28	23	50	3	8	52	19	309
5:30 PM	6	30	8	33	37	42	20	49	3	8	39	17	292
5:45 PM	4	30	7	31	34	34	25	45	3	11	41	29	294
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	50	305	73	274	277	295	201	394	38	78	346	156	2487
Approach %	11.68	71.26	17.06	32.39	32.74	34.87	31.75	62.24	6.00	13.45	59.66	26.90	
App/Depart	428	/	662	846	/	393	633	/	741	580	/	691	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	26	160	28	142	145	164	112	203	22	42	181	78	1303
Approach %	12.15	74.77	13.08	31.49	32.15	36.36	33.23	60.24	6.53	13.95	60.13	25.91	
PEAK HR. FACTOR:		0.907			0.794			0.906			0.929		0.915

CONTROL: Signal
COMMENT 1: 0
GPS: 34.876868, -117.022928

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup
Traffic Studies Done Right

Pedestrian & Bicycle Study

N-S STREET: Barstow Rd
E-W STREET: Rimrock Rd

Date: 04/11/23
Day: TUESDAY

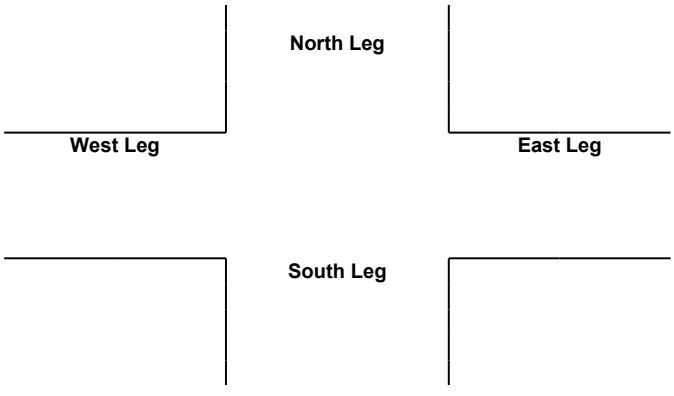
City: Barstow
Project #: 23-1210-019

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	2	0	2	0
8:30 AM	0	0	0	0
8:45 AM	5	0	3	3
TOTAL	**7**	**0**	**5**	**3**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

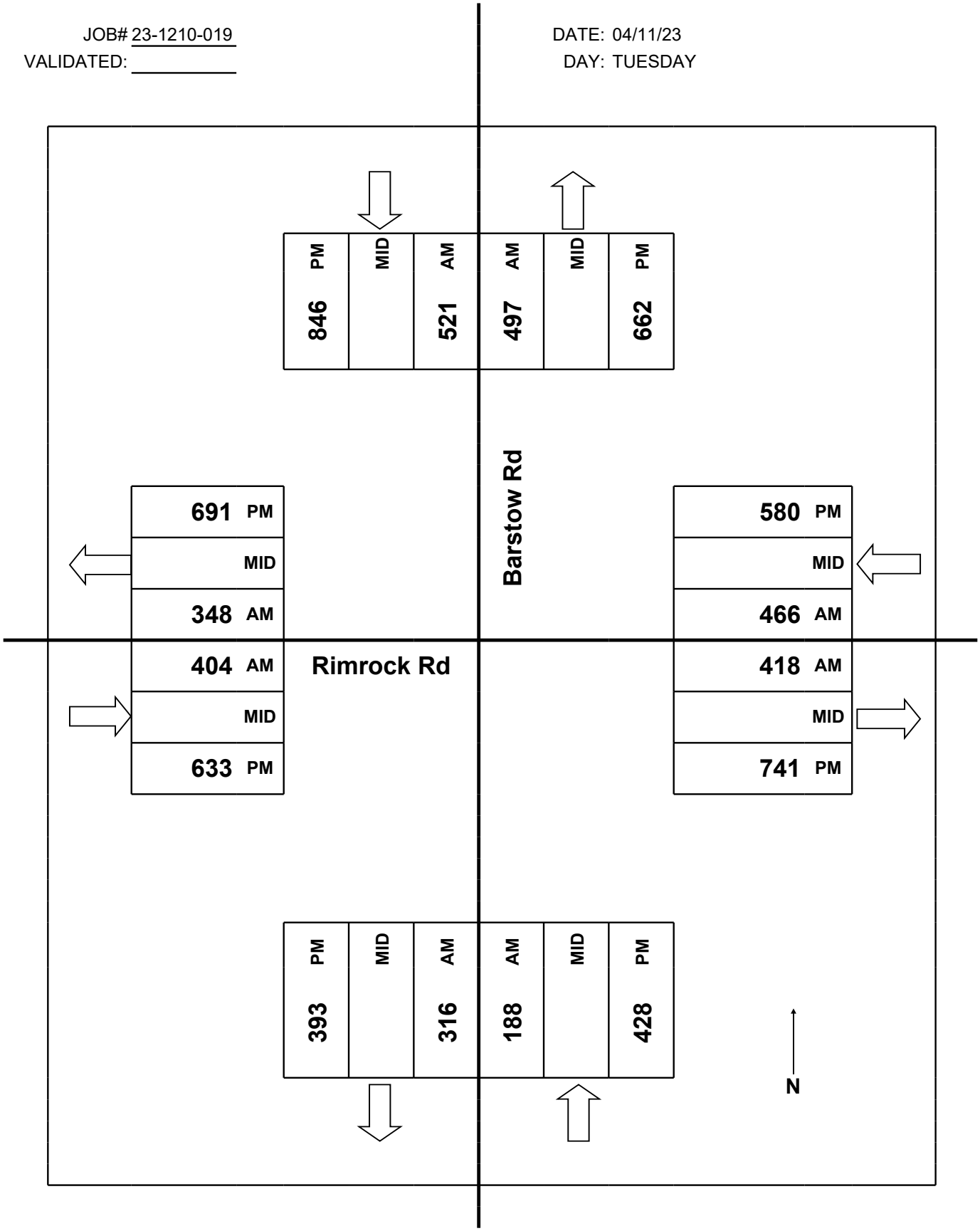
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	2	1
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	7	0	6	0
5:30 PM	8	0	2	0
5:45 PM	1	0	0	0
TOTAL	**16**	**0**	**10**	**1**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**



JOB# 23-1210-019
VALIDATED: _____

DATE: 04/11/23
DAY: TUESDAY



Prepared by National Data & Surveying Services

CLASSIFICATION

Lenwood Rd Bet. Barstow-Bakersfield Hwy & Community Blvd

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_001n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	3	2	0	0	0	0	1	0	0	0	0	0	6
02:00	0	0	2	0	1	0	0	0	1	0	0	0	0	4
03:00	0	6	4	0	2	0	0	4	0	0	0	0	0	16
04:00	0	5	4	0	0	0	0	0	3	0	0	0	0	12
05:00	0	9	5	0	2	0	0	0	0	0	0	0	0	16
06:00	0	16	9	0	4	0	0	3	0	0	0	0	0	32
07:00	0	21	4	0	4	0	0	2	1	0	0	0	0	32
08:00	0	14	14	0	2	0	0	3	0	0	0	0	0	33
09:00	0	12	8	1	4	0	0	0	2	0	0	0	0	27
10:00	0	24	16	0	2	0	0	1	1	0	0	0	0	44
11:00	1	25	17	1	5	0	0	4	1	0	0	0	0	54
12:00 PM	0	17	7	0	1	0	0	1	1	0	0	0	0	27
13:00	0	22	12	0	3	0	0	0	1	0	0	0	0	38
14:00	1	19	13	1	7	0	0	1	1	0	0	0	0	43
15:00	0	38	14	0	9	0	0	1	0	0	0	0	0	62
16:00	0	42	19	0	3	0	0	2	1	0	0	0	0	67
17:00	0	29	10	1	6	0	0	2	1	0	0	0	0	49
18:00	0	17	8	0	2	0	0	0	0	0	0	0	0	27
19:00	0	14	1	0	1	1	0	0	0	0	0	0	0	17
20:00	1	11	3	1	5	0	0	1	4	0	0	0	0	26
21:00	0	12	4	0	4	0	0	1	0	0	0	0	0	21
22:00	0	8	4	0	0	0	0	2	1	0	0	0	0	15
23:00	0	6	0	0	0	0	0	0	1	0	0	0	0	7
Totals	3	372	180	5	67	1		29	20					677
% of Totals	0%	55%	27%	1%	10%	0%		4%	3%					100%

AM Volumes	1	137	85	2	26	0	0	18	9	0	0	0	0	278
% AM	0%	20%	13%	0%	4%			3%	1%					41%
AM Peak Hour	11:00	11:00	11:00	09:00	11:00			03:00	04:00					11:00
Volume	1	25	17	1	5			4	3					54
PM Volumes	2	235	95	3	41	1	0	11	11	0	0	0	0	399
% PM	0%	35%	14%	0%	6%	0%		2%	2%					59%
PM Peak Hour	14:00	16:00	16:00	14:00	15:00	19:00		16:00	20:00					16:00
Volume	1	42	19	1	9	1		2	4					67

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	65		10%	65		10%	116		17%	431		64%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Lenwood Rd Bet. Barstow-Bakersfield Hwy & Community Blvd

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_001s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	4	1	0	0	0	0	3	0	0	0	0	0	8
01:00	0	3	1	0	0	0	0	2	1	0	0	0	0	7
02:00	0	1	1	0	1	0	0	0	0	0	0	0	0	3
03:00	0	4	0	0	0	0	0	1	0	0	0	0	0	5
04:00	0	7	5	0	3	0	0	0	0	0	0	0	0	15
05:00	0	17	14	0	2	0	0	1	0	0	0	0	0	34
06:00	0	20	8	0	0	0	0	0	2	0	0	0	0	30
07:00	0	15	3	1	3	1	0	0	1	0	0	0	0	24
08:00	1	10	13	0	3	0	0	2	2	0	0	0	0	31
09:00	0	11	11	1	3	0	0	2	2	0	0	0	0	30
10:00	0	20	8	0	4	0	0	1	2	0	0	0	0	35
11:00	0	13	11	0	6	0	0	3	4	0	0	0	0	37
12:00 PM	0	14	10	1	3	1	1	0	1	0	0	0	0	31
13:00	0	12	12	0	4	0	0	1	2	0	0	0	0	31
14:00	2	13	8	1	2	0	0	2	0	0	0	0	0	28
15:00	0	28	10	1	5	1	0	2	6	0	0	0	0	53
16:00	0	26	5	0	6	0	0	4	4	0	0	0	0	45
17:00	0	22	9	0	2	0	0	3	8	0	0	0	0	44
18:00	0	15	6	0	4	0	0	0	6	0	0	0	0	31
19:00	0	13	5	0	1	0	0	1	0	0	0	0	0	20
20:00	1	21	2	0	5	1	0	3	2	0	0	0	0	35
21:00	0	8	4	0	1	0	0	0	1	0	0	0	0	14
22:00	0	8	0	0	0	0	0	0	2	0	0	0	0	10
23:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
Totals	4	312	148	5	58	4	1	31	46					609
% of Totals	1%	51%	24%	1%	10%	1%	0%	5%	8%					100%

AM Volumes	1	125	76	2	25	1	0	15	14	0	0	0	0	259
% AM	0%	21%	12%	0%	4%	0%		2%	2%					43%
AM Peak Hour	08:00	06:00	05:00	07:00	11:00	07:00			11:00					11:00
Volume	1	20	14	1	6	1		3	4					37
PM Volumes	3	187	72	3	33	3	1	16	32	0	0	0	0	350
% PM	0%	31%	12%	0%	5%	0%	0%	3%	5%					57%
PM Peak Hour	14:00	15:00	13:00	12:00	16:00	12:00	12:00	16:00	17:00					15:00
Volume	2	28	12	1	6	1	1	4	8					53

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	55		9%	62		10%	89		15%	403		66%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Lenwood Rd Bet. Barstow-Bakersfield Hwy & Community Blvd

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_001n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	7	3	0	0	0	0	1	1	0	0	0	0	12
01:00	0	7	0	0	4	0	0	1	0	0	0	0	0	12
02:00	0	1	4	0	0	0	0	1	0	0	0	0	0	6
03:00	0	4	5	0	0	0	0	1	0	0	0	0	0	10
04:00	0	8	4	0	5	0	0	1	0	0	0	0	0	18
05:00	0	13	5	2	2	0	0	2	0	0	0	0	0	24
06:00	0	13	9	0	2	0	0	2	1	0	0	0	0	27
07:00	0	14	3	0	5	0	0	1	0	0	0	0	0	23
08:00	0	13	7	1	5	0	0	5	0	0	0	0	0	31
09:00	0	14	7	1	5	0	0	2	0	0	0	0	0	29
10:00	0	18	3	0	2	0	0	2	0	0	0	0	0	25
11:00	0	13	7	0	3	0	0	2	0	0	0	0	0	25
12:00 PM	0	26	6	0	7	0	0	3	0	0	0	0	0	42
13:00	0	20	6	0	5	0	0	5	0	0	0	0	0	36
14:00	0	21	19	0	5	0	0	5	0	0	0	0	0	50
15:00	0	21	3	0	4	0	0	4	0	0	0	0	0	32
16:00	0	29	1	0	2	0	0	3	0	0	0	0	0	35
17:00	0	32	15	0	2	0	0	2	0	0	0	0	0	51
18:00	0	22	3	0	3	0	0	3	0	0	0	0	0	31
19:00	0	23	4	0	4	0	0	1	0	0	0	0	0	32
20:00	0	28	3	0	4	0	0	4	0	0	0	0	0	39
21:00	0	13	3	0	0	0	0	0	0	0	0	0	0	16
22:00	0	18	6	0	1	0	0	2	0	0	0	0	0	27
23:00	0	4	2	0	2	0	0	0	0	0	0	0	0	8
Totals		382	128	4	72			53	2					641
% of Totals		60%	20%	1%	11%			8%	0%					100%

AM Volumes	0	125	57	4	33	0	0	21	2	0	0	0	0	242
% AM		20%	9%	1%	5%			3%	0%					38%
AM Peak Hour		10:00	06:00	05:00	04:00			08:00						08:00
Volume		18	9	2	5			5	1					31
PM Volumes	0	257	71	0	39	0	0	32	0	0	0	0	0	399
% PM		40%	11%		6%			5%						62%
PM Peak Hour		17:00	14:00		12:00			13:00						17:00
Volume		32	19		7			5						51

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	54		8%	78		12%	86		13%	423		66%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Lenwood Rd Bet. Barstow-Bakersfield Hwy & Community Blvd

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_001s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	6	0	0	0	0	0	0	2	0	0	0	0	8
01:00	0	6	2	1	2	0	0	1	0	0	0	0	0	12
02:00	0	2	1	0	0	0	0	1	0	0	0	0	0	4
03:00	0	5	0	0	3	0	0	3	0	0	0	0	0	11
04:00	0	5	2	0	1	0	0	3	1	0	0	0	0	12
05:00	0	4	14	0	0	0	0	0	0	0	0	0	0	18
06:00	0	15	8	0	2	0	0	3	0	0	0	0	0	28
07:00	1	10	3	1	4	0	0	3	0	0	0	0	0	22
08:00	0	13	3	0	3	0	0	3	1	0	0	0	0	23
09:00	1	10	7	2	3	0	0	2	1	0	0	0	0	26
10:00	0	12	10	0	2	0	0	1	2	0	0	0	0	27
11:00	1	21	14	0	6	0	0	2	3	0	0	0	0	47
12:00 PM	0	21	12	0	3	0	0	2	3	0	0	0	0	41
13:00	2	28	10	1	4	0	0	3	1	0	0	0	0	49
14:00	0	19	9	4	2	0	0	2	1	0	0	0	0	37
15:00	0	28	8	0	3	0	0	7	0	0	0	0	0	46
16:00	0	10	11	1	2	0	0	1	2	0	0	0	0	27
17:00	0	34	10	0	1	0	0	2	5	0	0	0	0	52
18:00	0	26	5	1	3	0	0	0	2	0	0	0	0	37
19:00	0	25	2	0	0	0	0	6	1	0	0	0	0	34
20:00	1	21	4	0	1	0	0	3	1	0	0	0	0	31
21:00	1	17	3	0	3	0	0	2	1	0	0	0	0	27
22:00	0	15	1	0	0	0	0	1	3	0	0	0	0	20
23:00	0	2	3	0	1	0	0	2	1	0	0	0	0	9
Totals	7	355	142	11	49			53	31					648
% of Totals	1%	55%	22%	2%	8%			8%	5%					100%

AM Volumes	3	109	64	4	26	0	0	22	10	0	0	0	0	238
% AM	0%	17%	10%	1%	4%			3%	2%					37%
AM Peak Hour	07:00	11:00	05:00	09:00	11:00			03:00	11:00					11:00
Volume	1	21	14	2	6			3	3					47
PM Volumes	4	246	78	7	23	0	0	31	21	0	0	0	0	410
% PM	1%	38%	12%	1%	4%			5%	3%					63%
PM Peak Hour	13:00	17:00	12:00	14:00	13:00			15:00	17:00					17:00
Volume	2	34	12	4	4			7	5					52

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	45		7%	90		14%	79		12%	434		67%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Lenwood Rd Bet. Lenwood Rd/Sun Valley Dr & Tortoise Rd

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_002e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	17	3	0	1	0	0	0	2	0	0	0	0	23
01:00	0	8	0	0	0	0	0	4	2	0	0	0	0	14
02:00	0	7	6	0	2	0	0	0	0	0	0	0	0	15
03:00	0	16	1	0	1	0	0	2	1	0	0	0	0	21
04:00	0	28	7	0	0	0	0	3	4	0	0	0	0	42
05:00	0	47	15	0	2	0	0	1	3	0	0	0	0	68
06:00	0	59	18	0	5	0	0	1	4	0	0	0	0	87
07:00	0	69	12	0	4	0	0	3	1	0	0	0	0	89
08:00	0	61	15	0	5	0	0	1	0	0	0	0	0	82
09:00	0	77	15	1	5	0	0	0	1	0	0	0	0	99
10:00	0	60	25	2	5	0	0	2	1	0	0	0	0	95
11:00	1	78	23	1	4	1	0	1	0	0	0	0	0	109
12:00 PM	0	82	18	0	4	0	0	2	0	0	0	0	0	106
13:00	1	84	14	0	7	1	0	0	1	0	0	0	0	108
14:00	3	78	22	3	5	0	0	1	0	0	0	0	0	112
15:00	0	80	20	3	4	0	0	2	1	0	0	0	0	110
16:00	1	77	18	2	7	1	0	2	1	0	0	0	0	109
17:00	0	86	16	0	4	0	0	4	0	0	0	0	0	110
18:00	0	51	11	0	4	0	0	2	1	0	0	0	0	69
19:00	1	62	10	0	1	1	0	1	0	0	0	0	0	76
20:00	0	46	14	0	0	0	0	0	0	0	0	0	0	60
21:00	0	43	5	0	1	1	0	0	0	0	0	0	0	50
22:00	0	26	2	1	1	0	0	2	4	0	0	0	0	36
23:00	1	21	1	1	1	0	0	0	1	0	0	0	0	26
Totals	**8**	**1263**	**291**	**14**	**73**	**5**		**34**	**28**					**1716**
% of Totals	0%	74%	17%	1%	4%	0%		2%	2%					100%

AM Volumes	1	527	140	4	34	1	0	18	19	0	0	0	0	744
% AM	0%	31%	8%	0%	2%	0%		1%	1%					43%
AM Peak Hour	11:00	11:00	10:00	10:00	06:00	11:00		01:00	04:00					11:00
Volume	1	78	25	2	5	1		4	4					109
PM Volumes	7	736	151	10	39	4	0	16	9	0	0	0	0	972
% PM	0%	43%	9%	1%	2%	0%		1%	1%					57%
PM Peak Hour	14:00	17:00	14:00	14:00	13:00	13:00		17:00	22:00					14:00
Volume	3	86	22	3	7	1		4	4					112

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	171		10%	214		12%	219		13%	1112		65%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Lenwood Rd Bet. Lenwood Rd/Sun Valley Dr & Tortoise Rd

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_002w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	1	35	5	0	1	0	0	0	0	0	0	0	0	42
01:00	0	18	1	0	0	0	0	0	3	0	0	0	0	22
02:00	0	19	4	0	2	0	0	0	0	0	1	0	0	26
03:00	0	21	3	0	0	0	0	1	2	0	1	0	0	28
04:00	0	15	5	0	2	0	0	0	3	0	1	0	0	26
05:00	0	38	21	0	5	0	0	0	1	0	0	0	0	65
06:00	0	30	15	0	5	1	0	0	2	0	0	0	0	53
07:00	0	59	13	2	5	0	0	0	2	0	1	0	0	82
08:00	2	46	22	0	7	0	0	1	4	0	0	0	0	82
09:00	0	60	17	0	2	1	0	0	3	0	0	0	0	83
10:00	0	50	17	1	5	1	0	1	4	0	0	0	0	79
11:00	2	66	15	0	4	2	0	0	3	1	1	0	0	94
12:00 PM	6	92	19	1	5	1	0	0	2	0	0	0	0	126
13:00	3	95	18	1	8	1	0	0	1	0	1	0	0	128
14:00	2	95	13	1	3	1	0	1	3	0	0	0	0	119
15:00	3	111	21	1	3	1	0	2	6	1	0	0	0	149
16:00	0	127	14	1	1	0	0	0	3	0	0	0	0	146
17:00	0	142	18	0	2	0	0	0	6	0	0	0	0	168
18:00	2	104	15	0	1	3	0	1	4	0	0	0	0	130
19:00	0	121	14	0	3	0	0	0	2	0	0	0	0	140
20:00	0	94	15	0	1	1	0	0	0	0	0	0	0	111
21:00	0	77	10	0	1	0	0	0	1	0	0	0	0	89
22:00	0	65	11	0	1	0	0	0	0	0	0	0	0	77
23:00	0	42	9	2	0	0	0	0	3	0	0	0	0	56
Totals	**21**	**1622**	**315**	**10**	**67**	**13**		**7**	**58**	**2**	**6**			**2121**
% of Totals	1%	76%	15%	0%	3%	1%		0%	3%	0%	0%			100%

AM Volumes	5	457	138	3	38	5	0	3	27	1	5	0	0	682
% AM	0%	22%	7%	0%	2%	0%		0%	1%	0%	0%			32%
AM Peak Hour	08:00	11:00	08:00	07:00	08:00	11:00		03:00	08:00	11:00	02:00			11:00
Volume	2	66	22	2	7	2		1	4	1	1			94
PM Volumes	16	1165	177	7	29	8	0	4	31	1	1	0	0	1439
% PM	1%	55%	8%	0%	1%	0%		0%	1%	0%	0%			68%
PM Peak Hour	12:00	17:00	15:00	23:00	13:00	18:00		15:00	15:00	15:00	13:00			17:00
Volume	6	142	21	2	8	3		2	6	1	1			168

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	164		8%	254		12%	314		15%	1389		65%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Lenwood Rd Bet. Lenwood Rd/Sun Valley Dr & Tortoise Rd

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_002e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	13	2	0	0	0	0	0	0	0	0	0	0	15
01:00	0	15	4	1	1	0	0	0	1	0	0	0	0	22
02:00	0	8	2	0	1	0	0	4	1	0	0	0	0	16
03:00	0	16	2	0	0	0	0	2	3	0	0	0	0	23
04:00	0	33	6	0	2	0	0	2	5	0	0	0	0	48
05:00	0	50	9	0	5	1	0	4	1	0	0	0	0	70
06:00	0	73	17	0	5	1	0	5	1	0	1	0	0	103
07:00	0	72	17	2	6	0	0	8	3	0	0	0	0	108
08:00	0	71	18	0	6	1	0	6	1	0	0	0	0	103
09:00	1	68	18	1	6	0	0	1	3	0	0	0	0	98
10:00	0	82	9	0	4	1	0	4	0	0	0	0	0	100
11:00	0	93	30	2	5	0	0	4	2	0	0	0	0	136
12:00 PM	0	90	22	1	5	3	0	3	0	0	0	0	0	124
13:00	2	93	20	2	5	0	0	0	3	0	0	0	0	125
14:00	5	98	14	2	4	0	0	4	3	0	0	0	0	130
15:00	3	81	23	4	9	0	0	2	3	0	0	0	0	125
16:00	2	94	29	1	11	1	0	2	3	0	0	0	0	143
17:00	0	78	20	1	4	0	0	3	3	0	0	0	0	109
18:00	0	73	14	2	7	1	0	2	1	0	1	0	0	101
19:00	0	64	7	0	5	0	0	3	2	0	0	0	0	81
20:00	1	69	18	2	1	1	0	4	2	0	0	0	0	98
21:00	0	55	10	0	1	0	0	3	3	0	0	0	0	72
22:00	0	38	10	0	0	2	0	3	5	0	0	0	0	58
23:00	0	27	1	0	1	1	0	2	3	0	0	0	0	35
Totals	14	1454	322	21	94	13		71	52		2			2043
% of Totals	1%	71%	16%	1%	5%	1%		3%	3%		0%			100%

AM Volumes	1	594	134	6	41	4	0	40	21	0	1	0	0	842
% AM	0%	29%	7%	0%	2%	0%		2%	1%		0%			41%
AM Peak Hour	09:00	11:00	11:00	07:00	07:00	05:00		07:00	04:00		06:00			11:00
Volume	1	93	30	2	6	1		8	5		1			136
PM Volumes	13	860	188	15	53	9	0	31	31	0	1	0	0	1201
% PM	1%	42%	9%	1%	3%	0%		2%	2%		0%			59%
PM Peak Hour	14:00	14:00	16:00	15:00	16:00	12:00		14:00	22:00		18:00			16:00
Volume	5	98	29	4	11	3		4	5		1			143

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	211	↔	10%	249	↔	12%	252	↔	12%	1331	↔	65%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Lenwood Rd Bet. Lenwood Rd/Sun Valley Dr & Tortoise Rd

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_002w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	30	1	0	0	0	0	0	2	0	0	0	0	33
01:00	0	20	5	1	1	0	0	0	0	0	0	0	0	27
02:00	0	12	0	0	2	0	0	0	0	0	0	0	0	14
03:00	0	19	6	1	0	1	0	1	2	0	0	0	0	30
04:00	2	11	2	1	4	0	0	0	2	0	0	0	0	22
05:00	0	43	18	1	7	0	0	0	4	0	0	0	0	73
06:00	0	41	12	1	5	0	0	0	3	0	0	0	0	62
07:00	0	33	14	2	6	3	0	0	1	0	0	0	0	59
08:00	1	47	10	2	7	1	0	0	6	0	0	0	0	74
09:00	0	67	14	0	7	3	0	0	5	0	0	0	0	96
10:00	0	76	14	0	5	1	0	0	4	0	0	0	0	100
11:00	0	76	15	0	3	0	0	1	3	0	0	0	0	98
12:00 PM	0	90	18	2	3	0	0	0	9	0	0	0	0	122
13:00	0	96	11	1	5	0	0	1	5	0	0	0	0	119
14:00	0	105	26	2	5	1	0	2	7	1	1	0	0	150
15:00	0	144	24	1	2	0	0	0	1	0	0	0	0	172
16:00	0	126	15	0	5	1	0	0	5	0	0	0	0	152
17:00	0	132	13	1	5	0	0	1	5	0	0	0	0	157
18:00	0	110	25	1	1	0	0	0	3	0	0	0	0	140
19:00	0	136	15	1	4	1	0	0	3	0	0	0	0	160
20:00	0	104	15	0	1	1	0	1	4	0	0	0	0	126
21:00	0	77	16	0	0	0	0	0	1	0	0	0	0	94
22:00	0	90	8	0	1	4	0	0	2	0	0	0	0	105
23:00	0	39	8	2	0	0	0	0	2	0	0	0	0	51
Totals	**3**	**1724**	**305**	**20**	**79**	**17**		**7**	**79**	**1**	**1**			**2236**
% of Totals	0%	77%	14%	1%	4%	1%		0%	4%	0%	0%			100%

AM Volumes	3	475	111	9	47	9	0	2	32	0	0	0	0	688
% AM	0%	21%	5%	0%	2%	0%		0%	1%					31%
AM Peak Hour	04:00	10:00	05:00	07:00	05:00	07:00		03:00	08:00					10:00
Volume	2	76	18	2	7	3		1	6					100
PM Volumes	0	1249	194	11	32	8	0	5	47	1	1	0	0	1548
% PM		56%	9%	0%	1%	0%		0%	2%	0%	0%			69%
PM Peak Hour		15:00	14:00	12:00	13:00	22:00		14:00	12:00	14:00	14:00			15:00
Volume		144	26	2	5	4		2	9	1	1			172

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	133		6%	241		11%	309		14%	1553		69%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by NDS/ATD

VOLUME - Total Volume, All Vehicle Types

Lenwood Rd E/O Commerce Pkwy

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA_21-030062-003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6,835	6,634	13,469

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00	0	0	26		27		53		12:00	0	0	102		108		210	
0:15	0	0	37		28		65		12:15	0	0	107		114		221	
0:30	0	0	23		29		52		12:30	0	0	106		123		229	
0:45	0	0	43	129	26	110	69	239	12:45	0	0	124	439	109	454	233	893
1:00	0	0	26		37		63		13:00	0	0	101		106		207	
1:15	0	0	23		24		47		13:15	0	0	117		95		212	
1:30	0	0	16		25		41		13:30	0	0	105		113		218	
1:45	0	0	24	89	14	100	38	189	13:45	0	0	99	422	97	411	196	833
2:00	0	0	26		26		52		14:00	0	0	115		104		219	
2:15	0	0	18		23		41		14:15	0	0	103		102		205	
2:30	0	0	25		26		51		14:30	0	0	94		81		175	
2:45	0	0	21	90	25	100	46	190	14:45	0	0	102	414	122	409	224	823
3:00	0	0	29		32		61		15:00	0	0	127		108		235	
3:15	0	0	39		25		64		15:15	0	0	108		105		213	
3:30	0	0	31		23		54		15:30	0	0	120		91		211	
3:45	0	0	26	125	35	115	61	240	15:45	0	0	100	455	122	426	222	881
4:00	0	0	46		16		62		16:00	0	0	102		109		211	
4:15	0	0	67		24		91		16:15	0	0	111		98		209	
4:30	0	0	41		33		74		16:30	0	0	95		108		203	
4:45	0	0	57	211	30	103	87	314	16:45	0	0	103	411	98	413	201	824
5:00	0	0	50		42		92		17:00	0	0	82		87		169	
5:15	0	0	58		43		101		17:15	0	0	93		117		210	
5:30	0	0	56		39		95		17:30	0	0	76		112		188	
5:45	0	0	70	234	51	175	121	409	17:45	0	0	88	339	105	421	193	760
6:00	0	0	69		52		121		18:00	0	0	88		94		182	
6:15	0	0	53		45		98		18:15	0	0	73		94		167	
6:30	0	0	82		60		142		18:30	0	0	77		85		162	
6:45	0	0	79	283	73	230	152	513	18:45	0	0	78	316	78	351	156	667
7:00	0	0	83		67		150		19:00	0	0	66		79		145	
7:15	0	0	85		63		148		19:15	0	0	71		80		151	
7:30	0	0	85		62		147		19:30	0	0	54		79		133	
7:45	0	0	87	340	90	282	177	622	19:45	0	0	67	258	94	332	161	590
8:00	0	0	88		73		161		20:00	0	0	63		68		131	
8:15	0	0	97		64		161		20:15	0	0	76		75		151	
8:30	0	0	83		75		158		20:30	0	0	59		70		129	
8:45	0	0	78	346	63	275	141	621	20:45	0	0	61	259	94	307	155	566
9:00	0	0	75		87		162		21:00	0	0	74		70		144	
9:15	0	0	76		63		139		21:15	0	0	59		59		118	
9:30	0	0	80		67		147		21:30	0	0	50		55		105	
9:45	0	0	86	317	73	290	159	607	21:45	0	0	54	237	63	247	117	484
10:00	0	0	90		73		163		22:00	0	0	37		59		96	
10:15	0	0	94		85		179		22:15	0	0	49		56		105	
10:30	0	0	104		80		184		22:30	0	0	53		50		103	
10:45	0	0	86	374	85	323	171	697	22:45	0	0	32	171	50	215	82	386
11:00	0	0	107		104		211		23:00	0	0	47		34		81	
11:15	0	0	105		105		210		23:15	0	0	36		38		74	
11:30	0	0	112		100		212		23:30	0	0	29		45		74	
11:45	0	0	104	428	85	394	189	822	23:45	0	0	36	148	34	151	70	299
TOTALS				2966		2497		5463	TOTALS				3869		4137		8006
SPLIT %				54.3%		45.7%		40.6%	SPLIT %				48.3%		51.7%		59.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6,835	6,634	13,469

AM Peak Hour			11:00	11:45	11:45	PM Peak Hour			14:45	12:00	12:00
AM Pk Volume			428	430	849	PM Pk Volume			457	454	893
Pk Hr Factor			0.955	0.874	0.927	Pk Hr Factor			0.900	0.923	0.958
7 - 9 Volume	0	0	686	557	1243	4 - 6 Volume	0	0	750	834	1584
7 - 9 Peak Hour			7:30	7:45	7:45	4 - 6 Peak Hour			16:00	17:00	16:00
7 - 9 Pk Volume	0	0	357	302	657	4 - 6 Pk Volume	0	0	411	421	824
Pk Hr Factor	0.000	0.000	0.920	0.839	0.928	Pk Hr Factor	0.000	0.000	0.926	0.900	0.976

Prepared by NDS/ATD

VOLUME - Passenger Cars

Lenwood Rd E/O Commerce Pkwy

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA_21-030062-003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	4,083	3,916	7,999

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			10		8		18		12:00			64		72		136	
0:15			17		16		33		12:15			78		62		140	
0:30			11		12		23		12:30			67		71		138	
0:45			20	58	14	50	34	108	12:45			86	295	68	273	154	568
1:00			9		12		21		13:00			63		70		133	
1:15			10		10		20		13:15			69		64		133	
1:30			1		7		8		13:30			71		68		139	
1:45			4	24	3	32	7	56	13:45			69	272	62	264	131	536
2:00			7		9		16		14:00			80		65		145	
2:15			8		8		16		14:15			66		61		127	
2:30			4		4		8		14:30			65		47		112	
2:45			8	27	15	36	23	63	14:45			79	290	77	250	156	540
3:00			6		7		13		15:00			89		66		155	
3:15			8		10		18		15:15			75		58		133	
3:30			3		8		11		15:30			79		60		139	
3:45			7	24	12	37	19	61	15:45			69	312	74	258	143	570
4:00			17		4		21		16:00			69		77		146	
4:15			11		6		17		16:15			72		56		128	
4:30			14		10		24		16:30			71		76		147	
4:45			29	71	15	35	44	106	16:45			75	287	67	276	142	563
5:00			23		18		41		17:00			57		59		116	
5:15			35		21		56		17:15			61		74		135	
5:30			21		22		43		17:30			49		85		134	
5:45			38	117	31	92	69	209	17:45			65	232	65	283	130	515
6:00			29		25		54		18:00			56		45		101	
6:15			16		23		39		18:15			41		63		104	
6:30			41		39		80		18:30			46		49		95	
6:45			39	125	51	138	90	263	18:45			50	193	45	202	95	395
7:00			40		43		83		19:00			38		41		79	
7:15			45		45		90		19:15			48		56		104	
7:30			59		33		92		19:30			34		43		77	
7:45			55	199	67	188	122	387	19:45			41	161	61	201	102	362
8:00			54		43		97		20:00			39		33		72	
8:15			55		40		95		20:15			45		35		80	
8:30			50		41		91		20:30			36		33		69	
8:45			51	210	39	163	90	373	20:45			36	156	59	160	95	316
9:00			52		55		107		21:00			42		46		88	
9:15			43		41		84		21:15			36		41		77	
9:30			50		42		92		21:30			37		34		71	
9:45			48	193	45	183	93	376	21:45			36	151	37	158	73	309
10:00			60		44		104		22:00			20		38		58	
10:15			59		45		104		22:15			32		36		68	
10:30			62		49		111		22:30			34		28		62	
10:45			56	237	49	187	105	424	22:45			11	97	26	128	37	225
11:00			71		63		134		23:00			24		18		42	
11:15			65		61		126		23:15			17		20		37	
11:30			77		64		141		23:30			15		27		42	
11:45			67	280	51	239	118	519	23:45			16	72	18	83	34	155
TOTALS				1565		1380		**2945**	**TOTALS**				2518		2536		**5054**
SPLIT %				53.1%		46.9%		**36.8%**	**SPLIT %**				49.8%		50.2%		**63.2%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	4,083	3,916	7,999

AM Peak Hour			11:30	11:45	**11:30**	**PM Peak Hour**			14:45	16:45	**14:45**
AM Pk Volume			286	256	**535**	**PM Pk Volume**			322	285	**583**
Pk Hr Factor			0.917	0.889	**0.949**	**Pk Hr Factor**			0.904	0.838	**0.934**
7 - 9 Volume	0	0	409	351	**760**	**4 - 6 Volume**	0	0	519	559	**1078**
7 - 9 Peak Hour			7:30	7:45	**7:30**	**4 - 6 Peak Hour**			16:00	16:45	**16:00**
7 - 9 Pk Volume	0	0	223	191	**406**	**4 - 6 Pk Volume**	0	0	287	285	**563**
Pk Hr Factor	0.000	0.000	0.945	0.713	**0.832**	**Pk Hr Factor**	0.000	0.000	0.957	0.838	**0.957**

Prepared by NDS/ATD

VOLUME

Lenwood Rd E/O Commerce Pkwy

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA_21-030062-003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,752	2,718	5,470

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00	0	0	16		19		35		12:00	0	0	38		36		74	
0:15	0	0	20		12		32		12:15	0	0	29		52		81	
0:30	0	0	12		17		29		12:30	0	0	39		52		91	
0:45	0	0	23	71	12	60	35	131	12:45	0	0	38	144	41	181	79	325
1:00	0	0	17		25		42		13:00	0	0	38		36		74	
1:15	0	0	13		14		27		13:15	0	0	48		31		79	
1:30	0	0	15		18		33		13:30	0	0	34		45		79	
1:45	0	0	20	65	11	68	31	133	13:45	0	0	30	150	35	147	65	297
2:00	0	0	19		17		36		14:00	0	0	35		39		74	
2:15	0	0	10		15		25		14:15	0	0	37		41		78	
2:30	0	0	21		22		43		14:30	0	0	29		34		63	
2:45	0	0	13	63	10	64	23	127	14:45	0	0	23	124	45	159	68	283
3:00	0	0	23		25		48		15:00	0	0	38		42		80	
3:15	0	0	31		15		46		15:15	0	0	33		47		80	
3:30	0	0	28		15		43		15:30	0	0	41		31		72	
3:45	0	0	19	101	23	78	42	179	15:45	0	0	31	143	48	168	79	311
4:00	0	0	29		12		41		16:00	0	0	33		32		65	
4:15	0	0	56		18		74		16:15	0	0	39		42		81	
4:30	0	0	27		23		50		16:30	0	0	24		32		56	
4:45	0	0	28	140	15	68	43	208	16:45	0	0	28	124	31	137	59	261
5:00	0	0	27		24		51		17:00	0	0	25		28		53	
5:15	0	0	23		22		45		17:15	0	0	32		43		75	
5:30	0	0	35		17		52		17:30	0	0	27		27		54	
5:45	0	0	32	117	20	83	52	200	17:45	0	0	23	107	40	138	63	245
6:00	0	0	40		27		67		18:00	0	0	32		49		81	
6:15	0	0	37		22		59		18:15	0	0	32		31		63	
6:30	0	0	41		21		62		18:30	0	0	31		36		67	
6:45	0	0	40	158	22	92	62	250	18:45	0	0	28	123	33	149	61	272
7:00	0	0	43		24		67		19:00	0	0	28		38		66	
7:15	0	0	40		18		58		19:15	0	0	23		24		47	
7:30	0	0	26		29		55		19:30	0	0	20		36		56	
7:45	0	0	32	141	23	94	55	235	19:45	0	0	26	97	33	131	59	228
8:00	0	0	34		30		64		20:00	0	0	24		35		59	
8:15	0	0	42		24		66		20:15	0	0	31		40		71	
8:30	0	0	33		34		67		20:30	0	0	23		37		60	
8:45	0	0	27	136	24	112	51	248	20:45	0	0	25	103	35	147	60	250
9:00	0	0	23		32		55		21:00	0	0	32		24		56	
9:15	0	0	33		22		55		21:15	0	0	23		18		41	
9:30	0	0	30		25		55		21:30	0	0	13		21		34	
9:45	0	0	38	124	28	107	66	231	21:45	0	0	18	86	26	89	44	175
10:00	0	0	30		29		59		22:00	0	0	17		21		38	
10:15	0	0	35		40		75		22:15	0	0	17		20		37	
10:30	0	0	42		31		73		22:30	0	0	19		22		41	
10:45	0	0	30	137	36	136	66	273	22:45	0	0	21	74	24	87	45	161
11:00	0	0	36		41		77		23:00	0	0	23		16		39	
11:15	0	0	40		44		84		23:15	0	0	19		18		37	
11:30	0	0	35		36		71		23:30	0	0	14		18		32	
11:45	0	0	37	148	34	155	71	303	23:45	0	0	20	76	16	68	36	144
TOTALS				1401		1117		2518	TOTALS				1351		1601		2952
SPLIT %				55.6%		44.4%		46.0%	SPLIT %				45.8%		54.2%		54.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,752	2,718	5,470

AM Peak Hour			6:30	11:45	11:45	PM Peak Hour			12:30	12:00	12:00
AM Pk Volume			164	174	317	PM Pk Volume			163	181	325
Pk Hr Factor			0.953	0.837	0.871	Pk Hr Factor			0.849	0.870	0.893
7 - 9 Volume	0	0	277	206	483	4 - 6 Volume	0	0	231	275	506
7 - 9 Peak Hour			7:00	8:00	7:45	4 - 6 Peak Hour			16:00	17:00	16:00
7 - 9 Pk Volume	0	0	141	112	252	4 - 6 Pk Volume	0	0	124	138	261
Pk Hr Factor	0.000	0.000	0.820	0.824	0.940	Pk Hr Factor	0.000	0.000	0.795	0.802	0.806

Prepared by NDS/ATD

VOLUME - Light Trucks

Lenwood Rd E/O Commerce Pkwy

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA_21-030062-003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	235	238	473

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			1		0		1		12:00			4		3		7	
0:15			0		1		1		12:15			3		4		7	
0:30			0		1		1		12:30			2		2		4	
0:45			1	2	1	3	2	5	12:45			4	13	5	14	9	27
1:00			1		1		2		13:00			5		3		8	
1:15			1		0		1		13:15			6		3		9	
1:30			1		1		2		13:30			3		3		6	
1:45			1	4	0	2	1	6	13:45			5	19	0	9	5	28
2:00			0		3		3		14:00			2		6		8	
2:15			0		1		1		14:15			4		4		8	
2:30			2		2		4		14:30			8		1		9	
2:45			1	3	1	7	2	10	14:45			2	16	8	19	10	35
3:00			1		0		1		15:00			3		8		11	
3:15			3		0		3		15:15			4		5		9	
3:30			1		2		3		15:30			5		2		7	
3:45			2	7	1	3	3	10	15:45			3	15	7	22	10	37
4:00			2		0		2		16:00			2		3		5	
4:15			0		0		0		16:15			7		1		8	
4:30			2		1		3		16:30			5		4		9	
4:45			1	5	0	1	1	6	16:45			3	17	1	9	4	26
5:00			0		1		1		17:00			4		3		7	
5:15			0		3		3		17:15			3		3		6	
5:30			2		0		2		17:30			1		2		3	
5:45			0	2	0	4	0	6	17:45			5	13	4	12	9	25
6:00			2		4		6		18:00			7		7		14	
6:15			2		3		5		18:15			3		0		3	
6:30			2		5		7		18:30			2		3		5	
6:45			2	8	0	12	2	20	18:45			5	17	2	12	7	29
7:00			1		7		8		19:00			1		5		6	
7:15			4		1		5		19:15			2		0		2	
7:30			2		5		7		19:30			1		2		3	
7:45			3	10	4	17	7	27	19:45			2	6	3	10	5	16
8:00			2		0		2		20:00			3		6		9	
8:15			0		3		3		20:15			7		4		11	
8:30			1		4		5		20:30			1		3		4	
8:45			3	6	3	10	6	16	20:45			2	13	2	15	4	28
9:00			5		4		9		21:00			2		1		3	
9:15			1		4		5		21:15			1		2		3	
9:30			3		5		8		21:30			1		0		1	
9:45			6	15	5	18	11	33	21:45			0	4	4	7	4	11
10:00			7		2		9		22:00			1		2		3	
10:15			3		4		7		22:15			2		0		2	
10:30			6		2		8		22:30			1		1		2	
10:45			2	18	4	12	6	30	22:45			1	5	2	5	3	10
11:00			5		5		10		23:00			0		0		0	
11:15			1		4		5		23:15			1		0		1	
11:30			6		1		7		23:30			0		0		0	
11:45			3	15	3	13	6	28	23:45			1	2	2	2	3	4
TOTALS				95		102		**197**	**TOTALS**				140		136		**276**
SPLIT %				48.2%		51.8%		**41.6%**	**SPLIT %**				50.7%		49.3%		**58.4%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	235	238	473

AM Peak Hour			9:45	9:00	**9:30**	**PM Peak Hour**			13:00	14:45	**14:30**
AM Pk Volume			22	18	**35**	**PM Pk Volume**			19	23	**39**
Pk Hr Factor			0.786	0.900	**0.795**	**Pk Hr Factor**			0.792	0.719	**0.886**
7 - 9 Volume	0	0	16	27	**43**	**4 - 6 Volume**	0	0	30	21	**51**
7 - 9 Peak Hour			7:15	7:00	**7:00**	**4 - 6 Peak Hour**			16:15	17:00	**16:15**
7 - 9 Pk Volume	0	0	11	17	**27**	**4 - 6 Pk Volume**	0	0	19	12	**28**
Pk Hr Factor	0.000	0.000	0.688	0.607	**0.844**	**Pk Hr Factor**	0.000	0.000	0.679	0.750	**0.778**

Prepared by NDS/ATD

VOLUME - Heavy Trucks

Lenwood Rd E/O Commerce Pkwy

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA_21-030062-003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,517	2,480	4,997

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			15		19		34		12:00			34		33		67	
0:15			20		11		31		12:15			26		48		74	
0:30			12		16		28		12:30			37		50		87	
0:45			22	69	11	57	33	126	12:45			34	131	36	167	70	298
1:00			16		24		40		13:00			33		33		66	
1:15			12		14		26		13:15			42		28		70	
1:30			14		17		31		13:30			31		42		73	
1:45			19	61	11	66	30	127	13:45			25	131	35	138	60	269
2:00			19		14		33		14:00			33		33		66	
2:15			10		14		24		14:15			33		37		70	
2:30			19		20		39		14:30			21		33		54	
2:45			12	60	9	57	21	117	14:45			21	108	37	140	58	248
3:00			22		25		47		15:00			35		34		69	
3:15			28		15		43		15:15			29		42		71	
3:30			27		13		40		15:30			36		29		65	
3:45			17	94	22	75	39	169	15:45			28	128	41	146	69	274
4:00			27		12		39		16:00			31		29		60	
4:15			56		18		74		16:15			32		41		73	
4:30			25		22		47		16:30			19		28		47	
4:45			27	135	15	67	42	202	16:45			25	107	30	128	55	235
5:00			27		23		50		17:00			21		25		46	
5:15			23		19		42		17:15			29		40		69	
5:30			33		17		50		17:30			26		25		51	
5:45			32	115	20	79	52	194	17:45			18	94	36	126	54	220
6:00			38		23		61		18:00			25		42		67	
6:15			35		19		54		18:15			29		31		60	
6:30			39		16		55		18:30			29		33		62	
6:45			38	150	22	80	60	230	18:45			23	106	31	137	54	243
7:00			42		17		59		19:00			27		33		60	
7:15			36		17		53		19:15			21		24		45	
7:30			24		24		48		19:30			19		34		53	
7:45			29	131	19	77	48	208	19:45			24	91	30	121	54	212
8:00			32		30		62		20:00			21		29		50	
8:15			42		21		63		20:15			24		36		60	
8:30			32		30		62		20:30			22		34		56	
8:45			24	130	21	102	45	232	20:45			23	90	33	132	56	222
9:00			18		28		46		21:00			30		23		53	
9:15			32		18		50		21:15			22		16		38	
9:30			27		20		47		21:30			12		21		33	
9:45			32	109	23	89	55	198	21:45			18	82	22	82	40	164
10:00			23		27		50		22:00			16		19		35	
10:15			32		36		68		22:15			15		20		35	
10:30			36		29		65		22:30			18		21		39	
10:45			28	119	32	124	60	243	22:45			20	69	22	82	42	151
11:00			31		36		67		23:00			23		16		39	
11:15			39		40		79		23:15			18		18		36	
11:30			29		35		64		23:30			14		18		32	
11:45			34	133	31	142	65	275	23:45			19	74	14	66	33	140
TOTALS				1306		1015		**2321**	**TOTALS**				1211		1465		**2676**
SPLIT %				56.3%		43.7%		**46.4%**	**SPLIT %**				45.3%		54.7%		**53.6%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,517	2,480	4,997

AM Peak Hour			6:30	11:45	**11:45**	**PM Peak Hour**			12:30	12:00	**12:00**
AM Pk Volume			155	162	**293**	**PM Pk Volume**			146	167	**298**
Pk Hr Factor			0.923	0.810	**0.842**	**Pk Hr Factor**			0.869	0.835	**0.856**
7 - 9 Volume	0	0	261	179	**440**	**4 - 6 Volume**	0	0	201	254	**455**
7 - 9 Peak Hour			7:45	8:00	**7:45**	**4 - 6 Peak Hour**			16:00	16:00	**16:00**
7 - 9 Pk Volume	0	0	135	102	**235**	**4 - 6 Pk Volume**	0	0	107	128	**235**
Pk Hr Factor	0.000	0.000	0.804	0.850	**0.933**	**Pk Hr Factor**	0.000	0.000	0.836	0.780	**0.805**

Prepared by NDS/ATD

VOLUME - Total Volume, All Vehicle Types

Lenwood Rd E/O Commerce Pkwy

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA_21-030062-003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,487	7,012	14,499

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00	0	0	28		26		54		12:00	0	0	132		96		228	
0:15	0	0	34		35		69		12:15	0	0	105		89		194	
0:30	0	0	31		34		65		12:30	0	0	118		101		219	
0:45	0	0	42	135	35	130	77	265	12:45	0	0	87	442	103	389	190	831
1:00	0	0	33		26		59		13:00	0	0	117		108		225	
1:15	0	0	31		30		61		13:15	0	0	95		101		196	
1:30	0	0	26		24		50		13:30	0	0	110		111		221	
1:45	0	0	30	120	27	107	57	227	13:45	0	0	125	447	98	418	223	865
2:00	0	0	38		28		66		14:00	0	0	114		99		213	
2:15	0	0	27		17		44		14:15	0	0	109		122		231	
2:30	0	0	23		24		47		14:30	0	0	109		105		214	
2:45	0	0	36	124	28	97	64	221	14:45	0	0	129	461	91	417	220	878
3:00	0	0	28		33		61		15:00	0	0	111		102		213	
3:15	0	0	43		15		58		15:15	0	0	96		114		210	
3:30	0	0	37		29		66		15:30	0	0	119		133		252	
3:45	0	0	45	153	28	105	73	258	15:45	0	0	130	456	95	444	225	900
4:00	0	0	34		29		63		16:00	0	0	101		97		198	
4:15	0	0	47		25		72		16:15	0	0	105		100		205	
4:30	0	0	51		28		79		16:30	0	0	93		76		169	
4:45	0	0	41	173	37	119	78	292	16:45	0	0	82	381	94	367	176	748
5:00	0	0	57		44		101		17:00	0	0	81		101		182	
5:15	0	0	53		46		99		17:15	0	0	87		94		181	
5:30	0	0	78		54		132		17:30	0	0	91		108		199	
5:45	0	0	61	249	55	199	116	448	17:45	0	0	94	353	96	399	190	752
6:00	0	0	80		45		125		18:00	0	0	76		116		192	
6:15	0	0	79		56		135		18:15	0	0	89		90		179	
6:30	0	0	69		73		142		18:30	0	0	89		112		201	
6:45	0	0	107	335	78	252	185	587	18:45	0	0	94	348	81	399	175	747
7:00	0	0	72		77		149		19:00	0	0	84		102		186	
7:15	0	0	82		63		145		19:15	0	0	88		100		188	
7:30	0	0	93		76		169		19:30	0	0	95		111		206	
7:45	0	0	98	345	84	300	182	645	19:45	0	0	75	342	91	404	166	746
8:00	0	0	114		81		195		20:00	0	0	84		98		182	
8:15	0	0	116		77		193		20:15	0	0	83		74		157	
8:30	0	0	83		72		155		20:30	0	0	73		87		160	
8:45	0	0	95	408	72	302	167	710	20:45	0	0	67	307	88	347	155	654
9:00	0	0	109		87		196		21:00	0	0	61		73		134	
9:15	0	0	98		78		176		21:15	0	0	71		86		157	
9:30	0	0	73		78		151		21:30	0	0	59		69		128	
9:45	0	0	90	370	94	337	184	707	21:45	0	0	76	267	72	300	148	567
10:00	0	0	87		95		182		22:00	0	0	64		68		132	
10:15	0	0	116		98		214		22:15	0	0	54		56		110	
10:30	0	0	104		101		205		22:30	0	0	46		44		90	
10:45	0	0	125	432	83	377	208	809	22:45	0	0	49	213	55	223	104	436
11:00	0	0	110		91		201		23:00	0	0	51		56		107	
11:15	0	0	94		101		195		23:15	0	0	50		42		92	
11:30	0	0	114		96		210		23:30	0	0	49		46		95	
11:45	0	0	112	430	112	400	224	830	23:45	0	0	46	196	36	180	82	376
TOTALS				3274		2725		**5999**	**TOTALS**				4213		4287		**8500**
SPLIT %				54.6%		45.4%		**41.4%**	**SPLIT %**				49.6%		50.4%		**58.6%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,487	7,012	14,499

AM Peak Hour				11:45	11:15	**11:45**	**PM Peak Hour**				14:00	15:00	**15:00**
AM Pk Volume				467	405	**865**	**PM Pk Volume**				461	444	**900**
Pk Hr Factor				0.884	0.904	**0.948**	**Pk Hr Factor**				0.893	0.835	**0.893**
7 - 9 Volume	0	0		753	602	**1355**	**4 - 6 Volume**	0	0		734	766	**1500**
7 - 9 Peak Hour				7:30	7:30	**7:30**	**4 - 6 Peak Hour**				16:00	17:00	**17:00**
7 - 9 Pk Volume	0	0		421	318	**739**	**4 - 6 Pk Volume**	0	0		381	399	**752**
Pk Hr Factor	0.000	0.000		0.907	0.946	**0.947**	**Pk Hr Factor**	0.000	0.000		0.907	0.924	**0.945**

Prepared by NDS/ATD

VOLUME - Passenger Cars

Lenwood Rd E/O Commerce Pkwy

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA_21-030062-003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	4,559	4,135	8,694

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			15		13		28		12:00			85		53		138	
0:15			19		11		30		12:15			74		54		128	
0:30			12		14		26		12:30			75		66		141	
0:45			17	63	13	51	30	114	12:45			57	291	67	240	124	531
1:00			11		9		20		13:00			80		72		152	
1:15			13		11		24		13:15			64		60		124	
1:30			11		9		20		13:30			74		63		137	
1:45			15	50	12	41	27	91	13:45			86	304	61	256	147	560
2:00			10		7		17		14:00			71		64		135	
2:15			6		8		14		14:15			82		81		163	
2:30			8		10		18		14:30			77		71		148	
2:45			17	41	7	32	24	73	14:45			89	319	52	268	141	587
3:00			11		11		22		15:00			71		60		131	
3:15			11		4		15		15:15			72		71		143	
3:30			11		11		22		15:30			79		83		162	
3:45			16	49	10	36	26	85	15:45			80	302	63	277	143	579
4:00			10		10		20		16:00			66		52		118	
4:15			15		7		22		16:15			73		62		135	
4:30			23		10		33		16:30			69		45		114	
4:45			24	72	26	53	50	125	16:45			56	264	59	218	115	482
5:00			32		18		50		17:00			48		62		110	
5:15			18		22		40		17:15			59		59		118	
5:30			36		25		61		17:30			59		62		121	
5:45			27	113	37	102	64	215	17:45			65	231	50	233	115	464
6:00			29		28		57		18:00			47		66		113	
6:15			39		33		72		18:15			56		60		116	
6:30			42		41		83		18:30			56		73		129	
6:45			49	159	45	147	94	306	18:45			64	223	50	249	114	472
7:00			38		46		84		19:00			49		59		108	
7:15			46		37		83		19:15			64		60		124	
7:30			51		45		96		19:30			64		82		146	
7:45			52	187	57	185	109	372	19:45			48	225	62	263	110	488
8:00			67		52		119		20:00			60		54		114	
8:15			72		41		113		20:15			59		45		104	
8:30			48		40		88		20:30			41		63		104	
8:45			53	240	36	169	89	409	20:45			42	202	52	214	94	416
9:00			67		59		126		21:00			41		38		79	
9:15			64		55		119		21:15			44		53		97	
9:30			50		53		103		21:30			37		41		78	
9:45			55	236	56	223	111	459	21:45			56	178	42	174	98	352
10:00			53		53		106		22:00			43		42		85	
10:15			73		62		135		22:15			31		36		67	
10:30			62		65		127		22:30			24		20		44	
10:45			79	267	55	235	134	502	22:45			33	131	37	135	70	266
11:00			79		59		138		23:00			34		21		55	
11:15			67		66		133		23:15			24		24		48	
11:30			89		64		153		23:30			26		24		50	
11:45			72	307	61	250	133	557	23:45			21	105	15	84	36	189
TOTALS				1784		1524		**3308**	**TOTALS**				2775		2611		**5386**
SPLIT %				53.9%		46.1%		**38.0%**	**SPLIT %**				51.5%		48.5%		**62.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	4,559	4,135	8,694

AM Peak Hour			11:30	11:00	**10:45**	**PM Peak Hour**			14:00	13:45	**13:45**
AM Pk Volume			320	250	**558**	**PM Pk Volume**			319	277	**593**
Pk Hr Factor			0.899	0.947	**0.912**	**Pk Hr Factor**			0.896	0.855	**0.910**
7 - 9 Volume	0	0	427	354	**781**	**4 - 6 Volume**	0	0	495	451	**946**
7 - 9 Peak Hour			7:30	7:30	**7:30**	**4 - 6 Peak Hour**			16:00	16:45	**16:00**
7 - 9 Pk Volume	0	0	242	195	**437**	**4 - 6 Pk Volume**	0	0	264	242	**482**
Pk Hr Factor	0.000	0.000	0.840	0.855	**0.918**	**Pk Hr Factor**	0.000	0.000	0.904	0.976	**0.893**

Prepared by NDS/ATD

VOLUME

Lenwood Rd E/O Commerce Pkwy

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA_21-030062-003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,928	2,877	5,805

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00	0	0	13		13		26		12:00	0	0	47		43		90	
0:15	0	0	15		24		39		12:15	0	0	31		35		66	
0:30	0	0	19		20		39		12:30	0	0	43		35		78	
0:45	0	0	25	72	22	79	47	151	12:45	0	0	30	151	36	149	66	300
1:00	0	0	22		17		39		13:00	0	0	37		36		73	
1:15	0	0	18		19		37		13:15	0	0	31		41		72	
1:30	0	0	15		15		30		13:30	0	0	36		48		84	
1:45	0	0	15	70	15	66	30	136	13:45	0	0	39	143	37	162	76	305
2:00	0	0	28		21		49		14:00	0	0	43		35		78	
2:15	0	0	21		9		30		14:15	0	0	27		41		68	
2:30	0	0	15		14		29		14:30	0	0	32		34		66	
2:45	0	0	19	83	21	65	40	148	14:45	0	0	40	142	39	149	79	291
3:00	0	0	17		22		39		15:00	0	0	40		42		82	
3:15	0	0	32		11		43		15:15	0	0	24		43		67	
3:30	0	0	26		18		44		15:30	0	0	40		50		90	
3:45	0	0	29	104	18	69	47	173	15:45	0	0	50	154	32	167	82	321
4:00	0	0	24		19		43		16:00	0	0	35		45		80	
4:15	0	0	32		18		50		16:15	0	0	32		38		70	
4:30	0	0	28		18		46		16:30	0	0	24		31		55	
4:45	0	0	17	101	11	66	28	167	16:45	0	0	26	117	35	149	61	266
5:00	0	0	25		26		51		17:00	0	0	33		39		72	
5:15	0	0	35		24		59		17:15	0	0	28		35		63	
5:30	0	0	42		29		71		17:30	0	0	32		46		78	
5:45	0	0	34	136	18	97	52	233	17:45	0	0	29	122	46	166	75	288
6:00	0	0	51		17		68		18:00	0	0	29		50		79	
6:15	0	0	40		23		63		18:15	0	0	33		30		63	
6:30	0	0	27		32		59		18:30	0	0	33		39		72	
6:45	0	0	58	176	33	105	91	281	18:45	0	0	30	125	31	150	61	275
7:00	0	0	34		31		65		19:00	0	0	35		43		78	
7:15	0	0	36		26		62		19:15	0	0	24		40		64	
7:30	0	0	42		31		73		19:30	0	0	31		29		60	
7:45	0	0	46	158	27	115	73	273	19:45	0	0	27	117	29	141	56	258
8:00	0	0	47		29		76		20:00	0	0	24		44		68	
8:15	0	0	44		36		80		20:15	0	0	24		29		53	
8:30	0	0	35		32		67		20:30	0	0	32		24		56	
8:45	0	0	42	168	36	133	78	301	20:45	0	0	25	105	36	133	61	238
9:00	0	0	42		28		70		21:00	0	0	20		35		55	
9:15	0	0	34		23		57		21:15	0	0	27		33		60	
9:30	0	0	23		25		48		21:30	0	0	22		28		50	
9:45	0	0	35	134	38	114	73	248	21:45	0	0	20	89	30	126	50	215
10:00	0	0	34		42		76		22:00	0	0	21		26		47	
10:15	0	0	43		36		79		22:15	0	0	23		20		43	
10:30	0	0	42		36		78		22:30	0	0	22		24		46	
10:45	0	0	46	165	28	142	74	307	22:45	0	0	16	82	18	88	34	170
11:00	0	0	31		32		63		23:00	0	0	17		35		52	
11:15	0	0	27		35		62		23:15	0	0	26		18		44	
11:30	0	0	25		32		57		23:30	0	0	23		22		45	
11:45	0	0	40	123	51	150	91	273	23:45	0	0	25	91	21	96	46	187
TOTALS				1490		1201		2691	TOTALS				1438		1676		3114
SPLIT %				55.4%		44.6%		46.4%	SPLIT %				46.2%		53.8%		53.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,928	2,877	5,805

AM Peak Hour			7:30	11:45	11:45	PM Peak Hour			15:30	17:15	15:30
AM Pk Volume			179	164	325	PM Pk Volume			157	177	322
Pk Hr Factor			0.952	0.804	0.893	Pk Hr Factor			0.785	0.885	0.894
7 - 9 Volume	0	0	326	248	574	4 - 6 Volume	0	0	239	315	554
7 - 9 Peak Hour			7:30	8:00	7:30	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	179	133	302	4 - 6 Pk Volume	0	0	122	166	288
Pk Hr Factor	0.000	0.000	0.952	0.924	0.944	Pk Hr Factor	0.000	0.000	0.924	0.902	0.923

Prepared by NDS/ATD

VOLUME - Light Trucks

Lenwood Rd E/O Commerce Pkwy

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA_21-030062-003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	338	309	647

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			0		0		0		12:00			5		8		13	
0:15			2		2		4		12:15			8		4		12	
0:30			1		1		2		12:30			7		5		12	
0:45			4	7	2	5	6	12	12:45			6	26	3	20	9	46
1:00			3		0		3		13:00			4		5		9	
1:15			1		4		5		13:15			4		4		8	
1:30			2		1		3		13:30			3		11		14	
1:45			1	7	2	7	3	14	13:45			10	21	3	23	13	44
2:00			1		0		1		14:00			7		5		12	
2:15			1		1		2		14:15			4		5		9	
2:30			0		0		0		14:30			3		2		5	
2:45			3	5	0	1	3	6	14:45			4	18	8	20	12	38
3:00			1		1		2		15:00			9		6		15	
3:15			0		2		2		15:15			6		6		12	
3:30			1		2		3		15:30			4		5		9	
3:45			2	4	2	7	4	11	15:45			9	28	4	21	13	49
4:00			0		1		1		16:00			5		4		9	
4:15			3		2		5		16:15			7		4		11	
4:30			0		5		5		16:30			1		0		1	
4:45			1	4	0	8	1	12	16:45			2	15	2	10	4	25
5:00			3		1		4		17:00			3		3		6	
5:15			2		2		4		17:15			3		5		8	
5:30			4		3		7		17:30			2		2		4	
5:45			3	12	1	7	4	19	17:45			5	13	3	13	8	26
6:00			5		0		5		18:00			8		7		15	
6:15			5		4		9		18:15			7		5		12	
6:30			1		3		4		18:30			7		1		8	
6:45			8	19	5	12	13	31	18:45			2	24	4	17	6	41
7:00			3		11		14		19:00			2		2		4	
7:15			7		3		10		19:15			3		6		9	
7:30			2		3		5		19:30			3		3		6	
7:45			3	15	3	20	6	35	19:45			7	15	4	15	11	30
8:00			5		5		10		20:00			1		2		3	
8:15			3		5		8		20:15			2		5		7	
8:30			2		2		4		20:30			3		0		3	
8:45			8	18	3	15	11	33	20:45			2	8	1	8	3	16
9:00			2		5		7		21:00			3		3		6	
9:15			1		5		6		21:15			3		3		6	
9:30			2		4		6		21:30			1		1		2	
9:45			3	8	2	16	5	24	21:45			1	8	4	11	5	19
10:00			6		5		11		22:00			2		5		7	
10:15			6		7		13		22:15			6		2		8	
10:30			7		4		11		22:30			3		3		6	
10:45			9	28	2	18	11	46	22:45			3	14	1	11	4	25
11:00			4		1		5		23:00			1		4		5	
11:15			2		3		5		23:15			2		2		4	
11:30			2		4		6		23:30			2		2		4	
11:45			5	13	8	16	13	29	23:45			3	8	0	8	3	16
TOTALS				140		132		**272**	**TOTALS**				198		177		**375**
SPLIT %				51.5%		48.5%		**42.0%**	**SPLIT %**				52.8%		47.2%		**58.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	338	309	647

AM Peak Hour			10:00	11:45	**11:45**	**PM Peak Hour**			15:00	14:45	**15:00**
AM Pk Volume			28	25	**50**	**PM Pk Volume**			28	25	**49**
Pk Hr Factor			0.778	0.781	**0.962**	**Pk Hr Factor**			0.778	0.781	**0.817**
7 - 9 Volume	0	0	33	35	**68**	**4 - 6 Volume**	0	0	28	23	**51**
7 - 9 Peak Hour			8:00	7:00	**7:00**	**4 - 6 Peak Hour**			16:00	17:00	**17:00**
7 - 9 Pk Volume	0	0	18	20	**35**	**4 - 6 Pk Volume**	0	0	15	13	**26**
Pk Hr Factor	0.000	0.000	0.563	0.455	**0.625**	**Pk Hr Factor**	0.000	0.000	0.536	0.650	**0.813**

Prepared by NDS/ATD

VOLUME - Heavy Trucks

Lenwood Rd E/O Commerce Pkwy

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA_21-030062-003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,590	2,568	5,158

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			13		13		26		12:00			42		35		77	
0:15			13		22		35		12:15			23		31		54	
0:30			18		19		37		12:30			36		30		66	
0:45			21	65	20	74	41	139	12:45			24	125	33	129	57	254
1:00			19		17		36		13:00			33		31		64	
1:15			17		15		32		13:15			27		37		64	
1:30			13		14		27		13:30			33		37		70	
1:45			14	63	13	59	27	122	13:45			29	122	34	139	63	261
2:00			27		21		48		14:00			36		30		66	
2:15			20		8		28		14:15			23		36		59	
2:30			15		14		29		14:30			29		32		61	
2:45			16	78	21	64	37	142	14:45			36	124	31	129	67	253
3:00			16		21		37		15:00			31		36		67	
3:15			32		9		41		15:15			18		37		55	
3:30			25		16		41		15:30			36		45		81	
3:45			27	100	16	62	43	162	15:45			41	126	28	146	69	272
4:00			24		18		42		16:00			30		41		71	
4:15			29		16		45		16:15			25		34		59	
4:30			28		13		41		16:30			23		31		54	
4:45			16	97	11	58	27	155	16:45			24	102	33	139	57	241
5:00			22		25		47		17:00			30		36		66	
5:15			33		22		55		17:15			25		30		55	
5:30			38		26		64		17:30			30		44		74	
5:45			31	124	17	90	48	214	17:45			24	109	43	153	67	262
6:00			46		17		63		18:00			21		43		64	
6:15			35		19		54		18:15			26		25		51	
6:30			26		29		55		18:30			26		38		64	
6:45			50	157	28	93	78	250	18:45			28	101	27	133	55	234
7:00			31		20		51		19:00			33		41		74	
7:15			29		23		52		19:15			21		34		55	
7:30			40		28		68		19:30			28		26		54	
7:45			43	143	24	95	67	238	19:45			20	102	25	126	45	228
8:00			42		24		66		20:00			23		42		65	
8:15			41		31		72		20:15			22		24		46	
8:30			33		30		63		20:30			29		24		53	
8:45			34	150	33	118	67	268	20:45			23	97	35	125	58	222
9:00			40		23		63		21:00			17		32		49	
9:15			33		18		51		21:15			24		30		54	
9:30			21		21		42		21:30			21		27		48	
9:45			32	126	36	98	68	224	21:45			19	81	26	115	45	196
10:00			28		37		65		22:00			19		21		40	
10:15			37		29		66		22:15			17		18		35	
10:30			35		32		67		22:30			19		21		40	
10:45			37	137	26	124	63	261	22:45			13	68	17	77	30	145
11:00			27		31		58		23:00			16		31		47	
11:15			25		32		57		23:15			24		16		40	
11:30			23		28		51		23:30			21		20		41	
11:45			35	110	43	134	78	244	23:45			22	83	21	88	43	171
TOTALS				1350		1069		**2419**	**TOTALS**				1240		1499		**2739**
SPLIT %				55.8%		44.2%		**46.9%**	**SPLIT %**				45.3%		54.7%		**53.1%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,590	2,568	5,158

AM Peak Hour			7:30	11:45	**11:45**	**PM Peak Hour**			15:30	17:15	**15:30**
AM Pk Volume			166	139	**275**	**PM Pk Volume**			132	160	**280**
Pk Hr Factor			0.965	0.808	**0.881**	**Pk Hr Factor**			0.805	0.909	**0.864**
7 - 9 Volume	0	0	293	213	**506**	**4 - 6 Volume**	0	0	211	292	**503**
7 - 9 Peak Hour			7:30	8:00	**7:30**	**4 - 6 Peak Hour**			16:45	17:00	**17:00**
7 - 9 Pk Volume	0	0	166	118	**273**	**4 - 6 Pk Volume**	0	0	109	153	**262**
Pk Hr Factor	0.000	0.000	0.965	0.894	**0.948**	**Pk Hr Factor**	0.000	0.000	0.908	0.869	**0.885**

Prepared by NDS/ATD

VOLUME - Total Volume, All Vehicle Types

Lenwood Rd Bet. I-15 SB Off Ramp & I-15 NB Off Ramp

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA_21-030062-004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6,067	13,876	19,943

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00	0	0	16		53		69		12:00	0	0	109		221		330	
0:15	0	0	11		54		65		12:15	0	0	132		286		418	
0:30	0	0	5		48		53		12:30	0	0	141		292		433	
0:45	0	0	15	47	47	202	62	249	12:45	0	0	140	522	269	1068	409	1590
1:00	0	0	9		38		47		13:00	0	0	105		294		399	
1:15	0	0	9		35		44		13:15	0	0	117		274		391	
1:30	0	0	7		33		40		13:30	0	0	104		281		385	
1:45	0	0	5	30	31	137	36	167	13:45	0	0	121	447	257	1106	378	1553
2:00	0	0	12		34		46		14:00	0	0	102		268		370	
2:15	0	0	7		38		45		14:15	0	0	129		239		368	
2:30	0	0	5		36		41		14:30	0	0	110		234		344	
2:45	0	0	8	32	38	146	46	178	14:45	0	0	123	464	283	1024	406	1488
3:00	0	0	5		46		51		15:00	0	0	114		225		339	
3:15	0	0	5		34		39		15:15	0	0	113		238		351	
3:30	0	0	6		38		44		15:30	0	0	104		214		318	
3:45	0	0	10	26	36	154	46	180	15:45	0	0	122	453	214	891	336	1344
4:00	0	0	14		33		47		16:00	0	0	118		241		359	
4:15	0	0	28		52		80		16:15	0	0	115		219		334	
4:30	0	0	26		70		96		16:30	0	0	126		202		328	
4:45	0	0	29	97	71	226	100	323	16:45	0	0	103	462	194	856	297	1318
5:00	0	0	16		89		105		17:00	0	0	124		208		332	
5:15	0	0	21		75		96		17:15	0	0	98		211		309	
5:30	0	0	17		84		101		17:30	0	0	110		201		311	
5:45	0	0	47	101	88	336	135	437	17:45	0	0	109	441	182	802	291	1243
6:00	0	0	32		99		131		18:00	0	0	117		212		329	
6:15	0	0	28		125		153		18:15	0	0	91		194		285	
6:30	0	0	42		124		166		18:30	0	0	99		196		295	
6:45	0	0	35	137	112	460	147	597	18:45	0	0	90	397	199	801	289	1198
7:00	0	0	30		107		137		19:00	0	0	82		201		283	
7:15	0	0	31		131		162		19:15	0	0	71		204		275	
7:30	0	0	44		119		163		19:30	0	0	67		188		255	
7:45	0	0	52	157	152	509	204	666	19:45	0	0	84	304	158	751	242	1055
8:00	0	0	57		122		179		20:00	0	0	67		167		234	
8:15	0	0	50		108		158		20:15	0	0	74		148		222	
8:30	0	0	55		162		217		20:30	0	0	76		161		237	
8:45	0	0	67	229	122	514	189	743	20:45	0	0	60	277	152	628	212	905
9:00	0	0	46		131		177		21:00	0	0	70		159		229	
9:15	0	0	56		135		191		21:15	0	0	50		125		175	
9:30	0	0	66		135		201		21:30	0	0	45		101		146	
9:45	0	0	79	247	133	534	212	781	21:45	0	0	41	206	101	486	142	692
10:00	0	0	70		138		208		22:00	0	0	31		103		134	
10:15	0	0	89		163		252		22:15	0	0	33		132		165	
10:30	0	0	74		171		245		22:30	0	0	27		118		145	
10:45	0	0	102	335	169	641	271	976	22:45	0	0	27	118	95	448	122	566
11:00	0	0	112		209		321		23:00	0	0	20		63		83	
11:15	0	0	87		209		296		23:15	0	0	14		73		87	
11:30	0	0	131		250		381		23:30	0	0	17		67		84	
11:45	0	0	136	466	218	886	354	1352	23:45	0	0	21	72	67	270	88	342
TOTALS				1904		4745		**6649**	**TOTALS**				4163		9131		**13294**
SPLIT %				28.6%		71.4%		**33.3%**	**SPLIT %**				31.3%		68.7%		**66.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6,067	13,876	19,943

AM Peak Hour				11:45		11:45		**11:45**	**PM Peak Hour**				12:00		12:15		**12:15**
AM Pk Volume				518		1017		**1535**	**PM Pk Volume**				522		1141		**1659**
Pk Hr Factor				0.918		0.871		**0.886**	**Pk Hr Factor**				0.926		0.970		**0.958**
7 - 9 Volume	0	0		386		1023		**1409**	**4 - 6 Volume**	0	0		903		1658		**2561**
7 - 9 Peak Hour				8:00		7:45		**7:45**	**4 - 6 Peak Hour**				16:15		16:00		**16:00**
7 - 9 Pk Volume	0	0		229		544		**758**	**4 - 6 Pk Volume**	0	0		468		856		**1318**
Pk Hr Factor	0.000	0.000		0.854		0.840		**0.873**	**Pk Hr Factor**	0.000	0.000		0.929		0.888		**0.918**

Prepared by NDS/ATD

VOLUME - Passenger Cars

Lenwood Rd Bet. I-15 SB Off Ramp & I-15 NB Off Ramp

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA_21-030062-004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,225	10,845	16,070

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			9		37		46		12:00			98		173		271	
0:15			10		35		45		12:15			118		234		352	
0:30			2		32		34		12:30			127		242		369	
0:45			8	29	31	135	39	164	12:45			127	470	229	878	356	1348
1:00			9		21		30		13:00			96		252		348	
1:15			7		15		22		13:15			105		226		331	
1:30			4		16		20		13:30			94		235		329	
1:45			2	22	14	66	16	88	13:45			114	409	216	929	330	1338
2:00			5		16		21		14:00			91		231		322	
2:15			5		16		21		14:15			113		204		317	
2:30			5		17		22		14:30			102		195		297	
2:45			5	20	16	65	21	85	14:45			112	418	217	847	329	1265
3:00			2		19		21		15:00			100		183		283	
3:15			4		14		18		15:15			101		200		301	
3:30			5		20		25		15:30			91		174		265	
3:45			7	18	18	71	25	89	15:45			112	404	177	734	289	1138
4:00			9		17		26		16:00			102		208		310	
4:15			12		20		32		16:15			98		187		285	
4:30			14		30		44		16:30			108		163		271	
4:45			20	55	40	107	60	162	16:45			89	397	165	723	254	1120
5:00			13		61		74		17:00			112		174		286	
5:15			17		46		63		17:15			87		175		262	
5:30			15		52		67		17:30			91		169		260	
5:45			41	86	55	214	96	300	17:45			97	387	138	656	235	1043
6:00			24		64		88		18:00			97		173		270	
6:15			26		83		109		18:15			73		156		229	
6:30			36		84		120		18:30			86		151		237	
6:45			35	121	75	306	110	427	18:45			72	328	153	633	225	961
7:00			27		78		105		19:00			69		166		235	
7:15			30		97		127		19:15			64		174		238	
7:30			37		82		119		19:30			62		155		217	
7:45			49	143	122	379	171	522	19:45			70	265	134	629	204	894
8:00			48		93		141		20:00			58		135		193	
8:15			44		80		124		20:15			67		107		174	
8:30			46		117		163		20:30			70		118		188	
8:45			48	186	94	384	142	570	20:45			50	245	131	491	181	736
9:00			36		95		131		21:00			60		139		199	
9:15			50		106		156		21:15			43		101		144	
9:30			55		100		155		21:30			39		86		125	
9:45			59	200	105	406	164	606	21:45			38	180	75	401	113	581
10:00			59		105		164		22:00			26		91		117	
10:15			77		128		205		22:15			27		111		138	
10:30			64		139		203		22:30			17		93		110	
10:45			97	297	134	506	231	803	22:45			18	88	74	369	92	457
11:00			91		169		260		23:00			14		49		63	
11:15			74		168		242		23:15			10		47		57	
11:30			120		207		327		23:30			11		47		58	
11:45			118	403	178	722	296	1125	23:45			19	54	51	194	70	248
TOTALS				1580		3361		4941	TOTALS				3645		7484		11129
SPLIT %				32.0%		68.0%		30.7%	SPLIT %				32.8%		67.2%		69.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,225	10,845	16,070

AM Peak Hour			11:45	11:45	11:45	PM Peak Hour			12:00	12:15	12:15
AM Pk Volume			461	827	1288	PM Pk Volume			470	957	1425
Pk Hr Factor			0.907	0.854	0.873	Pk Hr Factor			0.925	0.949	0.965
7 - 9 Volume	0	0	329	763	1092	4 - 6 Volume	0	0	784	1379	2163
7 - 9 Peak Hour			7:45	7:45	7:45	4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	187	412	599	4 - 6 Pk Volume	0	0	407	723	1120
Pk Hr Factor	0.000	0.000	0.954	0.844	0.876	Pk Hr Factor	0.000	0.000	0.908	0.869	0.903

Prepared by NDS/ATD

VOLUME

Lenwood Rd Bet. I-15 SB Off Ramp & I-15 NB Off Ramp

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA_21-030062-004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	842	3,031	3,873

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00	0	0	7		16		23		12:00	0	0	11		48		59	
0:15	0	0	1		19		20		12:15	0	0	14		52		66	
0:30	0	0	3		16		19		12:30	0	0	14		50		64	
0:45	0	0	7	18	16	67	23	85	12:45	0	0	13	52	40	190	53	242
1:00	0	0	0		17		17		13:00	0	0	9		42		51	
1:15	0	0	2		20		22		13:15	0	0	12		48		60	
1:30	0	0	3		17		20		13:30	0	0	10		46		56	
1:45	0	0	3	8	17	71	20	79	13:45	0	0	7	38	41	177	48	215
2:00	0	0	7		18		25		14:00	0	0	11		37		48	
2:15	0	0	2		22		24		14:15	0	0	16		35		51	
2:30	0	0	0		19		19		14:30	0	0	8		39		47	
2:45	0	0	3	12	22	81	25	93	14:45	0	0	11	46	66	177	77	223
3:00	0	0	3		27		30		15:00	0	0	14		42		56	
3:15	0	0	1		20		21		15:15	0	0	12		38		50	
3:30	0	0	1		18		19		15:30	0	0	13		40		53	
3:45	0	0	3	8	18	83	21	91	15:45	0	0	10	49	37	157	47	206
4:00	0	0	5		16		21		16:00	0	0	16		33		49	
4:15	0	0	16		32		48		16:15	0	0	17		32		49	
4:30	0	0	12		40		52		16:30	0	0	18		39		57	
4:45	0	0	9	42	31	119	40	161	16:45	0	0	14	65	29	133	43	198
5:00	0	0	3		28		31		17:00	0	0	12		34		46	
5:15	0	0	4		29		33		17:15	0	0	11		36		47	
5:30	0	0	2		32		34		17:30	0	0	19		32		51	
5:45	0	0	6	15	33	122	39	137	17:45	0	0	12	54	44	146	56	200
6:00	0	0	8		35		43		18:00	0	0	20		39		59	
6:15	0	0	2		42		44		18:15	0	0	18		38		56	
6:30	0	0	6		40		46		18:30	0	0	13		45		58	
6:45	0	0	0	16	37	154	37	170	18:45	0	0	18	69	46	168	64	237
7:00	0	0	3		29		32		19:00	0	0	13		35		48	
7:15	0	0	1		34		35		19:15	0	0	7		30		37	
7:30	0	0	7		37		44		19:30	0	0	5		33		38	
7:45	0	0	3	14	30	130	33	144	19:45	0	0	14	39	24	122	38	161
8:00	0	0	9		29		38		20:00	0	0	9		32		41	
8:15	0	0	6		28		34		20:15	0	0	7		41		48	
8:30	0	0	9		45		54		20:30	0	0	6		43		49	
8:45	0	0	19	43	28	130	47	173	20:45	0	0	10	32	21	137	31	169
9:00	0	0	10		36		46		21:00	0	0	10		20		30	
9:15	0	0	6		29		35		21:15	0	0	7		24		31	
9:30	0	0	11		35		46		21:30	0	0	6		15		21	
9:45	0	0	20	47	28	128	48	175	21:45	0	0	3	26	26	85	29	111
10:00	0	0	11		33		44		22:00	0	0	5		12		17	
10:15	0	0	12		35		47		22:15	0	0	6		21		27	
10:30	0	0	10		32		42		22:30	0	0	10		25		35	
10:45	0	0	5	38	35	135	40	173	22:45	0	0	9	30	21	79	30	109
11:00	0	0	21		40		61		23:00	0	0	6		14		20	
11:15	0	0	13		41		54		23:15	0	0	4		26		30	
11:30	0	0	11		43		54		23:30	0	0	6		20		26	
11:45	0	0	18	63	40	164	58	227	23:45	0	0	2	18	16	76	18	94
TOTALS				324		1384		**1708**	**TOTALS**				518		1647		**2165**
SPLIT %				19.0%		81.0%		**44.1%**	**SPLIT %**				23.9%		76.1%		**55.9%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	842	3,031	3,873

AM Peak Hour			11:00	11:45	**11:45**	**PM Peak Hour**			17:30	12:00	**12:00**
AM Pk Volume			63	190	**247**	**PM Pk Volume**			69	190	**242**
Pk Hr Factor			0.750	0.913	**0.936**	**Pk Hr Factor**			0.863	0.913	**0.917**
7 - 9 Volume	0	0	57	260	**317**	**4 - 6 Volume**	0	0	119	279	**398**
7 - 9 Peak Hour			8:00	7:45	**8:00**	**4 - 6 Peak Hour**			16:00	17:00	**17:00**
7 - 9 Pk Volume	0	0	43	132	**173**	**4 - 6 Pk Volume**	0	0	65	146	**200**
Pk Hr Factor	0.000	0.000	0.566	0.733	**0.801**	**Pk Hr Factor**	0.000	0.000	0.903	0.830	**0.893**

Prepared by NDS/ATD

VOLUME - Light Trucks

Lenwood Rd Bet. I-15 SB Off Ramp & I-15 NB Off Ramp

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA_21-030062-004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	418	577

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			2		2		4		12:00			5		9		14	
0:15			0		4		4		12:15			3		5		8	
0:30			0		1		1		12:30			5		11		16	
0:45			0	2	3	10	3	12	12:45			3	16	9	34	12	50
1:00			0		1		1		13:00			4		12		16	
1:15			0		1		1		13:15			4		10		14	
1:30			0		1		1		13:30			2		7		9	
1:45			0		2	5	2	5	13:45			1	11	8	37	9	48
2:00			0		0		0		14:00			0		5		5	
2:15			0		0		0		14:15			3		4		7	
2:30			0		0		0		14:30			4		4		8	
2:45			0		1	1	1	1	14:45			3	10	3	16	6	26
3:00			0		3		3		15:00			5		8		13	
3:15			0		1		1		15:15			2		5		7	
3:30			0		1		1		15:30			0		6		6	
3:45			1	1	1	6	2	7	15:45			2	9	6	25	8	34
4:00			0		2		2		16:00			3		3		6	
4:15			0		2		2		16:15			1		2		3	
4:30			1		3		4		16:30			2		5		7	
4:45			1	2	3	10	4	12	16:45			4	10	4	14	8	24
5:00			1		6		7		17:00			3		5		8	
5:15			2		2		4		17:15			2		8		10	
5:30			0		0		0		17:30			2		3		5	
5:45			3	6	4	12	7	18	17:45			3	10	5	21	8	31
6:00			1		6		7		18:00			3		3		6	
6:15			0		3		3		18:15			3		3		6	
6:30			0		8		8		18:30			0		4		4	
6:45			0	1	6	23	6	24	18:45			2	8	2	12	4	20
7:00			0		8		8		19:00			0		4		4	
7:15			0		7		7		19:15			1		2		3	
7:30			1		7		8		19:30			0		2		2	
7:45			1	2	4	26	5	28	19:45			7	8	4	12	11	20
8:00			1		9		10		20:00			2		4		6	
8:15			1		5		6		20:15			0		7		7	
8:30			2		3		5		20:30			1		7		8	
8:45			9	13	7	24	16	37	20:45			2	5	3	21	5	26
9:00			3		6		9		21:00			1		3		4	
9:15			2		8		10		21:15			0		2		2	
9:30			4		9		13		21:30			1		2		3	
9:45			8	17	2	25	10	42	21:45			0	2	2	9	2	11
10:00			3		10		13		22:00			0		2		2	
10:15			2		5		7		22:15			1		1		2	
10:30			0		10		10		22:30			2		1		3	
10:45			1	6	5	30	6	36	22:45			2	5	2	6	4	11
11:00			7		7		14		23:00			0		1		1	
11:15			1		7		8		23:15			0		3		3	
11:30			3		6		9		23:30			0		1		1	
11:45			4	15	11	31	15	46	23:45			0		3	8	3	8
TOTALS				65		203		**268**	**TOTALS**				94		215		**309**
SPLIT %				24.3%		75.7%		**46.4%**	**SPLIT %**				30.4%		69.6%		**53.6%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	418	577

AM Peak Hour			8:45	11:45	**11:45**	**PM Peak Hour**			12:00	12:30	**12:30**
AM Pk Volume			18	36	**53**	**PM Pk Volume**			16	42	**58**
Pk Hr Factor			0.500	0.818	**0.828**	**Pk Hr Factor**			0.800	0.875	**0.906**
7 - 9 Volume	0	0	15	50	**65**	**4 - 6 Volume**	0	0	20	35	**55**
7 - 9 Peak Hour			8:00	7:15	**8:00**	**4 - 6 Peak Hour**			16:30	16:30	**16:30**
7 - 9 Pk Volume	0	0	13	27	**37**	**4 - 6 Pk Volume**	0	0	11	22	**33**
Pk Hr Factor	0.000	0.000	0.361	0.750	**0.578**	**Pk Hr Factor**	0.000	0.000	0.688	0.688	**0.825**

Prepared by NDS/ATD

VOLUME - Heavy Trucks

Lenwood Rd Bet. I-15 SB Off Ramp & I-15 NB Off Ramp

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA_21-030062-004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	683	2,613	3,296

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			5		14		19		12:00			6		39		45	
0:15			1		15		16		12:15			11		47		58	
0:30			3		15		18		12:30			9		39		48	
0:45			7	16	13	57	20	73	12:45			10	36	31	156	41	192
1:00			0		16		16		13:00			5		30		35	
1:15			2		19		21		13:15			8		38		46	
1:30			3		16		19		13:30			8		39		47	
1:45			3	8	15	66	18	74	13:45			6	27	33	140	39	167
2:00			7		18		25		14:00			11		32		43	
2:15			2		22		24		14:15			13		31		44	
2:30			0		19		19		14:30			4		35		39	
2:45			3	12	21	80	24	92	14:45			8	36	63	161	71	197
3:00			3		24		27		15:00			9		34		43	
3:15			1		19		20		15:15			10		33		43	
3:30			1		17		18		15:30			13		34		47	
3:45			2	7	17	77	19	84	15:45			8	40	31	132	39	172
4:00			5		14		19		16:00			13		30		43	
4:15			16		30		46		16:15			16		30		46	
4:30			11		37		48		16:30			16		34		50	
4:45			8	40	28	109	36	149	16:45			10	55	25	119	35	174
5:00			2		22		24		17:00			9		29		38	
5:15			2		27		29		17:15			9		28		37	
5:30			2		32		34		17:30			17		29		46	
5:45			3	9	29	110	32	119	17:45			9	44	39	125	48	169
6:00			7		29		36		18:00			17		36		53	
6:15			2		39		41		18:15			15		35		50	
6:30			6		32		38		18:30			13		41		54	
6:45			0	15	31	131	31	146	18:45			16	61	44	156	60	217
7:00			3		21		24		19:00			13		31		44	
7:15			1		27		28		19:15			6		28		34	
7:30			6		30		36		19:30			5		31		36	
7:45			2	12	26	104	28	116	19:45			7	31	20	110	27	141
8:00			8		20		28		20:00			7		28		35	
8:15			5		23		28		20:15			7		34		41	
8:30			7		42		49		20:30			5		36		41	
8:45			10	30	21	106	31	136	20:45			8	27	18	116	26	143
9:00			7		30		37		21:00			9		17		26	
9:15			4		21		25		21:15			7		22		29	
9:30			7		26		33		21:30			5		13		18	
9:45			12	30	26	103	38	133	21:45			3	24	24	76	27	100
10:00			8		23		31		22:00			5		10		15	
10:15			10		30		40		22:15			5		20		25	
10:30			10		22		32		22:30			8		24		32	
10:45			4	32	30	105	34	137	22:45			7	25	19	73	26	98
11:00			14		33		47		23:00			6		13		19	
11:15			12		34		46		23:15			4		23		27	
11:30			8		37		45		23:30			6		19		25	
11:45			14	48	29	133	43	181	23:45			2	18	13	68	15	86
TOTALS				259		1181		**1440**	**TOTALS**				424		1432		**1856**
SPLIT %				18.0%		82.0%		**43.7%**	**SPLIT %**				22.8%		77.2%		**56.3%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	683	2,613	3,296

AM Peak Hour			11:00	11:45	**11:45**	**PM Peak Hour**			18:00	14:30	**18:00**
AM Pk Volume			48	154	**194**	**PM Pk Volume**			61	165	**217**
Pk Hr Factor			0.857	0.819	**0.836**	**Pk Hr Factor**			0.897	0.655	**0.904**
7 - 9 Volume	0	0	42	210	**252**	**4 - 6 Volume**	0	0	99	244	**343**
7 - 9 Peak Hour			8:00	7:45	**8:00**	**4 - 6 Peak Hour**			16:00	17:00	**16:00**
7 - 9 Pk Volume	0	0	30	111	**136**	**4 - 6 Pk Volume**	0	0	55	125	**174**
Pk Hr Factor	0.000	0.000	0.750	0.661	**0.694**	**Pk Hr Factor**	0.000	0.000	0.859	0.801	**0.870**

Prepared by NDS/ATD

VOLUME - Total Volume, All Vehicle Types

Lenwood Rd Bet. I-15 SB Off Ramp & I-15 NB Off Ramp

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA_21-030062-004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6,516	15,926	22,442

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00	0	0	16		53		69		12:00	0	0	136		247		383	
0:15	0	0	14		67		81		12:15	0	0	143		285		428	
0:30	0	0	13		45		58		12:30	0	0	136		328		464	
0:45	0	0	11	54	56	221	67	275	12:45	0	0	110	525	318	1178	428	1703
1:00	0	0	18		50		68		13:00	0	0	130		306		436	
1:15	0	0	13		44		57		13:15	0	0	128		287		415	
1:30	0	0	14		33		47		13:30	0	0	129		312		441	
1:45	0	0	8	53	34	161	42	214	13:45	0	0	137	524	270	1175	407	1699
2:00	0	0	7		52		59		14:00	0	0	124		313		437	
2:15	0	0	5		32		37		14:15	0	0	113		300		413	
2:30	0	0	5		29		34		14:30	0	0	127		281		408	
2:45	0	0	13	30	24	137	37	167	14:45	0	0	128	492	232	1126	360	1618
3:00	0	0	6		49		55		15:00	0	0	101		280		381	
3:15	0	0	8		40		48		15:15	0	0	123		261		384	
3:30	0	0	4		34		38		15:30	0	0	102		278		380	
3:45	0	0	17	35	42	165	59	200	15:45	0	0	114	440	230	1049	344	1489
4:00	0	0	5		60		65		16:00	0	0	101		231		332	
4:15	0	0	10		39		49		16:15	0	0	119		233		352	
4:30	0	0	8		56		64		16:30	0	0	109		228		337	
4:45	0	0	17	40	60	215	77	255	16:45	0	0	238	567	465	1157	703	1724
5:00	0	0	19		79		98		17:00	0	0	106		221		327	
5:15	0	0	14		85		99		17:15	0	0	137		245		382	
5:30	0	0	23		102		125		17:30	0	0	103		239		342	
5:45	0	0	40	96	77	343	117	439	17:45	0	0	101	447	199	904	300	1351
6:00	0	0	30		83		113		18:00	0	0	99		238		337	
6:15	0	0	45		124		169		18:15	0	0	78		191		269	
6:30	0	0	34		137		171		18:30	0	0	87		227		314	
6:45	0	0	58	167	118	462	176	629	18:45	0	0	89	353	213	869	302	1222
7:00	0	0	35		137		172		19:00	0	0	79		218		297	
7:15	0	0	34		77		111		19:15	0	0	95		210		305	
7:30	0	0	42		158		200		19:30	0	0	70		225		295	
7:45	0	0	63	174	146	518	209	692	19:45	0	0	80	324	191	844	271	1168
8:00	0	0	49		131		180		20:00	0	0	83		226		309	
8:15	0	0	55		141		196		20:15	0	0	82		222		304	
8:30	0	0	59		139		198		20:30	0	0	70		218		288	
8:45	0	0	65	228	127	538	192	766	20:45	0	0	80	315	205	871	285	1186
9:00	0	0	65		171		236		21:00	0	0	50		152		202	
9:15	0	0	66		173		239		21:15	0	0	72		179		251	
9:30	0	0	45		157		202		21:30	0	0	47		189		236	
9:45	0	0	70	246	136	637	206	883	21:45	0	0	59	228	157	677	216	905
10:00	0	0	74		181		255		22:00	0	0	35		151		186	
10:15	0	0	103		197		300		22:15	0	0	38		107		145	
10:30	0	0	114		189		303		22:30	0	0	30		132		162	
10:45	0	0	134	425	236	803	370	1228	22:45	0	0	33	136	113	503	146	639
11:00	0	0	132		245		377		23:00	0	0	22		105		127	
11:15	0	0	107		245		352		23:15	0	0	33		71		104	
11:30	0	0	138		237		375		23:30	0	0	19		87		106	
11:45	0	0	143	520	307	1034	450	1554	23:45	0	0	23	97	76	339	99	436
TOTALS				2068		5234		**7302**	**TOTALS**				4448		10692		**15140**
SPLIT %				28.3%		71.7%		**32.5%**	**SPLIT %**				29.4%		70.6%		**67.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6,516	15,926	22,442

AM Peak Hour			11:30	11:45	**11:45**	**PM Peak Hour**			16:30	12:30	**12:15**
AM Pk Volume			560	1167	**1725**	**PM Pk Volume**			590	1239	**1756**
Pk Hr Factor			0.979	0.889	**0.929**	**Pk Hr Factor**			0.620	0.944	**0.946**
7 - 9 Volume	0	0	402	1056	**1458**	**4 - 6 Volume**	0	0	1014	2061	**3075**
7 - 9 Peak Hour			8:00	7:30	**7:30**	**4 - 6 Peak Hour**			16:30	16:45	**16:45**
7 - 9 Pk Volume	0	0	228	576	**785**	**4 - 6 Pk Volume**	0	0	590	1170	**1754**
Pk Hr Factor	0.000	0.000	0.877	0.911	**0.939**	**Pk Hr Factor**	0.000	0.000	0.620	0.629	**0.624**

Prepared by NDS/ATD

VOLUME - Passenger Cars

Lenwood Rd Bet. I-15 SB Off Ramp & I-15 NB Off Ramp

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA_21-030062-004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,605	12,746	18,351

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			11		34		45		12:00			119		205		324	
0:15			9		42		51		12:15			124		252		376	
0:30			10		28		38		12:30			124		286		410	
0:45			6	36	33	137	39	173	12:45			99	466	269	1012	368	1478
1:00			8		29		37		13:00			117		260		377	
1:15			8		24		32		13:15			113		233		346	
1:30			12		11		23		13:30			114		263		377	
1:45			5	33	24	88	29	121	13:45			121	465	234	990	355	1455
2:00			3		25		28		14:00			107		269		376	
2:15			4		11		15		14:15			104		247		351	
2:30			3		15		18		14:30			111		234		345	
2:45			7	17	8	59	15	76	14:45			107	429	191	941	298	1370
3:00			2		21		23		15:00			82		243		325	
3:15			3		16		19		15:15			106		214		320	
3:30			2		13		15		15:30			87		216		303	
3:45			13	20	18	68	31	88	15:45			101	376	188	861	289	1237
4:00			3		33		36		16:00			83		183		266	
4:15			7		16		23		16:15			98		197		295	
4:30			5		27		32		16:30			94		186		280	
4:45			16	31	41	117	57	148	16:45			209	484	376	942	585	1426
5:00			17		38		55		17:00			93		176		269	
5:15			11		64		75		17:15			122		212		334	
5:30			18		66		84		17:30			92		192		284	
5:45			35	81	47	215	82	296	17:45			93	400	165	745	258	1145
6:00			21		58		79		18:00			88		204		292	
6:15			38		83		121		18:15			63		161		224	
6:30			29		97		126		18:30			78		194		272	
6:45			49	137	77	315	126	452	18:45			75	304	177	736	252	1040
7:00			24		85		109		19:00			64		181		245	
7:15			26		56		82		19:15			81		183		264	
7:30			34		110		144		19:30			68		205		273	
7:45			57	141	104	355	161	496	19:45			69	282	161	730	230	1012
8:00			46		104		150		20:00			68		195		263	
8:15			49		104		153		20:15			75		190		265	
8:30			51		99		150		20:30			58		180		238	
8:45			53	199	102	409	155	608	20:45			67	268	159	724	226	992
9:00			61		135		196		21:00			47		124		171	
9:15			59		148		207		21:15			63		151		214	
9:30			37		133		170		21:30			41		157		198	
9:45			61	218	110	526	171	744	21:45			53	204	124	556	177	760
10:00			63		140		203		22:00			30		125		155	
10:15			92		166		258		22:15			26		88		114	
10:30			102		147		249		22:30			26		112		138	
10:45			124	381	204	657	328	1038	22:45			28	110	93	418	121	528
11:00			119		216		335		23:00			15		79		94	
11:15			97		211		308		23:15			22		57		79	
11:30			121		203		324		23:30			8		61		69	
11:45			128	465	257	887	385	1352	23:45			13	58	61	258	74	316
TOTALS				1759		3833		**5592**	**TOTALS**				3846		8913		**12759**
SPLIT %				31.5%		68.5%		**30.5%**	**SPLIT %**				30.1%		69.9%		**69.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,605	12,746	18,351

AM Peak Hour			11:45	11:45	**11:45**	**PM Peak Hour**			16:30	12:15	**12:15**
AM Pk Volume			495	1000	**1495**	**PM Pk Volume**			518	1067	**1531**
Pk Hr Factor			0.967	0.874	**0.912**	**Pk Hr Factor**			0.620	0.933	**0.934**
7 - 9 Volume	0	0	340	764	**1104**	**4 - 6 Volume**	0	0	884	1687	**2571**
7 - 9 Peak Hour			7:45	7:30	**7:45**	**4 - 6 Peak Hour**			16:30	16:45	**16:45**
7 - 9 Pk Volume	0	0	203	422	**614**	**4 - 6 Pk Volume**	0	0	518	956	**1472**
Pk Hr Factor	0.000	0.000	0.890	0.959	**0.953**	**Pk Hr Factor**	0.000	0.000	0.620	0.636	**0.629**

Prepared by NDS/ATD

VOLUME

Lenwood Rd Bet. I-15 SB Off Ramp & I-15 NB Off Ramp

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA_21-030062-004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	911	3,180	4,091

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00	0	0	5		19		24		12:00	0	0	17		42		59	
0:15	0	0	5		25		30		12:15	0	0	19		33		52	
0:30	0	0	3		17		20		12:30	0	0	12		42		54	
0:45	0	0	5	18	23	84	28	102	12:45	0	0	11	59	49	166	60	225
1:00	0	0	10		21		31		13:00	0	0	13		46		59	
1:15	0	0	5		20		25		13:15	0	0	15		54		69	
1:30	0	0	2		22		24		13:30	0	0	15		49		64	
1:45	0	0	3	20	10	73	13	93	13:45	0	0	16	59	36	185	52	244
2:00	0	0	4		27		31		14:00	0	0	17		44		61	
2:15	0	0	1		21		22		14:15	0	0	9		53		62	
2:30	0	0	2		14		16		14:30	0	0	16		47		63	
2:45	0	0	6	13	16	78	22	91	14:45	0	0	21	63	41	185	62	248
3:00	0	0	4		28		32		15:00	0	0	19		37		56	
3:15	0	0	5		24		29		15:15	0	0	17		47		64	
3:30	0	0	2		21		23		15:30	0	0	15		62		77	
3:45	0	0	4	15	24	97	28	112	15:45	0	0	13	64	42	188	55	252
4:00	0	0	2		27		29		16:00	0	0	18		48		66	
4:15	0	0	3		23		26		16:15	0	0	21		36		57	
4:30	0	0	3		29		32		16:30	0	0	15		42		57	
4:45	0	0	1	9	19	98	20	107	16:45	0	0	29	83	89	215	118	298
5:00	0	0	2		41		43		17:00	0	0	13		45		58	
5:15	0	0	3		21		24		17:15	0	0	15		33		48	
5:30	0	0	5		36		41		17:30	0	0	11		47		58	
5:45	0	0	5	15	30	128	35	143	17:45	0	0	8	47	34	159	42	206
6:00	0	0	9		25		34		18:00	0	0	11		34		45	
6:15	0	0	7		41		48		18:15	0	0	15		30		45	
6:30	0	0	5		40		45		18:30	0	0	9		33		42	
6:45	0	0	9	30	41	147	50	177	18:45	0	0	14	49	36	133	50	182
7:00	0	0	11		52		63		19:00	0	0	15		37		52	
7:15	0	0	8		21		29		19:15	0	0	14		27		41	
7:30	0	0	8		48		56		19:30	0	0	2		20		22	
7:45	0	0	6	33	42	163	48	196	19:45	0	0	11	42	30	114	41	156
8:00	0	0	3		27		30		20:00	0	0	15		31		46	
8:15	0	0	6		37		43		20:15	0	0	7		32		39	
8:30	0	0	8		40		48		20:30	0	0	12		38		50	
8:45	0	0	12	29	25	129	37	158	20:45	0	0	13	47	46	147	59	194
9:00	0	0	4		36		40		21:00	0	0	3		28		31	
9:15	0	0	7		25		32		21:15	0	0	9		28		37	
9:30	0	0	8		24		32		21:30	0	0	6		32		38	
9:45	0	0	9	28	26	111	35	139	21:45	0	0	6	24	33	121	39	145
10:00	0	0	11		41		52		22:00	0	0	5		26		31	
10:15	0	0	11		31		42		22:15	0	0	12		19		31	
10:30	0	0	12		42		54		22:30	0	0	4		20		24	
10:45	0	0	10	44	32	146	42	190	22:45	0	0	5	26	20	85	25	111
11:00	0	0	13		29		42		23:00	0	0	7		26		33	
11:15	0	0	10		34		44		23:15	0	0	11		14		25	
11:30	0	0	17		34		51		23:30	0	0	11		26		37	
11:45	0	0	15	55	50	147	65	202	23:45	0	0	10	39	15	81	25	120
TOTALS				309		1401		**1710**	**TOTALS**				602		1779		**2381**
SPLIT %				18.1%		81.9%		**41.8%**	**SPLIT %**				25.3%		74.7%		**58.2%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	911	3,180	4,091

AM Peak Hour				11:30	6:15	**11:45**	**PM Peak Hour**				16:00	16:00	**16:00**
AM Pk Volume				68	174	**230**	**PM Pk Volume**				83	215	**298**
Pk Hr Factor				0.895	0.837	**0.885**	**Pk Hr Factor**				0.716	0.604	**0.631**
7 - 9 Volume	0	0		62	292	**354**	**4 - 6 Volume**	0	0		130	374	**504**
7 - 9 Peak Hour				7:00	7:00	**7:00**	**4 - 6 Peak Hour**				16:00	16:00	**16:00**
7 - 9 Pk Volume	0	0		33	163	**196**	**4 - 6 Pk Volume**	0	0		83	215	**298**
Pk Hr Factor	0.000	0.000		0.750	0.784	**0.778**	**Pk Hr Factor**	0.000	0.000		0.716	0.604	**0.631**

Prepared by NDS/ATD

VOLUME - Light Trucks

Lenwood Rd Bet. I-15 SB Off Ramp & I-15 NB Off Ramp

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA_21-030062-004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	172	423	595

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			3		2		5		12:00			6		9		15	
0:15			1		6		7		12:15			6		5		11	
0:30			0		2		2		12:30			6		10		16	
0:45			0	4	0	10	0	14	12:45			6	24	12	36	18	60
1:00			0		1		1		13:00			2		7		9	
1:15			1		0		1		13:15			6		5		11	
1:30			0		4		4		13:30			2		11		13	
1:45			1	2	1	6	2	8	13:45			3	13	5	28	8	41
2:00			0		2		2		14:00			4		7		11	
2:15			0		1		1		14:15			0		8		8	
2:30			0		0		0		14:30			3		7		10	
2:45			0		1	4	1	4	14:45			4	11	8	30	12	41
3:00			1		2		3		15:00			2		6		8	
3:15			1		1		2		15:15			4		6		10	
3:30			1		3		4		15:30			2		8		10	
3:45			1	4	2	8	3	12	15:45			2	10	6	26	8	36
4:00			0		4		4		16:00			3		7		10	
4:15			1		0		1		16:15			2		3		5	
4:30			0		4		4		16:30			0		3		3	
4:45			0	1	0	8	0	9	16:45			3	8	9	22	12	30
5:00			0		4		4		17:00			1		6		7	
5:15			1		2		3		17:15			1		6		7	
5:30			1		3		4		17:30			0		2		2	
5:45			1	3	1	10	2	13	17:45			3	5	3	17	6	22
6:00			1		4		5		18:00			2		4		6	
6:15			1		2		3		18:15			2		1		3	
6:30			0		6		6		18:30			0		7		7	
6:45			2	4	8	20	10	24	18:45			1	5	3	15	4	20
7:00			2		8		10		19:00			4		3		7	
7:15			3		2		5		19:15			1		4		5	
7:30			3		13		16		19:30			0		0		0	
7:45			1	9	9	32	10	41	19:45			3	8	2	9	5	17
8:00			1		4		5		20:00			4		1		5	
8:15			3		6		9		20:15			1		6		7	
8:30			1		6		7		20:30			3		1		4	
8:45			3	8	2	18	5	26	20:45			2	10	2	10	4	20
9:00			0		9		9		21:00			0		6		6	
9:15			0		2		2		21:15			2		6		8	
9:30			1		2		3		21:30			1		4		5	
9:45			2	3	4	17	6	20	21:45			2	5	2	18	4	23
10:00			4		10		14		22:00			2		6		8	
10:15			3		7		10		22:15			3		1		4	
10:30			4		5		9		22:30			0		4		4	
10:45			4	15	4	26	8	41	22:45			0	5	2	13	2	18
11:00			2		7		9		23:00			0		3		3	
11:15			2		5		7		23:15			3		3		6	
11:30			1		6		7		23:30			1		5		6	
11:45			5	10	8	26	13	36	23:45			1	5	3	14	4	19
TOTALS				63		185		**248**	**TOTALS**				109		238		**347**
SPLIT %				25.4%		74.6%		**41.7%**	**SPLIT %**				31.4%		68.6%		**58.3%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	172	423	595

AM Peak Hour				11:45	7:00	**11:45**	**PM Peak Hour**				12:00	12:00	**12:00**
AM Pk Volume				23	32	**55**	**PM Pk Volume**				24	36	**60**
Pk Hr Factor				0.958	0.615	**0.859**	**Pk Hr Factor**				1.000	0.750	**0.833**
7 - 9 Volume	0	0		17	50	**67**	**4 - 6 Volume**	0	0		13	39	**52**
7 - 9 Peak Hour				7:00	7:00	**7:00**	**4 - 6 Peak Hour**				16:00	16:30	**16:00**
7 - 9 Pk Volume	0	0		9	32	**41**	**4 - 6 Pk Volume**	0	0		8	24	**30**
Pk Hr Factor	0.000	0.000		0.750	0.615	**0.641**	**Pk Hr Factor**	0.000	0.000		0.667	0.667	**0.625**

Prepared by NDS/ATD

VOLUME - Heavy Trucks

Lenwood Rd Bet. I-15 SB Off Ramp & I-15 NB Off Ramp

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA_21-030062-004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	739	2,757	3,496

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			2		17		19		12:00			11		33		44	
0:15			4		19		23		12:15			13		28		41	
0:30			3		15		18		12:30			6		32		38	
0:45			5	14	23	74	28	88	12:45			5	35	37	130	42	165
1:00			10		20		30		13:00			11		39		50	
1:15			4		20		24		13:15			9		49		58	
1:30			2		18		20		13:30			13		38		51	
1:45			2	18	9	67	11	85	13:45			13	46	31	157	44	203
2:00			4		25		29		14:00			13		37		50	
2:15			1		20		21		14:15			9		45		54	
2:30			2		14		16		14:30			13		40		53	
2:45			6	13	15	74	21	87	14:45			17	52	33	155	50	207
3:00			3		26		29		15:00			17		31		48	
3:15			4		23		27		15:15			13		41		54	
3:30			1		18		19		15:30			13		54		67	
3:45			3	11	22	89	25	100	15:45			11	54	36	162	47	216
4:00			2		23		25		16:00			15		41		56	
4:15			2		23		25		16:15			19		33		52	
4:30			3		25		28		16:30			15		39		54	
4:45			1	8	19	90	20	98	16:45			26	75	80	193	106	268
5:00			2		37		39		17:00			12		39		51	
5:15			2		19		21		17:15			14		27		41	
5:30			4		33		37		17:30			11		45		56	
5:45			4	12	29	118	33	130	17:45			5	42	31	142	36	184
6:00			8		21		29		18:00			9		30		39	
6:15			6		39		45		18:15			13		29		42	
6:30			5		34		39		18:30			9		26		35	
6:45			7	26	33	127	40	153	18:45			13	44	33	118	46	162
7:00			9		44		53		19:00			11		34		45	
7:15			5		19		24		19:15			13		23		36	
7:30			5		35		40		19:30			2		20		22	
7:45			5	24	33	131	38	155	19:45			8	34	28	105	36	139
8:00			2		23		25		20:00			11		30		41	
8:15			3		31		34		20:15			6		26		32	
8:30			7		34		41		20:30			9		37		46	
8:45			9	21	23	111	32	132	20:45			11	37	44	137	55	174
9:00			4		27		31		21:00			3		22		25	
9:15			7		23		30		21:15			7		22		29	
9:30			7		22		29		21:30			5		28		33	
9:45			7	25	22	94	29	119	21:45			4	19	31	103	35	122
10:00			7		31		38		22:00			3		20		23	
10:15			8		24		32		22:15			9		18		27	
10:30			8		37		45		22:30			4		16		20	
10:45			6	29	28	120	34	149	22:45			5	21	18	72	23	93
11:00			11		22		33		23:00			7		23		30	
11:15			8		29		37		23:15			8		11		19	
11:30			16		28		44		23:30			10		21		31	
11:45			10	45	42	121	52	166	23:45			9	34	12	67	21	101
TOTALS				246		1216		**1462**	**TOTALS**				493		1541		**2034**
SPLIT %				16.8%		83.2%		**41.8%**	**SPLIT %**				24.2%		75.8%		**58.2%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	739	2,757	3,496

AM Peak Hour			11:30	6:15	**11:30**	**PM Peak Hour**			16:00	16:00	**16:00**
AM Pk Volume			50	150	**181**	**PM Pk Volume**			75	193	**268**
Pk Hr Factor			0.781	0.852	**0.870**	**Pk Hr Factor**			0.721	0.603	**0.632**
7 - 9 Volume	0	0	45	242	**287**	**4 - 6 Volume**	0	0	117	335	**452**
7 - 9 Peak Hour			7:00	7:00	**7:00**	**4 - 6 Peak Hour**			16:00	16:00	**16:00**
7 - 9 Pk Volume	0	0	24	131	**155**	**4 - 6 Pk Volume**	0	0	75	193	**268**
Pk Hr Factor	0.000	0.000	0.667	0.744	**0.731**	**Pk Hr Factor**	0.000	0.000	0.721	0.603	**0.632**

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy W/O Viejo Ct

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_005e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	8	2	0	0	0	0	0	1	0	0	0	0	11
01:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
02:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
03:00	0	13	2	0	0	0	0	2	0	0	0	0	0	17
04:00	0	42	14	0	2	0	0	1	0	0	1	0	0	60
05:00	0	95	21	1	2	0	0	0	0	0	0	0	0	119
06:00	0	132	25	1	8	0	0	0	0	0	1	0	0	167
07:00	0	118	25	1	5	1	0	0	0	0	0	0	0	150
08:00	0	87	18	1	4	2	0	1	0	0	1	0	0	114
09:00	0	61	23	2	4	6	0	1	1	0	1	0	0	99
10:00	0	65	21	1	10	2	0	0	0	0	0	0	0	99
11:00	3	63	20	3	11	3	0	1	0	0	0	0	0	104
12:00 PM	0	76	18	1	4	1	0	1	0	0	0	0	0	101
13:00	1	68	33	1	3	0	0	1	0	0	0	0	0	107
14:00	0	76	22	2	4	0	0	0	0	0	1	0	0	105
15:00	0	71	18	3	2	0	2	1	0	0	0	0	0	97
16:00	0	102	12	4	4	0	0	0	0	0	0	0	0	122
17:00	0	76	18	1	0	1	0	1	1	0	0	0	0	98
18:00	0	85	18	0	2	0	0	0	0	0	0	0	0	105
19:00	0	50	7	0	1	1	0	0	0	0	0	0	0	59
20:00	0	35	12	1	1	0	0	0	0	0	0	0	0	49
21:00	0	44	10	0	0	1	0	0	0	0	0	0	0	55
22:00	0	35	2	0	0	0	0	0	0	0	0	0	0	37
23:00	0	20	2	0	0	0	0	0	0	0	0	0	0	22
Totals	4	1435	345	23	68	18	2	10	3		5			1913
% of Totals	0%	75%	18%	1%	4%	1%	0%	1%	0%		0%			100%

AM Volumes	3	697	173	10	47	14	0	6	2	0	4	0	0	956
% AM	0%	36%	9%	1%	2%	1%		0%	0%		0%			50%
AM Peak Hour	11:00	06:00	06:00	11:00	11:00	09:00		03:00			04:00			06:00
Volume	3	132	25	3	11	6		2	1		1			167
PM Volumes	1	738	172	13	21	4	2	4	1	0	1	0	0	957
% PM	0%	39%	9%	1%	1%	0%	0%	0%	0%		0%			50%
PM Peak Hour	13:00	16:00	13:00	16:00	12:00	12:00	15:00	12:00	17:00		14:00			16:00
Volume	1	102	33	4	4	1	2	1	1		1			122

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	264		14%	208		11%	220		12%	1221		64%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy W/O Viejo Ct

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_005w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	32	1	1	2	0	0	4	1	0	0	0	0	41
01:00	0	16	4	0	1	0	0	1	1	0	0	0	0	23
02:00	0	10	3	0	2	0	0	1	0	0	0	0	0	16
03:00	0	13	1	0	1	0	0	0	0	0	0	0	0	15
04:00	1	6	3	0	2	0	0	0	0	0	0	0	0	12
05:00	0	23	3	0	5	0	0	0	0	0	0	0	0	31
06:00	0	33	9	1	2	1	0	0	0	0	0	0	0	46
07:00	0	44	11	4	7	1	0	0	0	0	0	0	0	67
08:00	0	48	12	2	8	3	0	1	0	0	0	0	0	74
09:00	1	50	20	0	6	2	0	1	1	0	1	0	0	82
10:00	0	48	21	2	10	3	0	0	0	0	0	0	0	84
11:00	0	61	20	1	9	1	1	1	1	0	0	0	0	95
12:00 PM	2	72	16	0	6	4	0	0	0	1	0	0	0	101
13:00	1	90	24	1	10	3	0	0	1	0	0	0	0	130
14:00	2	102	21	0	1	2	0	0	0	0	0	0	0	128
15:00	0	126	31	2	9	1	0	7	0	0	0	0	0	176
16:00	0	160	22	1	9	0	0	0	0	0	0	0	0	192
17:00	0	216	47	1	14	0	0	9	1	0	2	0	0	290
18:00	1	112	28	0	2	1	0	1	2	1	0	0	0	148
19:00	0	92	23	0	2	0	0	2	0	0	0	0	0	119
20:00	0	63	13	0	0	0	0	0	0	0	0	0	0	76
21:00	1	41	7	0	1	0	0	0	0	0	0	0	0	50
22:00	0	38	6	0	0	0	0	0	0	0	0	0	0	44
23:00	0	17	3	0	0	0	0	0	0	0	0	0	0	20
Totals	9	1513	349	16	109	22	1	28	8	2	3			2060
% of Totals	0%	73%	17%	1%	5%	1%	0%	1%	0%	0%	0%			100%

AM Volumes	2	384	108	11	55	11	1	9	4	0	1	0	0	586
% AM	0%	19%	5%	1%	3%	1%	0%	0%	0%		0%			28%
AM Peak Hour	04:00	11:00	10:00	07:00	10:00	08:00	11:00				09:00			11:00
Volume	1	61	21	4	10	3	1	4	1		1			95
PM Volumes	7	1129	241	5	54	11	0	19	4	2	2	0	0	1474
% PM	0%	55%	12%	0%	3%	1%		1%	0%	0%	0%			72%
PM Peak Hour	12:00	17:00	17:00	15:00	17:00	12:00		17:00	18:00	12:00	17:00			17:00
Volume	2	216	47	2	14	4		9	2	1	2			290

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	141	7%	231	11%	482	23%	1206	59%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy W/O Viejo Ct

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_005

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	40	3	1	2	0	0	4	2	0	0	0	0	52
01:00	0	25	5	0	1	0	0	1	1	0	0	0	0	33
02:00	0	14	4	0	3	0	0	1	0	0	0	0	0	22
03:00	0	26	3	0	1	0	0	2	0	0	0	0	0	32
04:00	1	48	17	0	4	0	0	1	0	0	1	0	0	72
05:00	0	118	24	1	7	0	0	0	0	0	0	0	0	150
06:00	0	165	34	2	10	1	0	0	0	0	1	0	0	213
07:00	0	162	36	5	12	2	0	0	0	0	0	0	0	217
08:00	0	135	30	3	12	5	0	2	0	0	1	0	0	188
09:00	1	111	43	2	10	8	0	2	2	0	2	0	0	181
10:00	0	113	42	3	20	5	0	0	0	0	0	0	0	183
11:00	3	124	40	4	20	4	1	2	1	0	0	0	0	199
12:00 PM	2	148	34	1	10	5	0	1	0	1	0	0	0	202
13:00	2	158	57	2	13	3	0	1	1	0	0	0	0	237
14:00	2	178	43	2	5	2	0	0	0	0	1	0	0	233
15:00	0	197	49	5	11	1	2	8	0	0	0	0	0	273
16:00	0	262	34	5	13	0	0	0	0	0	0	0	0	314
17:00	0	292	65	2	14	1	0	10	2	0	2	0	0	388
18:00	1	197	46	0	4	1	0	1	2	1	0	0	0	253
19:00	0	142	30	0	3	1	0	2	0	0	0	0	0	178
20:00	0	98	25	1	1	0	0	0	0	0	0	0	0	125
21:00	1	85	17	0	1	1	0	0	0	0	0	0	0	105
22:00	0	73	8	0	0	0	0	0	0	0	0	0	0	81
23:00	0	37	5	0	0	0	0	0	0	0	0	0	0	42
Totals	13	2948	694	39	177	40	3	38	11	2	8			3973
% of Totals	0%	74%	17%	1%	4%	1%	0%	1%	0%	0%	0%			100%

AM Volumes	5	1081	281	21	102	25	1	15	6	0	5	0	0	1542
% AM	0%	27%	7%	1%	3%	1%	0%	0%	0%		0%			39%
AM Peak Hour	11:00	06:00	09:00	07:00	10:00	09:00	11:00				09:00			07:00
Volume	3	165	43	5	20	8	1	4	2		2			217
PM Volumes	8	1867	413	18	75	15	2	23	5	2	3	0	0	2431
% PM	0%	47%	10%	0%	2%	0%	0%	1%	0%	0%	0%			61%
PM Peak Hour	12:00	17:00	17:00	15:00	17:00	12:00	15:00	17:00	17:00	12:00	17:00			17:00
Volume	2	292	65	5	14	5	2	10	2	1	2			388

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	405		10%	439		11%	702		18%	2427		61%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy W/O Viejo Ct

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_005e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	12	0	0	0	0	0	1	0	0	0	0	0	13
01:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
02:00	0	6	0	0	1	0	0	2	0	0	0	0	0	9
03:00	0	16	6	0	0	0	0	0	0	0	0	0	0	22
04:00	0	30	13	0	0	0	0	0	0	0	0	0	0	43
05:00	0	89	25	2	6	2	0	0	0	0	1	0	0	125
06:00	1	113	20	1	6	1	0	1	0	0	1	0	0	144
07:00	0	118	31	1	3	3	0	0	0	0	0	0	0	156
08:00	0	79	26	1	6	0	0	0	0	0	0	0	0	112
09:00	0	52	18	0	2	1	0	1	1	0	2	0	0	77
10:00	0	68	9	1	5	1	0	1	0	0	0	0	0	85
11:00	0	61	25	2	3	0	0	1	0	0	0	0	0	92
12:00 PM	0	80	17	0	2	1	0	1	1	0	0	0	0	102
13:00	1	58	19	0	7	1	0	0	1	0	1	0	0	88
14:00	0	70	22	3	2	1	0	0	0	0	0	0	0	98
15:00	1	62	12	1	6	1	0	0	0	0	0	0	0	83
16:00	0	81	22	4	2	0	0	0	0	0	0	0	0	109
17:00	0	78	21	2	1	0	0	1	0	0	0	0	0	103
18:00	0	58	19	0	1	1	0	0	0	0	0	0	0	79
19:00	0	55	11	1	1	0	0	0	0	0	0	0	0	68
20:00	0	59	14	1	1	0	0	0	1	0	0	0	0	76
21:00	0	41	5	0	0	0	0	0	0	0	0	0	0	46
22:00	0	40	9	0	0	2	0	0	0	0	0	0	0	51
23:00	0	19	0	0	1	0	0	0	0	0	0	0	0	20
Totals	3	1354	345	20	56	15		9	4		5			1811
% of Totals	0%	75%	19%	1%	3%	1%		0%	0%		0%			100%

AM Volumes	1	653	174	8	32	8	0	7	1	0	4	0	0	888
% AM	0%	36%	10%	0%	2%	0%		0%	0%		0%			49%
AM Peak Hour	06:00	07:00	07:00	05:00	05:00	07:00		02:00	09:00		09:00			07:00
Volume	1	118	31	2	6	3		2	1		2			156
PM Volumes	2	701	171	12	24	7	0	2	3	0	1	0	0	923
% PM	0%	39%	9%	1%	1%	0%		0%	0%		0%			51%
PM Peak Hour	13:00	16:00	14:00	16:00	13:00	22:00		12:00	12:00		13:00			16:00
Volume	1	81	22	4	7	2		1	1		1			109

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	268	↔	15%	190	↔	10%	212	↔	12%	1141	↔	63%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy W/O Viejo Ct

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_005w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	13	4	0	1	0	0	1	0	0	0	0	0	19
01:00	0	14	5	0	0	0	0	0	0	0	0	0	0	19
02:00	0	3	3	0	1	0	0	0	0	0	0	0	0	7
03:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
04:00	0	5	2	0	2	0	0	0	0	0	0	0	0	9
05:00	0	22	1	0	6	1	0	0	0	0	0	0	0	30
06:00	0	25	6	1	2	1	0	0	1	0	0	0	0	36
07:00	0	31	13	4	7	3	0	0	0	0	0	0	0	58
08:00	0	35	7	2	6	2	1	0	1	0	0	0	0	54
09:00	0	39	19	0	2	3	0	0	1	0	0	0	0	64
10:00	0	47	15	1	2	1	0	0	1	0	0	0	0	67
11:00	1	55	23	1	3	1	1	1	1	0	0	0	0	87
12:00 PM	1	74	18	1	8	0	0	0	1	0	0	0	0	103
13:00	1	69	26	0	3	2	0	0	1	0	0	0	0	102
14:00	0	106	29	2	4	0	0	0	0	1	0	0	0	142
15:00	0	126	17	0	8	0	0	2	0	0	1	0	0	154
16:00	0	178	40	1	7	1	0	1	0	0	0	0	0	228
17:00	1	148	39	2	7	0	0	0	1	0	0	0	0	198
18:00	0	75	26	2	2	0	0	0	0	0	0	0	0	105
19:00	1	70	28	0	2	1	0	0	1	0	0	0	0	103
20:00	0	72	13	0	0	0	0	0	0	0	0	0	0	85
21:00	1	47	7	0	0	0	0	0	0	0	0	0	0	55
22:00	0	30	9	0	0	1	0	0	0	0	0	0	0	40
23:00	0	19	6	0	0	0	0	0	0	0	0	0	0	25
Totals	6	1311	357	17	73	17	2	5	9	1	1			1799
% of Totals	0%	73%	20%	1%	4%	1%	0%	0%	1%	0%	0%			100%

AM Volumes	1	297	99	9	32	12	2	2	5	0	0	0	0	459
% AM	0%	17%	6%	1%	2%	1%	0%	0%	0%					26%
AM Peak Hour	11:00	11:00	11:00	07:00	07:00	07:00	08:00		06:00					11:00
Volume	1	55	23	4	7	3	1	1	1					87
PM Volumes	5	1014	258	8	41	5	0	3	4	1	1	0	0	1340
% PM	0%	56%	14%	0%	2%	0%		0%	0%	0%	0%			74%
PM Peak Hour	12:00	16:00	16:00	14:00	12:00	13:00		15:00	12:00	14:00	15:00			16:00
Volume	1	178	40	2	8	2		2	1	1	1			228

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	112		6%	205		11%	426		24%	1056		59%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy W/O Viejo Ct

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_005

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	25	4	0	1	0	0	2	0	0	0	0	0	32
01:00	0	23	6	0	0	0	0	0	0	0	0	0	0	29
02:00	0	9	3	0	2	0	0	2	0	0	0	0	0	16
03:00	0	24	7	0	0	0	0	0	0	0	0	0	0	31
04:00	0	35	15	0	2	0	0	0	0	0	0	0	0	52
05:00	0	111	26	2	12	3	0	0	0	0	1	0	0	155
06:00	1	138	26	2	8	2	0	1	1	0	1	0	0	180
07:00	0	149	44	5	10	6	0	0	0	0	0	0	0	214
08:00	0	114	33	3	12	2	1	0	1	0	0	0	0	166
09:00	0	91	37	0	4	4	0	1	2	0	2	0	0	141
10:00	0	115	24	2	7	2	0	1	1	0	0	0	0	152
11:00	1	116	48	3	6	1	1	2	1	0	0	0	0	179
12:00 PM	1	154	35	1	10	1	0	1	2	0	0	0	0	205
13:00	2	127	45	0	10	3	0	0	2	0	1	0	0	190
14:00	0	176	51	5	6	1	0	0	0	1	0	0	0	240
15:00	1	188	29	1	14	1	0	2	0	0	1	0	0	237
16:00	0	259	62	5	9	1	0	1	0	0	0	0	0	337
17:00	1	226	60	4	8	0	0	1	1	0	0	0	0	301
18:00	0	133	45	2	3	1	0	0	0	0	0	0	0	184
19:00	1	125	39	1	3	1	0	0	1	0	0	0	0	171
20:00	0	131	27	1	1	0	0	0	1	0	0	0	0	161
21:00	1	88	12	0	0	0	0	0	0	0	0	0	0	101
22:00	0	70	18	0	0	3	0	0	0	0	0	0	0	91
23:00	0	38	6	0	1	0	0	0	0	0	0	0	0	45
Totals	9	2665	702	37	129	32	2	14	13	1	6			3610
% of Totals	0%	74%	19%	1%	4%	1%	0%	0%	0%	0%	0%			100%

AM Volumes	2	950	273	17	64	20	2	9	6	0	4	0	0	1347
% AM	0%	26%	8%	0%	2%	1%	0%	0%	0%		0%			37%
AM Peak Hour	06:00	07:00	11:00	07:00	05:00	07:00	08:00		09:00		09:00			07:00
Volume	1	149	48	5	12	6	1	2	2		2			214
PM Volumes	7	1715	429	20	65	12	0	5	7	1	2	0	0	2263
% PM	0%	48%	12%	1%	2%	0%		0%	0%	0%	0%			63%
PM Peak Hour	13:00	16:00	16:00	14:00	15:00	13:00		15:00	12:00	14:00	13:00			16:00
Volume	2	259	62	5	14	3		2	2	1	1			337

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	380		11%	395		11%	638		18%	2197		61%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy Bet. Pettit Rd & Ewing Rd

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_007e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	27	9	0	0	0	0	0	0	0	0	0	0	36
01:00	0	17	8	0	0	0	0	0	0	0	0	0	0	25
02:00	0	25	2	0	0	0	0	0	0	0	0	0	0	27
03:00	0	28	8	0	0	0	0	1	0	0	0	0	0	37
04:00	0	48	20	1	2	0	0	1	0	0	1	0	0	73
05:00	0	157	52	1	9	0	0	0	0	0	0	0	0	219
06:00	0	215	70	1	14	0	0	0	0	0	1	0	0	301
07:00	0	230	73	2	13	1	0	0	1	0	0	0	0	320
08:00	0	194	78	5	12	0	0	1	1	0	1	0	0	292
09:00	0	204	69	3	17	0	0	2	2	0	1	0	0	298
10:00	0	168	62	0	18	0	0	2	0	0	0	0	0	250
11:00	0	202	64	1	21	1	0	1	0	0	0	0	0	290
12:00 PM	0	209	69	4	20	1	0	2	1	0	0	0	0	306
13:00	0	205	80	0	12	0	0	2	1	0	0	0	0	300
14:00	0	200	67	3	10	1	0	0	0	0	0	0	0	281
15:00	0	194	66	0	12	0	0	1	1	0	0	0	0	274
16:00	0	226	72	4	6	0	0	3	1	0	0	0	0	312
17:00	0	185	61	1	7	0	0	0	0	0	0	0	0	254
18:00	0	176	64	0	10	0	0	0	1	0	0	0	0	251
19:00	0	127	46	0	9	0	0	0	0	0	0	0	0	182
20:00	0	145	38	1	6	0	0	0	0	0	0	0	0	190
21:00	1	114	24	0	2	0	0	1	0	0	0	0	0	142
22:00	0	110	27	0	4	0	0	0	0	0	0	0	0	141
23:00	0	49	18	0	1	0	0	0	0	0	0	0	0	68
Totals	1	3455	1147	27	205	4		17	9		4			4869
% of Totals	0%	71%	24%	1%	4%	0%		0%	0%		0%			100%

AM Volumes	0	1515	515	14	106	2	0	8	4	0	4	0	0	2168
% AM		31%	11%	0%	2%	0%		0%	0%		0%			45%
AM Peak Hour		07:00	08:00	08:00	11:00	07:00		09:00	09:00		04:00			07:00
Volume		230	78	5	21	1		2	2		1			320
PM Volumes	1	1940	632	13	99	2	0	9	5	0	0	0	0	2701
% PM	0%	40%	13%	0%	2%	0%		0%	0%					55%
PM Peak Hour	21:00	16:00	13:00	12:00	12:00	12:00		16:00	12:00					16:00
Volume	1	226	80	4	20	1		3	1					312

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	612		13%	606		12%	566		12%	3085		63%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy Bet. Pettit Rd & Ewing Rd

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_007w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	52	13	0	2	0	0	2	1	0	0	0	0	70
01:00	1	28	11	0	3	0	0	0	0	0	0	0	0	43
02:00	0	13	6	0	0	0	0	1	2	0	0	0	0	22
03:00	0	20	6	0	0	0	0	1	0	0	0	0	0	27
04:00	0	35	10	0	2	0	0	1	0	0	0	0	0	48
05:00	0	43	15	0	1	0	0	0	1	0	0	0	0	60
06:00	0	92	34	0	8	1	0	2	2	0	0	0	0	139
07:00	0	95	32	3	7	0	0	1	1	0	0	0	0	139
08:00	0	126	48	0	21	2	0	0	1	0	0	0	0	198
09:00	0	130	54	1	12	0	0	1	0	0	0	0	0	198
10:00	0	137	61	1	18	0	0	1	2	0	0	0	0	220
11:00	0	205	62	0	18	1	0	0	3	0	0	0	0	289
12:00 PM	0	169	57	2	19	0	0	0	0	0	0	0	0	247
13:00	0	204	68	0	26	2	0	0	2	0	0	0	0	302
14:00	1	231	72	2	17	0	0	3	2	0	0	0	0	328
15:00	0	280	92	1	22	0	0	0	5	0	0	0	0	400
16:00	0	316	75	1	18	0	0	0	4	0	0	0	0	414
17:00	2	310	111	1	22	0	0	4	6	0	2	0	0	458
18:00	0	221	74	0	16	0	0	1	2	0	0	0	0	314
19:00	0	181	58	0	13	0	0	0	1	0	0	0	0	253
20:00	0	164	44	0	20	0	1	0	2	0	0	0	0	231
21:00	0	148	36	0	1	0	0	0	0	0	0	0	0	185
22:00	0	120	24	0	5	0	0	0	0	0	0	0	0	149
23:00	0	51	17	1	3	0	0	0	1	0	0	0	0	73
Totals	4	3371	1080	13	274	6	1	18	38		2			4807
% of Totals	0%	70%	22%	0%	6%	0%	0%	0%	1%		0%			100%

AM Volumes	1	976	352	5	92	4	0	10	13	0	0	0	0	1453
% AM	0%	20%	7%	0%	2%	0%		0%	0%					30%
AM Peak Hour	01:00	11:00	11:00	07:00	08:00	08:00			11:00					11:00
Volume	1	205	62	3	21	2		2	3					289
PM Volumes	3	2395	728	8	182	2	1	8	25	0	2	0	0	3354
% PM	0%	50%	15%	0%	4%	0%	0%	0%	1%		0%			70%
PM Peak Hour	17:00	16:00	17:00	12:00	13:00	13:00	20:00	17:00	17:00		17:00			17:00
Volume	2	316	111	2	26	2	1	4	6		2			458

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	337		7%	549		11%	872		18%	3049		63%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy Bet. Pettit Rd & Ewing Rd

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_007

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	79	22	0	2	0	0	2	1	0	0	0	0	106
01:00	1	45	19	0	3	0	0	0	0	0	0	0	0	68
02:00	0	38	8	0	0	0	0	1	2	0	0	0	0	49
03:00	0	48	14	0	0	0	0	2	0	0	0	0	0	64
04:00	0	83	30	1	4	0	0	2	0	0	1	0	0	121
05:00	0	200	67	1	10	0	0	0	1	0	0	0	0	279
06:00	0	307	104	1	22	1	0	2	2	0	1	0	0	440
07:00	0	325	105	5	20	1	0	1	2	0	0	0	0	459
08:00	0	320	126	5	33	2	0	1	2	0	1	0	0	490
09:00	0	334	123	4	29	0	0	3	2	0	1	0	0	496
10:00	0	305	123	1	36	0	0	3	2	0	0	0	0	470
11:00	0	407	126	1	39	2	0	1	3	0	0	0	0	579
12:00 PM	0	378	126	6	39	1	0	2	1	0	0	0	0	553
13:00	0	409	148	0	38	2	0	2	3	0	0	0	0	602
14:00	1	431	139	5	27	1	0	3	2	0	0	0	0	609
15:00	0	474	158	1	34	0	0	1	6	0	0	0	0	674
16:00	0	542	147	5	24	0	0	3	5	0	0	0	0	726
17:00	2	495	172	2	29	0	0	4	6	0	2	0	0	712
18:00	0	397	138	0	26	0	0	1	3	0	0	0	0	565
19:00	0	308	104	0	22	0	0	0	1	0	0	0	0	435
20:00	0	309	82	1	26	0	1	0	2	0	0	0	0	421
21:00	1	262	60	0	3	0	0	1	0	0	0	0	0	327
22:00	0	230	51	0	9	0	0	0	0	0	0	0	0	290
23:00	0	100	35	1	4	0	0	0	1	0	0	0	0	141
Totals	5	6826	2227	40	479	10	1	35	47		6			9676
% of Totals	0%	71%	23%	0%	5%	0%	0%	0%	0%		0%			100%

AM Volumes	1	2491	867	19	198	6	0	18	17	0	4	0	0	3621
% AM	0%	26%	9%	0%	2%	0%		0%	0%		0%			37%
AM Peak Hour	01:00	11:00	08:00	07:00	11:00	08:00		09:00	11:00		04:00			11:00
Volume	1	407	126	5	39	2		3	3		1			579
PM Volumes	4	4335	1360	21	281	4	1	17	30	0	2	0	0	6055
% PM	0%	45%	14%	0%	3%	0%	0%	0%	0%		0%			63%
PM Peak Hour	17:00	16:00	17:00	12:00	12:00	13:00	20:00	17:00	15:00		17:00			16:00
Volume	2	542	172	6	39	2	1	4	6		2			726

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	949		10%	1155		12%	1438		15%	6134		63%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy Bet. Pettit Rd & Ewing Rd

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_007e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	27	10	0	2	0	0	0	0	0	0	0	0	39
01:00	0	20	4	0	0	0	0	1	1	0	0	0	0	26
02:00	0	24	7	0	0	0	0	1	0	0	0	0	0	32
03:00	0	35	4	0	0	0	0	0	0	0	0	0	0	39
04:00	0	54	18	0	1	0	0	0	0	0	0	0	0	73
05:00	0	130	43	1	5	0	0	0	0	0	1	0	0	180
06:00	0	208	58	1	7	0	0	1	0	0	1	0	0	276
07:00	1	224	76	2	12	0	0	1	1	0	0	0	0	317
08:00	0	163	66	1	13	0	0	2	0	0	0	0	0	245
09:00	1	170	70	2	10	0	1	2	2	0	2	0	0	260
10:00	0	170	56	1	9	0	0	1	2	0	0	0	0	239
11:00	1	184	65	1	13	0	0	2	0	0	0	0	0	266
12:00 PM	0	166	51	1	16	0	0	0	2	0	0	0	0	236
13:00	0	177	78	0	11	1	0	4	3	0	1	0	0	275
14:00	0	198	62	3	11	0	0	1	0	0	0	0	0	275
15:00	0	181	68	0	12	1	0	0	1	0	0	0	0	263
16:00	5	192	71	0	16	0	0	2	0	0	0	0	0	286
17:00	0	183	63	0	11	0	0	2	0	0	0	0	0	259
18:00	0	148	49	0	5	0	0	0	0	0	0	0	0	202
19:00	1	164	55	0	8	0	0	1	0	0	0	0	0	229
20:00	0	124	43	0	7	0	0	0	0	0	0	0	0	174
21:00	0	103	32	0	5	0	0	0	0	0	0	0	0	140
22:00	1	61	33	0	2	0	0	0	0	0	0	0	0	97
23:00	0	47	20	0	4	0	0	0	0	0	0	0	0	71
Totals	10	3153	1102	13	180	2	1	21	12		5			4499
% of Totals	0%	70%	24%	0%	4%	0%	0%	0%	0%		0%			100%

AM Volumes	3	1409	477	9	72	0	1	11	6	0	4	0	0	1992
% AM	0%	31%	11%	0%	2%		0%	0%	0%		0%			44%
AM Peak Hour	07:00	07:00	07:00	07:00	08:00		09:00	08:00	09:00		09:00			07:00
Volume	1	224	76	2	13		1	2	2		2			317
PM Volumes	7	1744	625	4	108	2	0	10	6	0	1	0	0	2507
% PM	0%	39%	14%	0%	2%	0%		0%	0%		0%			56%
PM Peak Hour	16:00	14:00	13:00	14:00	12:00	13:00		13:00	13:00		13:00			16:00
Volume	5	198	78	3	16	1		4	3		1			286

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	562		12%	511		11%	545		12%	2881		64%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy Bet. Pettit Rd & Ewing Rd

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_007w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	33	16	0	0	0	0	0	0	0	0	0	0	49
01:00	1	17	12	0	3	0	0	1	0	0	0	0	0	34
02:00	0	13	7	0	1	0	0	0	0	0	0	0	0	21
03:00	0	23	5	0	1	0	0	0	0	0	0	0	0	29
04:00	0	19	6	0	1	0	0	0	0	0	0	0	0	26
05:00	0	23	9	0	5	0	0	1	0	0	0	0	0	38
06:00	0	85	34	0	6	1	0	1	0	0	0	0	0	127
07:00	0	82	41	3	9	1	0	1	5	0	0	0	0	142
08:00	0	91	36	2	12	0	0	1	0	0	1	0	0	143
09:00	1	124	51	0	3	0	0	1	1	0	0	0	0	181
10:00	0	148	55	0	7	1	0	2	2	0	0	0	0	215
11:00	0	163	59	0	18	0	0	1	1	0	1	0	0	243
12:00 PM	0	191	64	0	9	2	0	0	3	0	0	0	0	269
13:00	0	196	63	2	12	0	0	2	1	0	0	0	0	276
14:00	0	224	79	1	11	1	0	2	2	0	0	0	0	320
15:00	0	236	64	0	19	2	0	1	3	0	0	0	0	325
16:00	1	285	92	1	16	0	0	5	4	0	0	0	0	404
17:00	0	272	94	0	15	0	0	1	1	0	0	0	0	383
18:00	0	207	60	3	4	0	0	0	3	0	0	0	0	277
19:00	0	164	56	1	6	0	0	0	1	0	0	0	0	228
20:00	0	174	46	0	4	0	0	0	1	0	0	0	0	225
21:00	0	127	45	0	3	0	0	0	0	0	0	0	0	175
22:00	0	107	26	0	2	0	0	0	0	0	0	0	0	135
23:00	0	51	17	0	2	0	0	1	0	0	0	0	0	71
Totals	3	3055	1037	13	169	8		21	28		2			4336
% of Totals	0%	70%	24%	0%	4%	0%		0%	1%		0%			100%

AM Volumes	2	821	331	5	66	3	0	9	9	0	2	0	0	1248
% AM	0%	19%	8%	0%	2%	0%		0%	0%		0%			29%
AM Peak Hour	01:00	11:00	11:00	07:00	11:00	06:00		10:00	07:00		08:00			11:00
Volume	1	163	59	3	18	1		2	5		1			243
PM Volumes	1	2234	706	8	103	5	0	12	19	0	0	0	0	3088
% PM	0%	52%	16%	0%	2%	0%		0%	0%					71%
PM Peak Hour	16:00	16:00	17:00	18:00	15:00	12:00		16:00	16:00					16:00
Volume	1	285	94	3	19	2		5	4					404

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	285		7%	545		13%	787		18%	2719		63%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

National Trails Hwy Bet. Pettit Rd & Ewing Rd

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_007

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	60	26	0	2	0	0	0	0	0	0	0	0	88
01:00	1	37	16	0	3	0	0	2	1	0	0	0	0	60
02:00	0	37	14	0	1	0	0	1	0	0	0	0	0	53
03:00	0	58	9	0	1	0	0	0	0	0	0	0	0	68
04:00	0	73	24	0	2	0	0	0	0	0	0	0	0	99
05:00	0	153	52	1	10	0	0	1	0	0	1	0	0	218
06:00	0	293	92	1	13	1	0	2	0	0	1	0	0	403
07:00	1	306	117	5	21	1	0	2	6	0	0	0	0	459
08:00	0	254	102	3	25	0	0	3	0	0	1	0	0	388
09:00	2	294	121	2	13	0	1	3	3	0	2	0	0	441
10:00	0	318	111	1	16	1	0	3	4	0	0	0	0	454
11:00	1	347	124	1	31	0	0	3	1	0	1	0	0	509
12:00 PM	0	357	115	1	25	2	0	0	5	0	0	0	0	505
13:00	0	373	141	2	23	1	0	6	4	0	1	0	0	551
14:00	0	422	141	4	22	1	0	3	2	0	0	0	0	595
15:00	0	417	132	0	31	3	0	1	4	0	0	0	0	588
16:00	6	477	163	1	32	0	0	7	4	0	0	0	0	690
17:00	0	455	157	0	26	0	0	3	1	0	0	0	0	642
18:00	0	355	109	3	9	0	0	0	3	0	0	0	0	479
19:00	1	328	111	1	14	0	0	1	1	0	0	0	0	457
20:00	0	298	89	0	11	0	0	0	1	0	0	0	0	399
21:00	0	230	77	0	8	0	0	0	0	0	0	0	0	315
22:00	1	168	59	0	4	0	0	0	0	0	0	0	0	232
23:00	0	98	37	0	6	0	0	1	0	0	0	0	0	142
Totals	13	6208	2139	26	349	10	1	42	40		7			8835
% of Totals	0%	70%	24%	0%	4%	0%	0%	0%	0%		0%			100%

AM Volumes	5	2230	808	14	138	3	1	20	15	0	6	0	0	3240
% AM	0%	25%	9%	0%	2%	0%	0%	0%	0%		0%			37%
AM Peak Hour	09:00	11:00	11:00	07:00	11:00	06:00	09:00	08:00	07:00		09:00			11:00
Volume	2	347	124	5	31	1	1	3	6		2			509
PM Volumes	8	3978	1331	12	211	7	0	22	25	0	1	0	0	5595
% PM	0%	45%	15%	0%	2%	0%		0%	0%		0%			63%
PM Peak Hour	16:00	16:00	16:00	14:00	16:00	15:00		16:00	12:00		13:00			16:00
Volume	6	477	163	4	32	3		7	5		1			690

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	847	↔	10%	1056	↔	12%	1332	↔	15%	5600	↔	63%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Hinkley Rd N/O National Trails Hwy

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_008n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
04:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
05:00	0	2	7	0	3	0	0	0	0	0	0	0	0	12
06:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8
07:00	0	10	3	0	4	0	0	0	0	0	0	0	0	17
08:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7
09:00	0	6	6	0	0	0	0	0	0	0	0	0	0	12
10:00	0	8	1	0	3	0	0	1	0	0	0	0	0	13
11:00	0	11	4	0	2	0	0	0	0	0	0	0	0	17
12:00 PM	0	10	5	0	2	0	0	0	0	0	0	0	0	17
13:00	0	9	6	0	2	0	0	0	0	0	0	0	0	17
14:00	0	5	4	0	2	0	0	1	0	0	0	0	0	12
15:00	0	8	3	0	2	0	0	1	0	0	0	0	0	14
16:00	0	4	3	0	1	0	0	0	0	0	0	0	0	8
17:00	0	11	2	0	1	0	0	0	0	0	0	0	0	14
18:00	0	4	3	0	0	0	0	0	0	0	0	0	0	7
19:00	0	8	4	0	1	0	0	0	0	0	0	0	0	13
20:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
21:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
22:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
23:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
Totals		**129**	**61**		**26**			**3**						**219**
% of Totals		59%	28%		12%			1%						100%

AM Volumes	0	56	26	0	14	0	0	1	0	0	0	0	0	97
% AM		26%	12%		6%			0%						44%
AM Peak Hour		11:00	05:00		07:00			10:00						07:00
Volume		11	7		4			1						17
PM Volumes	0	73	35	0	12	0	0	2	0	0	0	0	0	122
% PM		33%	16%		5%			1%						56%
PM Peak Hour		17:00	13:00		12:00			14:00						12:00
Volume		11	6		2			1						17

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	24		11%	34		16%	22		10%	139		63%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Hinkley Rd N/O National Trails Hwy

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_008s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	1	0	0	0	0	0	1
04:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
05:00	0	3	4	0	0	0	0	0	0	0	0	0	0	7
06:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
07:00	0	10	1	1	2	0	0	0	0	0	0	0	0	14
08:00	0	10	1	0	0	0	0	1	0	0	0	0	0	12
09:00	0	8	4	1	0	1	0	1	0	0	0	0	0	15
10:00	0	6	2	1	2	0	0	0	0	0	0	0	0	11
11:00	1	6	5	0	2	0	0	0	0	0	0	0	0	14
12:00 PM	0	10	2	1	0	1	0	0	0	0	0	0	0	14
13:00	0	11	7	1	1	1	0	0	0	0	0	0	0	21
14:00	0	13	11	1	6	0	0	0	0	0	0	0	0	31
15:00	0	8	5	0	1	1	0	1	2	0	0	0	0	18
16:00	0	14	4	1	0	0	0	0	0	0	0	0	0	19
17:00	0	27	10	0	2	0	0	0	0	0	0	0	0	39
18:00	0	12	4	0	0	0	0	0	0	0	0	0	0	16
19:00	1	6	1	1	0	0	0	0	1	0	0	0	0	10
20:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	2	151	64	8	16	4		4	3					252
% of Totals	1%	60%	25%	3%	6%	2%		2%	1%					100%

AM Volumes	1	49	19	3	6	1	0	3	0	0	0	0	0	82
% AM	0%	19%	8%	1%	2%	0%		1%						33%
AM Peak Hour	11:00	07:00	11:00	07:00	07:00	09:00		03:00						09:00
Volume	1	10	5	1	2	1		1						15
PM Volumes	1	102	45	5	10	3	0	1	3	0	0	0	0	170
% PM	0%	40%	18%	2%	4%	1%		0%	1%					67%
PM Peak Hour	19:00	17:00	14:00	12:00	14:00	12:00		15:00	15:00					17:00
Volume	1	27	11	1	6	1		1	2					39

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	26		10%	35		14%	58		23%	133		53%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Hinkley Rd N/O National Trails Hwy

Day: Wednesday
Date: 8/4/2021

City: Barstow
Project #: CA21_030062_008

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	2	1	0	0	0	0	1	0	0	0	0	0	4
04:00	0	7	3	0	0	0	0	0	0	0	0	0	0	10
05:00	0	5	11	0	3	0	0	0	0	0	0	0	0	19
06:00	0	10	2	0	1	0	0	0	0	0	0	0	0	13
07:00	0	20	4	1	6	0	0	0	0	0	0	0	0	31
08:00	0	15	2	0	1	0	0	1	0	0	0	0	0	19
09:00	0	14	10	1	0	1	0	1	0	0	0	0	0	27
10:00	0	14	3	1	5	0	0	1	0	0	0	0	0	24
11:00	1	17	9	0	4	0	0	0	0	0	0	0	0	31
12:00 PM	0	20	7	1	2	1	0	0	0	0	0	0	0	31
13:00	0	20	13	1	3	1	0	0	0	0	0	0	0	38
14:00	0	18	15	1	8	0	0	1	0	0	0	0	0	43
15:00	0	16	8	0	3	1	0	2	2	0	0	0	0	32
16:00	0	18	7	1	1	0	0	0	0	0	0	0	0	27
17:00	0	38	12	0	3	0	0	0	0	0	0	0	0	53
18:00	0	16	7	0	0	0	0	0	0	0	0	0	0	23
19:00	1	14	5	1	1	0	0	0	1	0	0	0	0	23
20:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
21:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
22:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
23:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
Totals	2	280	125	8	42	4		7	3					471
% of Totals	0%	59%	27%	2%	9%	1%		1%	1%					100%

AM Volumes	1	105	45	3	20	1	0	4	0	0	0	0	0	179
% AM	0%	22%	10%	1%	4%	0%		1%						38%
AM Peak Hour	11:00	07:00	05:00	07:00	07:00	09:00		03:00						07:00
Volume	1	20	11	1	6	1		1						31
PM Volumes	1	175	80	5	22	3	0	3	3	0	0	0	0	292
% PM	0%	37%	17%	1%	5%	1%		1%	1%					62%
PM Peak Hour	19:00	17:00	14:00	12:00	14:00	12:00		15:00	15:00					17:00
Volume	1	38	15	1	8	1		2	2					53

Directional Peak Periods All Classes	AM 7-9 Volume	↔	%	NOON 12-2 Volume	↔	%	PM 4-6 Volume	↔	%	Off Peak Volumes Volume	↔	%
	50		11%	69		15%	80		17%	272		58%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Hinkley Rd N/O National Trails Hwy

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_008n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
02:00	0	2	4	0	1	0	0	0	0	0	0	0	0	7
03:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
04:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	5	0	0	0	1	0	1	0	0	0	0	0	7
07:00	0	5	3	0	4	1	0	1	0	0	0	0	0	14
08:00	0	2	2	0	2	0	0	0	0	0	0	0	0	6
09:00	0	5	3	1	1	0	0	0	0	0	0	0	0	10
10:00	0	4	3	1	1	0	0	0	0	0	0	0	0	9
11:00	0	3	7	0	0	0	0	0	0	0	0	0	0	10
12:00 PM	0	8	1	0	3	0	0	1	0	0	0	0	0	13
13:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
14:00	0	7	1	0	1	0	0	1	0	0	0	0	0	10
15:00	0	6	1	0	3	0	0	1	0	0	0	0	0	11
16:00	0	9	1	0	2	0	0	0	0	0	0	0	0	12
17:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
18:00	0	4	6	0	2	0	0	0	0	0	0	0	0	12
19:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
20:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
21:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
22:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
23:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
Totals		105	50	2	20	2		5						184
% of Totals		57%	27%	1%	11%	1%		3%						100%

AM Volumes	0	35	28	2	9	2	0	2	0	0	0	0	0	78
% AM		19%	15%	1%	5%	1%		1%						42%
AM Peak Hour		06:00	11:00	09:00	07:00	06:00		06:00						07:00
Volume		5	7	1	4	1		1						14
PM Volumes	0	70	22	0	11	0	0	3	0	0	0	0	0	106
% PM		38%	12%		6%			2%						58%
PM Peak Hour		16:00	18:00		12:00			12:00						12:00
Volume		9	6		3			1						13

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	20		11%	23		13%	21		11%	120		65%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Hinkley Rd N/O National Trails Hwy

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_008s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
07:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
08:00	0	3	0	1	0	0	0	0	0	0	0	0	0	4
09:00	0	4	2	0	0	0	0	0	1	0	0	0	0	7
10:00	0	9	4	2	2	0	0	1	0	0	0	0	0	18
11:00	0	2	3	0	2	0	0	0	0	0	0	0	0	7
12:00 PM	0	8	1	0	2	0	0	0	0	0	0	0	0	11
13:00	0	8	4	2	1	1	0	0	1	0	0	0	0	17
14:00	0	10	0	0	0	0	0	1	0	0	0	0	0	11
15:00	0	7	3	0	1	1	0	1	0	0	0	0	0	13
16:00	2	10	1	1	0	0	0	0	0	0	0	0	0	14
17:00	0	10	4	0	1	0	0	0	0	0	0	0	0	15
18:00	0	4	4	0	2	0	0	0	0	0	0	0	0	10
19:00	0	7	3	0	1	0	0	0	0	0	0	0	0	11
20:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Totals	**2**	**105**	**37**	**6**	**12**	**2**		**3**	**2**					**169**
% of Totals	1%	62%	22%	4%	7%	1%		2%	1%					100%

AM Volumes	0	31	13	3	4	0	0	1	1	0	0	0	0	53
% AM		18%	8%	2%	2%			1%	1%					31%
AM Peak Hour		10:00	10:00	10:00	10:00			10:00	09:00					10:00
Volume		9	4	2	2			1	1					18
PM Volumes	2	74	24	3	8	2	0	2	1	0	0	0	0	116
% PM	1%	44%	14%	2%	5%	1%		1%	1%					69%
PM Peak Hour	16:00	14:00	13:00	13:00	12:00	13:00		14:00	13:00					13:00
Volume	2	10	4	2	2	1		1	1					17

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	12		7%	28		17%	29		17%	100		59%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Hinkley Rd N/O National Trails Hwy

Day: Thursday
Date: 8/5/2021

City: Barstow
Project #: CA21_030062_008

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
02:00	0	4	5	0	1	0	0	0	0	0	0	0	0	10
03:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
04:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
06:00	0	8	1	0	0	1	0	1	0	0	0	0	0	11
07:00	0	11	5	0	4	1	0	1	0	0	0	0	0	22
08:00	0	5	2	1	2	0	0	0	0	0	0	0	0	10
09:00	0	9	5	1	1	0	0	0	1	0	0	0	0	17
10:00	0	13	7	3	3	0	0	1	0	0	0	0	0	27
11:00	0	5	10	0	2	0	0	0	0	0	0	0	0	17
12:00 PM	0	16	2	0	5	0	0	1	0	0	0	0	0	24
13:00	0	16	6	2	1	1	0	0	1	0	0	0	0	27
14:00	0	17	1	0	1	0	0	2	0	0	0	0	0	21
15:00	0	13	4	0	4	1	0	2	0	0	0	0	0	24
16:00	2	19	2	1	2	0	0	0	0	0	0	0	0	26
17:00	0	17	6	0	1	0	0	0	0	0	0	0	0	24
18:00	0	8	10	0	4	0	0	0	0	0	0	0	0	22
19:00	0	12	5	0	1	0	0	0	0	0	0	0	0	18
20:00	0	7	4	0	0	0	0	0	0	0	0	0	0	11
21:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
22:00	0	10	3	0	0	0	0	0	0	0	0	0	0	13
23:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
Totals	**2**	**210**	**87**	**8**	**32**	**4**		**8**	**2**					**353**
% of Totals	1%	59%	25%	2%	9%	1%		2%	1%					100%

AM Volumes	0	66	41	5	13	2	0	3	1	0	0	0	0	131
% AM		19%	12%	1%	4%	1%		1%	0%					37%
AM Peak Hour		10:00	11:00	10:00	07:00	06:00		06:00	09:00					10:00
Volume		13	10	3	4	1		1	1					27
PM Volumes	2	144	46	3	19	2	0	5	1	0	0	0	0	222
% PM	1%	41%	13%	1%	5%	1%		1%	0%					63%
PM Peak Hour	16:00	16:00	18:00	13:00	12:00	13:00		14:00	13:00					13:00
Volume	2	19	10	2	5	1		2	1					27

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	32		9%	51		14%	50		14%	220		62%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 25, 2021
JOB #:

CITY: Barstow
LOCATION: CLASS10 Barstow Rd - Armory Way to Rimrock Rd.

AM	NORTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	13	0	0	0	0	0	0	1	0	0	0	0	14
0:15	0	3	0	0	1	0	0	0	0	0	0	0	0	4
0:30	0	9	1	0	0	0	0	0	0	0	0	0	0	10
0:45	0	6	0	0	1	0	0	0	1	0	0	0	0	8
1:00	0	2	1	0	0	0	0	0	1	0	0	0	0	4
1:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
1:30	0	6	1	0	0	0	0	0	0	0	0	0	0	7
1:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7
2:00	0	3	0	0	0	0	0	0	0	0	0	1	0	4
2:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7
2:30	0	4	1	0	0	0	0	0	0	0	0	0	0	5
2:45	0	8	1	0	0	0	0	0	4	0	0	0	0	13
3:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7
3:15	0	7	0	0	0	0	0	0	1	0	0	0	0	8
3:30	0	9	0	0	0	0	0	0	0	0	0	0	0	9
3:45	0	4	2	0	1	0	0	0	1	0	0	2	0	10
4:00	0	9	4	0	1	0	0	0	0	0	0	0	0	14
4:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9
4:30	1	9	3	0	1	0	0	0	0	0	0	0	0	14
4:45	0	19	1	0	0	0	0	0	2	0	0	0	0	22
5:00	0	21	6	0	1	0	0	0	0	0	0	0	0	28
5:15	2	33	5	0	3	0	0	0	0	0	0	0	0	43
5:30	1	29	4	0	2	0	1	0	0	0	0	0	0	37
5:45	4	61	6	0	6	0	0	0	0	0	1	0	0	78
6:00	1	53	14	0	7	0	0	0	0	0	0	0	0	75
6:15	2	53	9	0	4	0	0	0	2	0	0	1	0	71
6:30	4	60	9	1	3	1	0	0	0	0	0	0	0	78
6:45	2	109	14	1	4	0	0	0	1	0	0	1	1	133
7:00	2	80	8	1	1	1	0	0	1	0	0	0	0	94
7:15	0	51	6	1	2	0	0	0	0	0	1	0	0	61
7:30	1	40	4	1	4	0	0	0	1	0	0	0	0	51
7:45	0	58	9	1	6	1	0	2	0	0	0	0	0	77
8:00	0	58	5	0	3	1	0	0	2	0	0	0	0	69
8:15	1	58	9	0	3	2	0	0	0	0	1	0	0	74
8:30	2	53	15	1	2	3	0	0	5	0	0	0	0	81
8:45	1	74	7	0	6	0	0	1	2	0	0	0	0	91
9:00	1	52	5	0	1	0	0	0	1	0	0	0	0	60
9:15	1	49	6	1	1	2	0	0	3	0	0	0	0	63
9:30	2	54	8	1	4	0	0	1	4	0	0	0	0	74
9:45	4	47	10	1	5	0	0	0	1	0	0	0	0	68
10:00	1	45	6	0	7	1	0	0	2	0	0	0	0	62
10:15	1	50	7	1	4	0	0	0	1	0	0	1	0	65
10:30	1	51	11	2	2	1	0	0	3	0	0	0	0	71
10:45	2	54	9	0	7	0	0	0	2	0	0	0	0	74
11:00	0	56	14	1	1	0	0	0	0	0	0	0	0	72
11:15	1	63	11	0	3	2	0	0	1	0	0	0	0	81
11:30	0	50	12	1	2	0	0	0	1	0	0	0	0	66
11:45	1	62	13	1	4	1	0	0	1	0	1	0	0	84
TOTAL	39	1,665	260	16	104	16	1	4	45	0	4	6	1	2,161

AM PEAK HOUR	6:15 AM
AM PEAK VOLUME	376

PM	NORTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	80	8	0	4	0	0	0	2	0	0	0	0	95
12:15	0	89	11	0	4	2	0	0	2	0	1	1	1	111
12:30	1	107	16	0	8	0	0	0	3	0	0	0	0	135
12:45	0	81	16	1	6	1	0	2	0	0	0	0	0	107
13:00	0	68	15	0	2	0	0	0	0	0	1	0	0	86
13:15	0	72	11	1	3	1	0	0	2	0	0	0	0	90
13:30	0	65	8	1	4	0	0	0	4	0	1	0	0	83
13:45	1	75	9	0	5	1	0	0	0	0	0	0	1	92
14:00	0	76	8	1	5	2	0	0	2	0	0	0	0	94
14:15	1	50	13	1	6	1	0	0	1	0	0	0	1	74
14:30	0	56	6	1	2	2	0	1	0	0	0	0	1	69
14:45	0	85	11	0	1	0	0	0	1	0	0	0	0	98
15:00	1	57	12	0	5	1	0	0	1	0	0	0	0	77
15:15	1	58	9	0	1	2	1	0	1	0	0	0	0	73
15:30	1	66	5	0	1	2	0	0	1	0	0	0	0	76
15:45	1	76	6	0	4	0	0	0	4	0	0	0	0	91
16:00	0	58	8	0	3	0	0	1	1	0	0	0	0	71
16:15	1	73	8	0	8	1	0	0	1	0	0	0	0	92
16:30	2	78	7	0	5	1	0	1	0	0	0	0	0	94
16:45	1	78	11	0	2	1	0	0	0	0	0	0	0	93
17:00	1	77	12	0	5	1	0	0	0	0	0	0	0	96
17:15	3	78	14	0	4	0	0	1	3	0	1	0	0	104
17:30	1	57	12	0	7	1	0	1	4	0	0	0	0	83
17:45	0	69	12	0	9	0	0	0	2	0	0	0	0	92
18:00	1	79	10	0	6	0	0	0	0	0	1	0	0	97
18:15	1	49	9	0	2	0	0	1	3	0	0	0	1	66
18:30	1	54	6	0	4	1	0	0	0	0	0	0	0	66
18:45	2	55	4	0	2	1	0	0	0	0	0	0	0	64
19:00	0	67	5	0	4	0	0	0	2	0	1	0	0	79
19:15	1	42	5	0	3	1	0	0	0	0	0	0	0	52
19:30	0	45	0	0	2	0	0	0	0	0	0	1	0	48
19:45	0	32	9	0	0	0	0	0	0	0	0	0	0	41
20:00	1	49	6	0	1	0	0	0	1	0	0	0	0	58
20:15	1	53	4	0	3	0	0	0	0	0	0	0	0	61
20:30	2	45	4	0	0	0	0	0	1	0	0	0	0	52
20:45	0	35	2	0	2	0	0	0	0	0	0	0	0	39
21:00	0	27	8	0	0	0	0	0	1	0	0	0	0	36
21:15	0	28	2	0	0	0	0	0	0	0	0	0	0	30
21:30	0	30	5	0	0	1	0	0	1	0	0	1	0	38
21:45	1	20	1	0	0	0	0	0	0	0	0	0	0	22
22:00	0	17	4	0	2	1	0	0	1	0	0	0	0	25
22:15	0	19	2	0	1	2	0	0	0	0	0	0	0	24
22:30	1	9	2	0	0	1	0	0	0	0	0	0	0	13
22:45	0	8	1	0	1	0	0	0	0	0	0	0	0	10
23:00	0	17	4	0	1	0	0	1	0	0	1	0	0	24
23:15	0	11	1	0	0	0	0	0	1	0	0	0	0	13
23:30	0	8	1	0	1	0	0	0	0	0	0	0	0	10
23:45	0	8	1	0	0	0	0	0	4	0	0	1	0	14
TOTAL	29	2,536	344	6	139	28	1	9	50	0	7	4	5	3,158

PM PEAK HOUR	12:00 PM
PM PEAK VOLUME	448

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	68	4,201	604	22	243	44	2	13	95	0	11	10	6	5,319
% OF TOTAL	1.3%	79.0%	11.4%	0.4%	4.6%	0.8%	0.0%	0.2%	1.8%	0.0%	0.2%	0.2%	0.1%	100.0%

TOTAL: ALL	82	8,848	1,211	46	563	106	3	35	181	0	16	13	16	11,120
% OF TOTAL	1.5%	166.3%	22.8%	0.9%	10.6%	2.0%	0.1%	0.7%	3.4%	0.0%	0.3%	0.2%	0.3%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 25, 2021
JOB #:

CITY: Barstow
LOCATION: CLASS10 Barstow Rd - Armory Way to Rimrock Rd.

AM	SOUTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	12	1	0	0	0	0	0	0	0	0	0	0	13
0:15	0	20	1	0	1	0	0	0	1	0	0	0	1	24
0:30	0	9	2	0	0	0	0	0	1	0	0	0	0	12
0:45	0	10	0	0	1	1	0	0	2	0	0	0	0	14
1:00	0	12	1	0	1	0	0	0	0	0	0	0	0	14
1:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
1:30	0	15	1	0	0	0	0	0	1	0	0	0	0	17
1:45	0	3	1	0	1	0	0	0	2	0	0	0	0	7
2:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
2:15	0	3	0	0	1	0	0	0	1	0	0	0	0	5
2:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6
3:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
3:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:30	0	6	0	0	0	0	0	0	1	0	0	0	0	7
3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	2	1	0	0	0	0	1	0	0	1	0	0	5
4:15	0	14	0	0	0	0	0	2	0	0	0	0	0	16
4:30	0	8	3	0	5	0	0	0	0	0	0	0	0	16
4:45	0	12	3	0	7	0	0	2	3	0	0	0	0	27
5:00	0	9	5	0	10	0	0	0	0	0	0	0	0	24
5:15	0	7	3	0	2	0	0	0	1	0	0	0	0	13
5:30	0	6	4	0	5	0	0	1	1	0	0	0	0	17
5:45	0	24	0	0	1	0	0	0	2	0	0	0	0	27
6:00	0	29	8	0	2	0	0	0	2	0	0	0	0	41
6:15	0	20	4	1	4	0	0	0	5	0	0	0	0	34
6:30	0	27	3	1	3	0	0	1	0	0	0	0	0	35
6:45	0	43	11	0	3	0	1	0	1	0	0	0	0	59
7:00	1	85	8	1	1	0	0	0	1	0	1	0	0	98
7:15	0	57	9	0	2	0	0	0	2	0	0	0	0	70
7:30	0	38	3	1	6	2	0	0	2	0	0	0	0	52
7:45	0	59	3	1	3	1	0	0	1	0	0	1	0	69
8:00	0	51	7	1	2	1	0	0	4	0	0	0	0	66
8:15	0	55	10	1	9	0	0	0	2	0	0	0	0	77
8:30	0	66	9	0	6	0	0	0	1	0	0	0	0	82
8:45	1	69	5	0	2	2	0	0	0	0	0	0	1	80
9:00	0	65	10	0	5	1	0	0	1	0	0	0	1	83
9:15	0	58	11	1	6	1	0	1	1	0	0	0	0	79
9:30	0	48	3	0	7	0	0	0	1	0	0	0	0	59
9:45	0	42	7	0	4	1	0	0	1	0	0	1	0	56
10:00	0	43	10	0	4	1	0	1	1	0	0	0	0	60
10:15	0	61	5	2	8	0	0	1	0	0	0	0	0	77
10:30	0	48	10	1	5	0	0	1	1	0	0	0	1	67
10:45	0	52	7	0	5	1	0	0	3	0	0	0	0	68
11:00	0	46	4	0	2	1	0	0	2	0	0	0	0	55
11:15	0	55	13	0	3	0	0	0	3	0	0	0	0	74
11:30	1	58	12	1	6	0	0	0	1	0	0	0	0	79
11:45	0	66	14	0	3	1	0	1	0	0	1	0	0	86
TOTAL	3	1,436	214	12	137	14	1	12	52	0	3	2	4	1,890

AM PEAK HOUR	8:30 AM
AM PEAK VOLUME	324

PM	SOUTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	3	72	9	0	6	0	0	0	0	0	0	0	0	90
12:15	0	72	9	2	3	2	0	0	2	0	0	0	0	90
12:30	0	62	19	0	7	0	0	0	0	0	0	0	0	88
12:45	0	120	18	0	9	4	0	0	1	0	0	0	0	152
13:00	0	102	9	1	1	2	0	0	2	0	0	0	0	117
13:15	0	77	7	1	5	1	0	0	2	0	0	0	1	94
13:30	0	69	14	1	9	6	0	0	1	0	0	0	0	100
13:45	0	92	12	1	4	3	0	1	1	0	0	0	0	114
14:00	0	76	9	1	7	0	0	0	1	0	0	1	0	95
14:15	0	119	11	1	6	2	0	2	2	0	0	0	0	143
14:30	0	76	11	1	4	1	0	0	0	0	0	0	0	93
14:45	1	66	4	0	4	2	0	0	3	0	0	0	0	80
15:00	0	90	11	0	7	1	0	1	2	0	0	0	0	112
15:15	1	80	7	1	5	1	0	0	0	0	1	0	0	96
15:30	0	59	11	0	6	2	0	0	1	0	0	0	1	80
15:45	0	73	11	0	2	3	0	0	1	0	1	0	0	91
16:00	0	94	13	0	6	2	0	0	0	0	0	0	0	115
16:15	1	89	22	1	6	1	0	0	1	0	0	0	0	121
16:30	1	112	8	0	9	0	0	0	0	0	0	0	1	131
16:45	0	92	9	0	9	0	0	0	1	0	0	0	0	111
17:00	0	117	20	0	5	4	0	1	1	0	0	0	0	148
17:15	1	96	15	0	4	3	0	0	0	0	0	0	0	119
17:30	0	103	12	0	4	1	0	0	0	0	0	0	0	120
17:45	0	94	9	0	5	1	0	0	1	0	0	0	1	111
18:00	0	106	9	0	2	0	0	0	1	0	0	0	0	118
18:15	0	68	8	0	6	0	0	0	2	0	0	0	0	84
18:30	0	81	10	0	1	0	0	0	1	0	0	0	0	93
18:45	0	75	5	0	5	0	0	0	1	0	0	0	0	86
19:00	1	59	4	0	7	0	0	0	1	0	0	0	0	72
19:15	0	79	15	0	2	0	0	0	1	0	0	0	1	98
19:30	1	74	8	0	2	1	0	0	0	0	0	0	0	86
19:45	1	62	10	0	5	1	0	0	1	0	0	0	0	80
20:00	0	67	3	0	2	0	0	0	0	0	0	0	0	72
20:15	0	54	7	0	3	1	0	0	0	0	0	0	0	65
20:30	0	55	6	1	1	2	0	0	0	0	0	0	0	65
20:45	0	46	3	0	4	0	0	0	1	0	0	0	0	54
21:00	0	34	4	0	0	0	0	0	0	0	0	0	1	39
21:15	0	33	2	0	1	0	0	2	1	0	0	0	0	39
21:30	0	23	2	0	1	0	0	0	0	0	0	0	0	26
21:45	0	36	2	0	3	0	0	1	0	0	0	0	0	42
22:00	0	25	3	0	0	0	0	1	0	0	0	0	0	29
22:15	0	26	2	0	1	0	0	0	0	0	0	0	0	29
22:30	0	24	4	0	0	0	0	0	1	0	0	0	0	29
22:45	0	21	2	0	0	0	0	0	0	0	0	0	0	23
23:00	0	16	2	0	1	0	0	0	0	0	0	0	0	19
23:15	0	9	2	0	1	0	0	0	0	0	0	0	0	12
23:30	0	24	0	0	1	1	0	1	0	0	0	0	0	27
23:45	0	12	0	0	1	0	0	0	0	0	0	0	0	13
TOTAL	11	3,211	393	12	183	48	0	10	34	0	2	1	6	3,911

PM PEAK HOUR	4:15 PM
PM PEAK VOLUME	511

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	14	4,647	607	24	320	62	1	22	86	0	5	3	10	5,801
% OF TOTAL	0.2%	80.1%	10.5%	0.4%	5.5%	1.1%	0.0%	0.4%	1.5%	0.0%	0.1%	0.1%	0.2%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, August 26, 2021
JOB #:

CITY: Barstow
LOCATION: CLASS10 Barstow Rd - Armory Way to Rimrock Rd.

AM	NORTHBOUND														PM	NORTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL	Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7	12:00	2	60	11	2	7	0	0	0	0	0	0	0	0	82
0:15	0	5	0	0	1	1	0	0	0	0	0	0	0	7	12:15	1	66	8	0	6	0	0	2	5	0	0	0	0	88
0:30	0	12	1	0	0	0	0	0	0	0	0	0	0	13	12:30	0	55	10	2	3	1	0	0	0	0	0	0	0	71
0:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:45	0	60	10	0	4	1	0	0	5	0	0	0	0	80
1:00	0	3	0	0	0	0	0	0	1	0	0	0	0	4	13:00	1	61	5	0	3	2	0	1	3	0	0	0	0	76
1:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	13:15	0	58	9	0	9	0	0	1	2	0	0	0	1	80
1:30	0	8	0	0	0	0	0	0	1	0	0	0	0	9	13:30	0	50	5	1	3	1	1	1	3	0	0	0	0	65
1:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	13:45	0	55	11	0	3	1	0	1	1	0	0	2	0	74
2:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	14:00	0	63	9	0	6	1	0	0	2	0	0	0	0	81
2:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7	14:15	0	70	16	1	4	2	0	1	0	0	0	0	0	94
2:30	0	4	0	0	0	0	0	1	1	0	0	0	0	6	14:30	1	75	6	1	6	3	0	1	1	0	0	0	0	94
2:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6	14:45	1	74	15	0	8	0	0	0	2	1	0	1	0	102
3:00	0	11	0	0	0	0	0	0	1	0	0	0	0	12	15:00	1	58	9	1	2	0	0	0	2	1	0	0	0	74
3:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7	15:15	0	75	6	0	7	0	1	0	1	0	0	0	0	90
3:30	0	6	0	0	0	0	0	0	1	0	0	1	0	8	15:30	0	72	13	1	4	1	0	0	1	0	0	0	0	92
3:45	0	8	2	0	0	0	0	0	2	1	0	0	0	13	15:45	1	89	11	0	2	3	0	0	2	0	0	0	0	108
4:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10	16:00	0	68	13	0	2	0	1	0	3	0	0	0	0	87
4:15	0	14	2	0	0	0	0	0	2	0	0	0	0	18	16:15	1	58	10	1	0	0	0	0	0	0	0	0	0	70
4:30	0	5	3	0	0	0	0	0	0	0	0	0	0	8	16:30	2	64	9	0	2	0	0	1	6	0	0	1	0	85
4:45	0	17	1	1	2	0	0	0	0	0	0	0	0	21	16:45	0	66	11	0	4	0	0	0	2	0	0	0	0	83
5:00	0	23	2	0	3	1	0	0	0	0	0	0	0	29	17:00	0	67	9	0	1	1	0	1	0	0	0	0	0	79
5:15	2	26	2	0	2	0	0	0	0	0	0	0	0	32	17:15	0	63	10	0	0	0	0	0	0	0	0	0	0	73
5:30	2	49	7	0	0	0	0	0	1	0	0	0	0	59	17:30	0	58	8	1	0	0	0	0	1	0	0	0	0	68
5:45	1	59	3	0	6	0	0	0	1	0	0	0	0	70	17:45	1	74	15	0	6	1	0	0	0	0	0	0	0	97
6:00	1	53	11	0	4	0	0	0	0	0	0	0	0	69	18:00	2	68	11	0	8	0	0	0	0	0	0	0	0	89
6:15	1	55	7	0	3	1	0	0	0	0	0	0	0	67	18:15	2	64	11	0	4	0	0	0	1	0	0	0	0	82
6:30	0	55	12	0	4	0	0	0	1	2	0	0	0	74	18:30	0	56	3	1	2	1	0	0	0	0	0	0	0	63
6:45	1	119	16	0	3	0	0	0	0	0	0	0	0	139	18:45	1	47	7	0	3	0	0	1	1	0	0	1	0	61
7:00	1	71	14	1	1	0	0	1	1	0	0	0	0	90	19:00	1	60	7	0	7	0	0	1	0	0	0	0	0	76
7:15	2	76	8	0	4	1	0	0	1	0	0	0	0	92	19:15	0	56	5	0	4	0	0	0	0	0	0	0	0	65
7:30	1	36	7	2	5	0	0	0	4	0	0	0	0	55	19:30	0	46	5	1	0	0	0	0	2	0	0	1	1	56
7:45	1	68	9	0	8	0	0	0	2	0	0	0	0	88	19:45	2	52	4	0	1	0	0	0	1	0	0	0	0	60
8:00	0	58	5	0	2	0	0	0	0	0	0	0	0	65	20:00	1	55	7	0	0	0	0	0	0	0	0	0	0	63
8:15	3	62	11	1	3	1	0	1	2	0	0	0	1	85	20:15	1	32	7	0	2	0	0	0	1	0	0	0	0	43
8:30	0	69	7	1	2	1	0	1	0	0	0	0	1	82	20:30	0	33	7	0	0	0	0	0	2	0	0	0	0	42
8:45	1	87	9	0	5	1	0	0	0	0	3	0	0	106	20:45	1	38	1	0	5	0	0	0	0	0	0	0	0	45
9:00	2	45	6	0	4	0	0	0	7	0	0	0	0	64	21:00	3	33	4	0	1	0	0	0	0	0	0	0	0	41
9:15	1	46	2	0	3	1	0	0	1	0	0	0	1	55	21:15	2	27	4	0	0	0	0	0	0	0	0	0	0	33
9:30	2	60	11	1	4	2	0	0	2	0	0	0	0	82	21:30	2	21	3	0	0	0	0	0	0	0	0	0	0	26
9:45	1	66	6	0	1	0	0	0	2	1	0	0	0	77	21:45	1	20	3	0	1	0	0	0	0	0	0	0	0	25
10:00	1	56	16	1	1	1	0	0	2	0	0	1	0	79	22:00	0	16	3	1	0	0	0	0	0	0	0	0	0	20
10:15	1	56	12	1	5	2	0	0	6	0	0	0	2	85	22:15	1	11	1	0	1	2	0	0	2	0	0	0	0	18
10:30	0	57	8	2	4	0	0	2	2	0	0	0	0	75	22:30	1	13	1	0	0	0	0	0	0	0	0	0	0	15
10:45	2	46	11	0	3	0	0	1	2	0	1	0	0	66	22:45	0	14	2	0	0	0	0	0	0	0	0	0	0	16
11:00	2	69	7	0	4	1	0	2	1	0	0	0	0	86	23:00	0	24	0	0	0	0	0	0	0	1	0	0	0	25
11:15	0	58	10	0	7	0	0	0	2	0	0	0	0	77	23:15	2	12	2	0	0	0	0	0	0	0	0	0	0	16
11:30	0	54	12	1	1	0	0	1	1	0	0	0	0	70	23:30	0	8	0	0	0	1	0	0	0	0	0	0	0	9
11:45	3	67	7	0	4	2	0	1	0	0	0	0	1	85	23:45	0	7	2	0	0	0	0	0	2	0	0	1	0	12
TOTAL	32	1,789	250	12	99	16	0	11	50	4	4	2	6	2,275	TOTAL	35	2,372	339	14	131	22	3	12	54	3	0	7	2	2,994

AM PEAK HOUR	6:30 AM	**PM PEAK HOUR**	3:15 PM
AM PEAK VOLUME	395	**PM PEAK VOLUME**	377

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	67	4,161	589	26	230	38	3	23	104	7	4	9	8	5,269
% OF TOTAL	1.3%	79.0%	11.2%	0.5%	4.4%	0.7%	0.1%	0.4%	2.0%	0.1%	0.1%	0.2%	0.2%	100.0%

TOTAL: ALL	83	8,840	1,152	57	595	89	10	55	204	10	13	12	16	11,136
% OF TOTAL	1.6%	167.8%	21.9%	1.1%	11.3%	1.7%	0.2%	1.0%	3.9%	0.2%	0.2%	0.2%	0.3%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, August 26, 2021
JOB #:

CITY: Barstow
LOCATION: CLASS10 Barstow Rd - Armory Way to Rimrock Rd.

AM	SOUTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
0:15	0	10	3	1	1	0	0	0	0	0	0	0	0	15
0:30	0	12	1	0	0	0	0	0	0	0	0	0	0	13
0:45	0	9	0	0	0	0	0	0	0	1	0	0	0	10
1:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
1:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5
1:30	0	11	1	0	0	0	0	2	0	0	0	0	0	14
1:45	0	8	2	0	1	0	0	0	0	0	0	1	0	12
2:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
2:15	0	6	0	0	2	0	0	0	0	0	0	0	0	8
2:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
2:45	0	5	1	0	0	0	0	2	0	0	1	0	0	9
3:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
3:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:45	0	6	0	0	1	0	0	0	1	0	0	0	0	8
4:00	0	14	1	0	0	0	0	0	1	0	0	0	0	16
4:15	1	13	0	0	2	0	0	0	0	0	0	0	0	16
4:30	0	4	1	0	2	1	0	0	0	0	0	0	0	8
4:45	0	8	3	0	5	0	0	0	1	0	0	0	0	17
5:00	0	11	5	1	8	0	0	0	2	0	0	0	0	27
5:15	0	9	3	0	4	0	0	0	0	0	0	0	1	17
5:30	0	11	2	0	5	0	0	1	2	0	0	0	0	21
5:45	0	13	0	0	1	0	0	0	5	0	0	0	0	19
6:00	0	13	8	0	0	0	0	0	1	0	0	0	0	22
6:15	0	25	0	2	8	0	0	1	3	0	0	0	0	39
6:30	1	27	3	1	3	0	0	0	1	0	0	0	0	36
6:45	0	48	5	0	2	1	0	1	2	0	0	0	0	59
7:00	0	74	3	0	6	3	0	0	2	0	1	0	0	89
7:15	0	59	5	2	6	1	0	0	3	0	0	0	0	76
7:30	0	39	4	0	3	1	0	0	3	0	0	0	0	50
7:45	2	58	6	1	7	0	0	0	3	0	0	0	1	78
8:00	0	64	12	0	5	0	0	0	0	0	0	0	0	81
8:15	0	69	7	2	2	0	0	0	2	0	0	0	0	82
8:30	0	69	6	0	7	0	0	0	1	0	0	0	0	83
8:45	0	60	7	0	6	1	0	0	2	0	0	0	0	76
9:00	0	66	5	1	7	1	0	1	1	0	0	0	0	82
9:15	0	52	12	0	7	0	0	0	4	0	1	0	0	76
9:30	0	51	6	0	5	1	0	0	3	0	1	0	2	69
9:45	0	51	8	0	4	0	1	1	0	1	0	0	0	66
10:00	0	57	4	0	3	1	0	0	5	0	0	0	1	71
10:15	0	51	6	2	7	0	0	1	2	0	0	0	0	69
10:30	1	46	5	1	10	0	0	2	1	0	0	0	0	66
10:45	0	47	6	0	6	0	0	0	1	0	0	0	1	61
11:00	0	52	7	0	6	0	0	0	1	0	0	0	0	66
11:15	0	57	11	2	5	1	0	0	1	0	1	0	0	78
11:30	0	64	9	1	3	0	1	0	4	0	0	0	0	82
11:45	1	62	12	0	5	1	1	0	3	1	0	0	0	86
TOTAL	6	1,456	182	17	157	13	3	12	61	3	5	1	6	1,922

AM PEAK HOUR	7:45 AM
AM PEAK VOLUME	324

PM	SOUTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	67	8	0	4	1	1	0	1	0	0	0	0	82
12:15	0	73	8	1	13	2	1	0	1	0	0	0	0	99
12:30	0	56	6	0	7	1	0	0	0	0	1	0	0	71
12:45	0	77	10	0	5	1	0	0	2	0	0	0	1	96
13:00	0	68	4	0	12	0	0	2	2	0	0	0	0	88
13:15	0	67	12	1	2	0	0	1	4	0	0	0	0	87
13:30	0	61	13	1	4	1	0	0	1	0	0	0	0	81
13:45	0	69	6	1	2	1	0	1	1	0	0	0	0	81
14:00	0	80	8	1	6	1	0	1	3	0	0	0	0	100
14:15	1	65	9	3	2	0	0	1	2	0	0	0	1	84
14:30	0	124	13	0	7	2	0	0	1	0	0	1	0	148
14:45	0	125	22	0	10	3	0	0	3	0	2	0	0	165
15:00	0	85	14	0	6	0	1	1	2	0	1	0	0	110
15:15	0	104	15	0	7	1	1	2	1	0	0	0	0	131
15:30	0	75	12	0	5	2	0	1	1	0	0	0	0	96
15:45	0	89	16	0	6	1	0	0	0	0	0	0	0	112
16:00	0	114	16	0	1	3	0	1	0	0	0	0	0	135
16:15	2	134	11	1	11	0	0	3	1	0	0	0	0	163
16:30	1	111	11	0	7	0	0	1	0	0	0	0	0	131
16:45	1	99	14	1	12	1	0	0	0	0	0	0	0	128
17:00	1	112	19	0	2	2	0	1	0	0	0	0	0	137
17:15	0	110	10	1	5	0	0	0	0	0	0	0	0	126
17:30	0	93	10	0	5	2	0	0	1	0	0	0	0	111
17:45	0	88	8	1	6	2	0	0	2	0	0	0	0	107
18:00	0	106	8	0	5	1	0	0	1	0	0	0	0	121
18:15	0	79	3	1	7	3	0	0	0	0	0	0	0	93
18:30	0	75	13	0	9	3	0	0	0	0	0	0	0	100
18:45	0	79	3	0	7	0	0	1	0	0	0	0	0	90
19:00	0	63	7	0	2	1	0	1	0	0	0	0	0	74
19:15	0	63	8	1	3	1	0	0	3	0	0	0	0	79
19:30	0	60	9	0	4	0	0	1	0	0	0	0	0	74
19:45	1	53	6	0	6	1	0	0	0	0	0	0	0	67
20:00	0	70	6	0	3	0	0	0	1	0	0	0	0	80
20:15	0	48	3	0	1	0	0	0	1	0	0	0	0	53
20:30	0	51	3	0	1	0	0	0	1	0	0	0	0	56
20:45	0	32	5	0	2	0	0	0	0	0	0	0	0	39
21:00	1	35	2	0	0	1	0	0	0	0	0	0	0	39
21:15	1	29	6	0	2	0	0	0	0	0	0	0	0	38
21:30	0	29	4	0	1	0	0	0	0	0	0	0	0	34
21:45	0	40	6	0	2	0	0	1	1	0	0	0	0	50
22:00	0	27	2	0	0	0	0	0	0	0	0	0	0	29
22:15	0	21	3	0	1	0	0	0	0	0	0	0	0	25
22:30	0	26	3	0	1	0	0	0	0	0	0	0	0	30
22:45	0	15	3	0	0	0	0	0	1	0	0	0	0	19
23:00	0	20	0	0	1	0	0	0	0	0	0	0	0	21
23:15	0	30	1	0	0	0	0	0	0	0	0	1	0	32
23:30	0	11	2	0	2	0	0	0	1	0	0	0	0	16
23:45	1	15	0	0	1	0	0	0	0	0	0	0	0	17
TOTAL	10	3,223	381	14	208	38	4	20	39	0	4	2	2	3,945

PM PEAK HOUR	4:15 PM
PM PEAK VOLUME	559

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	16	4,679	563	31	365	51	7	32	100	3	9	3	8	5,867
% OF TOTAL	0.3%	79.8%	9.6%	0.5%	6.2%	0.9%	0.1%	0.5%	1.7%	0.1%	0.2%	0.1%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 25, 2021
JOB #: 1/0/1900

CITY: Barstow
LOCATION: CLASS24 Lenwood Rd - W. Main St to Jasper Rd.

AM	NORTHBOUND														PM	NORTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL	Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	12:00	1	21	7	0	12	0	0	0	0	0	0	0	0	41
0:15	0	7	1	0	1	0	0	0	0	0	0	0	0	9	12:15	0	38	6	0	8	0	1	0	0	0	0	0	0	53
0:30	0	1	1	0	0	1	0	0	0	0	0	0	0	3	12:30	0	34	3	2	13	0	0	0	0	0	0	0	0	52
0:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	12:45	1	49	14	4	8	2	0	0	0	0	0	0	0	78
1:00	0	5	0	0	0	0	0	1	0	0	0	0	0	6	13:00	0	52	4	0	10	1	0	0	0	0	0	0	0	67
1:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3	13:15	0	37	13	0	9	0	0	0	0	0	0	0	0	59
1:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:30	2	38	10	0	9	1	0	0	0	0	0	0	0	60
1:45	0	4	1	0	0	0	0	0	0	0	0	0	0	5	13:45	2	34	11	1	7	1	0	1	0	0	0	0	0	57
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	14:00	2	38	4	0	3	1	0	0	0	0	0	0	0	48
2:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3	14:15	0	41	6	0	6	0	1	0	0	0	0	0	0	54
2:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:30	0	37	10	0	6	0	0	0	0	0	0	0	0	53
2:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:45	1	30	4	1	9	0	0	0	0	0	0	0	0	45
3:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3	15:00	1	36	13	0	8	0	1	0	0	0	0	0	0	59
3:15	0	0	1	0	0	0	1	0	0	0	0	0	0	2	15:15	0	40	7	0	5	1	0	0	0	0	0	0	0	53
3:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5	15:30	0	35	3	0	5	0	0	0	0	0	0	0	0	43
3:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	15:45	0	36	10	1	4	0	0	0	0	0	0	0	0	51
4:00	0	4	0	0	1	0	0	0	0	0	0	0	0	5	16:00	1	35	14	0	6	0	0	0	0	0	0	0	0	56
4:15	0	1	1	1	0	0	0	0	0	0	0	0	0	3	16:15	0	43	10	0	6	0	0	0	0	0	0	0	0	59
4:30	0	4	2	0	1	0	0	0	0	0	0	0	0	7	16:30	1	43	8	0	6	0	0	0	0	0	0	0	0	58
4:45	1	5	0	0	3	0	0	0	0	0	0	0	0	9	16:45	1	37	2	1	8	0	0	0	0	0	0	0	0	49
5:00	0	11	2	0	3	0	0	0	0	0	0	0	0	16	17:00	1	34	9	0	5	0	0	1	0	0	0	0	0	50
5:15	0	20	4	0	7	1	0	0	0	0	0	0	0	32	17:15	0	37	9	0	5	0	0	0	0	0	0	0	0	51
5:30	0	27	5	1	4	0	0	0	0	0	0	0	0	37	17:30	1	36	8	0	8	1	0	0	0	0	0	0	0	54
5:45	0	27	5	0	5	0	0	0	0	0	0	0	0	37	17:45	1	46	6	2	6	0	0	0	0	0	0	0	0	61
6:00	2	36	6	0	5	0	0	0	0	0	0	0	0	49	18:00	0	27	6	0	6	0	0	0	0	0	0	0	0	39
6:15	0	22	1	1	4	0	0	0	1	0	0	0	0	29	18:15	0	33	5	0	2	0	0	0	0	0	0	0	0	40
6:30	0	27	7	1	0	0	0	0	0	0	0	0	0	35	18:30	0	22	8	1	5	0	0	0	0	0	0	0	0	36
6:45	0	39	3	2	8	1	0	0	0	0	0	0	0	53	18:45	0	25	2	1	4	0	0	0	0	0	0	0	0	32
7:00	1	37	5	1	12	1	0	0	0	0	0	0	0	57	19:00	0	34	4	0	2	1	0	1	0	0	0	0	0	42
7:15	1	25	1	0	7	0	0	0	0	0	0	0	0	34	19:15	0	40	7	0	4	0	1	0	0	0	0	0	0	52
7:30	0	37	4	1	4	0	0	1	0	0	0	0	0	47	19:30	0	35	8	0	3	0	0	0	0	0	0	0	0	46
7:45	1	39	7	1	12	0	0	0	0	0	0	0	0	60	19:45	0	31	5	1	2	0	0	0	0	0	0	0	0	39
8:00	0	23	6	0	10	0	0	0	0	0	0	0	0	39	20:00	0	35	6	0	4	0	0	0	0	0	0	0	0	45
8:15	0	47	8	0	5	0	0	0	0	0	0	0	0	60	20:15	0	29	7	0	5	0	0	1	0	0	0	0	0	42
8:30	0	33	5	0	7	0	1	0	0	0	0	0	0	46	20:30	0	27	5	1	2	0	0	0	0	0	0	0	0	35
8:45	0	36	9	1	4	1	0	0	0	0	0	0	0	51	20:45	0	25	1	0	3	0	0	0	0	0	0	0	0	29
9:00	0	27	7	0	6	1	0	0	0	0	0	0	0	41	21:00	0	23	2	0	2	0	1	0	0	0	0	0	0	28
9:15	0	21	9	0	2	0	0	0	0	0	0	0	0	32	21:15	0	29	4	0	2	0	0	0	0	0	0	0	0	35
9:30	0	24	4	0	10	0	0	0	0	0	0	0	0	38	21:30	0	18	0	0	2	1	0	0	0	0	0	0	0	21
9:45	0	25	6	2	5	0	0	0	0	0	0	0	0	38	21:45	0	25	3	0	2	0	0	0	0	0	0	0	0	30
10:00	0	27	3	0	5	0	0	0	0	0	0	0	0	35	22:00	1	21	3	0	1	1	0	0	0	0	0	0	0	27
10:15	0	32	9	0	10	1	0	0	0	0	0	0	0	52	22:15	0	19	2	0	0	0	0	0	0	0	0	0	0	21
10:30	0	32	7	0	6	1	0	0	0	0	0	0	0	46	22:30	1	7	0	0	0	0	0	0	0	0	0	0	0	8
10:45	0	29	11	1	7	0	0	0	0	0	0	0	0	48	22:45	0	15	1	0	1	0	0	1	0	0	0	0	0	18
11:00	4	24	13	0	2	0	0	0	0	0	0	0	0	43	23:00	0	16	2	0	0	0	0	0	0	0	0	0	0	18
11:15	0	37	9	0	6	1	0	0	0	0	0	0	0	53	23:15	0	10	2	0	1	0	0	0	0	0	0	0	0	13
11:30	1	43	13	0	8	0	0	0	0	0	0	0	0	65	23:30	0	9	0	0	0	0	0	0	0	0	0	0	0	9
11:45	2	36	11	1	6	1	0	0	0	0	0	0	0	57	23:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
TOTAL	13	905	189	14	177	10	2	2	1	0	0	0	0	1,313	TOTAL	18	1,467	274	16	225	11	5	5	0	0	0	0	0	2,021
										AM PEAK HOUR				11:00 AM										PM PEAK HOUR				12:45 PM
										AM PEAK VOLUME				218										PM PEAK VOLUME				264

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	31	2,372	463	30	402	21	7	7	1	0	0	0	0	3,334
% OF TOTAL	0.9%	71.1%	13.9%	0.9%	12.1%	0.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

TOTAL: ALL	37	4,427	1,002	40	820	27	9	9	3	0	0	0	0	6,374
% OF TOTAL	1.1%	132.8%	30.1%	1.2%	24.6%	0.8%	0.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 25, 2021
JOB #: 1/0/1900

CITY: Barstow
LOCATION: CLASS24 Lenwood Rd - W. Main St to Jasper Rd.

AM	SOUTHBOUND														PM	SOUTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL	Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	12:00	0	37	4	0	5	0	0	0	0	0	0	0	0	46
0:15	1	7	2	0	1	0	0	0	0	0	0	0	0	11	12:15	0	35	8	0	8	0	0	0	0	0	0	0	0	51
0:30	0	5	1	0	1	0	0	0	0	0	0	0	0	7	12:30	0	37	7	0	9	0	0	0	0	0	0	0	0	53
0:45	0	5	0	0	1	0	0	0	0	0	0	0	0	6	12:45	0	35	6	0	6	0	0	0	0	0	0	0	0	47
1:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	13:00	0	29	8	0	7	0	0	0	0	0	0	0	0	44
1:15	0	3	1	0	0	0	0	0	0	0	0	0	0	4	13:15	0	42	9	0	5	0	0	0	0	0	0	0	0	56
1:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4	13:30	0	40	9	0	11	0	0	0	0	0	0	0	0	60
1:45	0	1	0	0	1	0	0	0	0	0	0	0	0	2	13:45	0	24	5	0	8	0	0	0	0	0	0	0	0	37
2:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5	14:00	0	28	5	0	5	0	0	0	0	0	0	0	0	38
2:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:15	0	35	10	1	3	0	0	0	0	0	0	0	0	49
2:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5	14:30	0	25	6	0	8	0	0	0	0	0	0	0	0	39
2:45	0	0	0	1	0	1	0	0	0	0	0	0	0	2	14:45	0	36	4	0	5	0	0	0	0	0	0	0	0	45
3:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4	15:00	0	42	13	0	3	0	0	0	0	0	0	0	0	58
3:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4	15:15	0	31	9	0	8	0	0	0	0	0	0	0	0	48
3:30	0	1	1	0	1	0	0	0	0	0	0	0	0	3	15:30	0	34	5	0	10	0	0	0	0	0	0	0	0	49
3:45	0	5	1	0	1	0	0	0	0	0	0	0	0	7	15:45	0	27	7	0	9	0	0	0	0	0	0	0	0	43
4:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5	16:00	0	18	10	0	7	0	0	0	0	0	0	0	0	35
4:15	0	7	1	0	1	0	0	0	0	0	0	0	0	9	16:15	0	35	11	0	6	0	0	0	0	0	0	0	0	52
4:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8	16:30	0	23	4	0	4	0	0	0	0	0	0	0	0	31
4:45	0	12	3	0	1	0	0	0	0	0	0	0	0	16	16:45	0	26	8	2	5	0	0	0	0	0	0	0	0	41
5:00	0	15	3	0	3	0	0	0	0	0	0	0	0	21	17:00	0	27	3	0	4	0	0	0	0	0	0	0	0	34
5:15	0	17	5	0	4	0	0	0	0	0	0	0	0	26	17:15	0	32	12	0	7	0	0	0	0	0	0	0	0	51
5:30	0	24	3	0	5	0	0	0	0	0	0	0	0	32	17:30	0	25	9	0	3	0	0	1	0	0	0	0	0	38
5:45	0	26	4	0	4	0	0	0	0	0	0	0	0	34	17:45	0	35	9	1	5	0	0	0	0	0	0	0	0	50
6:00	0	20	10	0	4	0	0	0	0	0	0	0	0	34	18:00	0	36	14	0	2	0	0	0	0	0	0	0	0	52
6:15	0	17	4	0	2	0	0	0	0	0	0	0	0	23	18:15	0	18	9	0	7	0	0	0	0	0	0	0	0	34
6:30	0	14	5	0	3	0	0	0	1	0	0	0	0	23	18:30	0	20	9	0	6	0	0	0	0	0	0	0	0	35
6:45	1	20	6	0	4	0	0	0	0	0	0	0	0	31	18:45	0	13	7	1	3	0	0	0	0	0	0	0	0	24
7:00	0	21	8	0	9	0	0	0	0	0	0	0	0	38	19:00	0	24	6	0	4	0	0	0	0	0	0	0	0	34
7:15	0	31	8	0	5	0	0	0	0	0	0	0	0	44	19:15	0	30	11	0	2	1	0	0	1	0	0	0	0	45
7:30	0	22	9	0	11	0	0	0	0	0	0	0	0	42	19:30	0	27	10	0	8	0	0	0	0	0	0	0	0	45
7:45	0	30	13	1	9	0	0	0	0	0	0	0	0	53	19:45	0	25	11	1	8	0	0	1	0	0	0	0	0	46
8:00	0	26	7	0	7	1	0	0	0	0	0	0	0	41	20:00	0	19	13	0	7	0	0	0	0	0	0	0	0	39
8:15	0	33	8	0	4	0	0	0	0	0	0	0	0	45	20:15	0	26	8	0	4	0	0	0	0	0	0	0	0	38
8:30	0	32	9	0	5	0	0	0	0	0	0	0	0	46	20:30	0	23	5	0	4	0	0	0	0	0	0	0	0	32
8:45	0	34	4	0	3	0	0	0	0	0	0	0	0	41	20:45	1	17	6	0	9	0	0	0	0	0	0	0	0	33
9:00	0	40	4	0	3	0	0	0	0	0	0	0	0	47	21:00	0	12	4	0	7	0	1	0	0	0	0	0	0	24
9:15	0	35	6	0	7	0	0	0	0	0	0	0	0	48	21:15	0	21	5	0	6	0	0	0	0	0	0	0	0	32
9:30	1	26	7	1	4	0	0	0	0	0	0	0	0	39	21:30	0	23	5	0	7	0	0	0	0	0	0	0	0	35
9:45	0	21	4	0	9	1	0	0	0	0	0	0	0	35	21:45	0	22	9	0	4	1	0	0	0	0	0	0	0	36
10:00	0	30	6	0	8	0	0	0	0	0	0	0	0	44	22:00	0	24	4	0	3	0	0	0	0	0	0	0	0	31
10:15	0	22	3	0	10	0	0	0	0	0	0	0	0	35	22:15	0	23	5	0	2	0	0	0	0	0	0	0	0	30
10:30	1	40	13	0	6	0	0	0	0	0	0	0	0	60	22:30	0	14	7	0	2	0	0	0	0	0	0	0	0	23
10:45	0	29	9	0	6	0	0	0	0	0	0	0	0	44	22:45	0	10	5	0	3	0	0	0	0	0	0	0	0	18
11:00	0	28	6	0	5	0	1	0	0	0	0	0	0	40	23:00	0	9	2	0	2	0	0	0	0	0	0	0	0	13
11:15	0	36	10	1	10	1	0	0	0	0	0	0	0	58	23:15	0	4	1	0	1	0	0	0	0	0	0	0	0	6
11:30	0	37	5	0	3	0	0	0	0	0	0	0	0	45	23:30	0	7	1	0	1	0	0	0	0	0	0	0	0	9
11:45	1	32	9	0	4	0	0	0	0	0	0	0	0	46	23:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
TOTAL	5	847	201	4	165	4	1	0	1	0	0	0	0	1,228	TOTAL	1	1,208	338	6	253	2	1	2	1	0	0	0	0	1,812

AM PEAK HOUR	10:30 AM
AM PEAK VOLUME	202

PM PEAK HOUR	12:45 PM
PM PEAK VOLUME	207

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	6	2,055	539	10	418	6	2	2	2	0	0	0	0	3,040
% OF TOTAL	0.2%	67.6%	17.7%	0.3%	13.8%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, August 26, 2021
JOB #: 1/0/1900

CITY: Barstow
LOCATION: CLASS24 Lenwood Rd - W. Main St to Jasper Rd.

AM	NORTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
0:15	0	11	1	0	1	0	0	0	0	0	0	0	0	13
0:30	0	6	1	0	1	0	0	0	0	0	0	0	0	8
0:45	0	4	2	0	0	0	0	0	0	0	0	0	0	6
1:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
1:15	0	2	0	0	1	0	0	1	0	0	0	0	0	4
1:30	0	4	1	0	0	0	0	0	1	0	0	0	0	6
1:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:00	0	2	0	0	1	0	0	1	1	0	0	0	0	5
2:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:30	1	5	0	0	0	0	0	0	0	0	0	0	0	6
2:45	0	4	0	0	1	0	0	0	0	0	0	0	0	5
3:00	0	4	1	1	0	0	0	0	0	0	0	0	0	6
3:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:45	0	4	1	0	0	0	1	0	1	0	0	0	0	7
4:00	0	2	1	0	1	0	0	0	0	0	0	0	0	4
4:15	0	2	0	1	1	0	0	0	0	0	0	0	0	4
4:30	0	4	2	0	0	0	0	0	0	0	0	0	0	6
4:45	0	9	0	0	2	0	0	0	0	0	0	0	0	11
5:00	0	16	2	0	4	0	0	0	0	0	0	0	0	22
5:15	0	15	1	0	7	1	0	0	0	0	0	0	0	24
5:30	0	22	3	1	5	0	0	0	0	0	0	0	0	31
5:45	0	15	6	0	5	0	0	0	0	0	0	0	0	26
6:00	0	38	1	0	2	0	0	0	0	0	0	0	0	41
6:15	0	25	4	1	8	0	0	0	0	0	0	0	0	38
6:30	0	24	4	1	7	1	0	0	0	0	0	0	0	37
6:45	0	31	4	1	5	3	0	0	1	0	0	0	0	45
7:00	1	35	6	1	8	2	0	0	1	0	0	0	0	54
7:15	1	26	1	1	9	0	0	0	1	0	0	0	0	39
7:30	0	26	5	1	8	2	0	0	0	0	0	0	0	42
7:45	1	27	4	1	5	0	0	0	0	0	0	0	0	38
8:00	0	25	5	0	9	0	0	0	0	0	0	0	0	39
8:15	0	49	6	0	7	0	0	0	0	0	0	0	0	62
8:30	1	30	8	2	4	0	0	0	0	0	0	0	0	45
8:45	0	30	8	1	4	0	0	0	0	0	0	0	0	43
9:00	0	29	13	0	11	1	0	0	0	0	0	0	0	54
9:15	4	16	6	0	5	0	0	0	0	0	0	0	0	31
9:30	1	28	8	0	8	1	0	0	0	0	0	0	0	46
9:45	0	25	3	0	5	0	0	0	0	0	0	0	0	33
10:00	1	26	8	0	3	0	0	0	0	0	0	0	0	38
10:15	0	16	5	0	7	0	0	0	0	0	0	0	0	28
10:30	0	26	9	0	7	1	1	0	0	0	0	0	0	44
10:45	0	34	8	1	7	0	0	0	0	0	0	0	0	50
11:00	1	31	9	0	12	0	0	0	0	1	0	0	0	54
11:15	1	19	8	0	5	0	1	0	0	0	0	0	0	34
11:30	0	33	2	0	7	0	0	0	0	0	0	0	0	42
11:45	1	31	14	2	9	0	0	0	0	0	0	0	0	57
TOTAL	14	836	172	16	192	12	3	2	6	1	0	0	0	1,254

AM PEAK HOUR	8:15 AM
AM PEAK VOLUME	204

PM	NORTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	44	11	0	6	0	0	0	0	0	0	0	0	62
12:15	0	27	10	0	10	0	0	0	0	0	0	0	0	47
12:30	1	22	6	0	8	0	0	1	0	0	0	0	0	38
12:45	1	35	10	1	10	1	0	0	1	0	0	0	0	59
13:00	0	38	5	0	11	0	1	0	0	0	0	0	0	55
13:15	0	38	9	0	11	1	0	0	0	0	0	0	0	59
13:30	0	28	7	0	6	0	0	0	0	0	0	0	0	41
13:45	0	24	8	0	13	0	1	0	0	0	0	0	0	46
14:00	0	29	4	1	7	0	1	0	0	0	0	0	0	42
14:15	1	38	5	0	6	0	0	0	0	0	0	0	0	50
14:30	0	35	11	1	10	0	0	0	0	1	0	0	0	58
14:45	1	39	10	2	7	0	0	0	0	0	0	0	0	59
15:00	0	59	13	0	12	1	0	0	0	0	0	0	0	85
15:15	0	50	6	0	8	1	0	0	0	0	0	0	0	65
15:30	0	38	7	0	6	0	0	0	0	0	0	0	0	51
15:45	1	49	8	1	3	0	0	0	0	0	0	0	0	62
16:00	0	41	7	0	6	1	0	1	0	0	0	0	0	56
16:15	0	53	9	0	7	1	0	0	0	0	0	0	0	70
16:30	0	38	7	0	8	0	0	0	0	0	0	0	0	53
16:45	0	45	10	1	10	2	0	0	0	0	0	0	0	68
17:00	0	60	15	0	7	0	0	1	0	0	0	0	0	83
17:15	0	33	10	0	9	0	0	0	0	0	0	0	0	52
17:30	0	31	6	0	5	0	0	1	0	0	0	0	0	43
17:45	0	31	4	1	5	0	0	0	0	0	0	0	0	41
18:00	2	30	9	0	6	0	0	0	0	0	0	0	0	47
18:15	0	41	3	0	2	1	0	0	0	0	0	0	0	47
18:30	1	24	3	0	4	0	0	0	0	0	0	0	0	32
18:45	0	20	4	1	6	0	0	0	0	0	0	0	0	31
19:00	0	31	6	0	4	0	1	0	0	0	0	0	0	42
19:15	0	43	3	0	5	0	0	0	0	0	0	0	0	51
19:30	0	33	5	0	3	0	0	0	0	0	0	0	0	41
19:45	0	29	5	1	1	0	0	0	0	0	0	0	0	36
20:00	1	42	4	0	3	0	1	0	0	0	0	0	0	51
20:15	1	37	7	0	6	0	0	0	0	0	0	0	0	51
20:30	0	35	3	0	1	0	0	0	0	0	0	0	0	39
20:45	0	19	5	0	2	1	0	0	0	0	0	0	0	27
21:00	0	27	4	0	3	0	0	0	0	0	0	0	0	34
21:15	0	22	4	0	2	0	0	0	0	0	0	0	0	28
21:30	0	23	2	0	1	1	0	0	0	0	0	0	0	27
21:45	0	20	1	0	1	0	0	0	0	0	0	0	0	22
22:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
22:15	0	21	1	0	3	0	0	0	0	0	0	0	0	25
22:30	0	22	0	0	0	0	0	0	0	0	0	0	0	22
22:45	0	10	4	0	0	0	0	0	0	0	0	0	0	14
23:00	1	12	1	0	0	0	0	0	0	0	0	0	0	14
23:15	0	11	2	0	1	0	0	0	0	0	0	0	0	14
23:30	1	13	0	1	0	0	0	0	0	0	0	0	0	15
23:45	0	8	0	0	1	0	0	0	0	0	0	0	0	9
TOTAL	13	1,507	276	11	246	11	5	4	1	1	0	0	0	2,075

PM PEAK HOUR	4:15 PM
PM PEAK VOLUME	274

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	27	2,343	448	27	438	23	8	6	7	2	0	0	0	3,329
% OF TOTAL	0.8%	70.4%	13.5%	0.8%	13.2%	0.7%	0.2%	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	100.0%

TOTAL: ALL	32	4,448	991	47	791	29	11	7	9	3	0	0	0	6,368
% OF TOTAL	1.0%	133.6%	29.8%	1.4%	23.8%	0.9%	0.3%	0.2%	0.3%	0.1%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, August 26, 2021
JOB #: 1/0/1900

CITY: Barstow
LOCATION: CLASS24 Lenwood Rd - W. Main St to Jasper Rd.

AM	SOUTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	4	0	0	1	0	0	0	0	0	0	0	0	5
0:15	0	8	3	0	2	0	0	0	0	0	0	0	0	13
0:30	0	4	1	0	0	0	0	0	0	0	0	0	0	5
0:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
1:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
1:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
2:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
2:15	0	2	1	0	1	0	0	0	0	0	0	0	0	4
2:30	0	4	0	0	1	0	0	0	0	0	0	0	0	5
2:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
3:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
4:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
4:15	0	3	1	0	1	0	0	0	0	0	0	0	0	5
4:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
4:45	0	6	3	0	2	0	0	0	0	0	0	0	0	11
5:00	0	11	3	0	2	0	0	0	0	0	0	0	0	16
5:15	0	16	3	0	3	0	0	0	0	0	0	0	0	22
5:30	0	22	8	0	2	0	0	0	0	0	0	0	0	32
5:45	0	29	14	0	1	0	0	0	0	0	0	0	0	44
6:00	1	15	4	0	3	0	0	0	0	0	0	0	0	23
6:15	0	14	5	0	1	0	0	0	0	0	0	0	0	20
6:30	0	24	6	0	3	0	0	0	0	0	0	0	0	33
6:45	0	19	3	0	1	0	0	0	0	0	0	0	0	23
7:00	0	26	5	1	2	0	0	0	0	0	0	0	0	34
7:15	0	27	8	0	3	0	0	0	1	0	0	0	0	39
7:30	0	29	8	0	5	0	1	0	0	0	0	0	0	43
7:45	0	28	5	0	4	0	0	0	1	0	0	0	0	38
8:00	0	26	9	1	4	0	0	0	0	0	0	0	0	40
8:15	1	25	8	0	4	0	0	0	0	0	0	0	0	38
8:30	0	27	8	0	6	0	0	0	0	0	0	0	0	41
8:45	0	30	10	0	5	0	0	0	0	0	0	0	0	45
9:00	0	28	7	0	7	0	0	0	0	0	0	0	0	42
9:15	0	27	10	0	8	0	0	0	0	0	0	0	0	45
9:30	0	37	13	1	10	0	0	0	0	0	0	0	0	61
9:45	0	32	8	0	7	0	0	0	0	0	0	0	0	47
10:00	0	22	9	0	5	0	0	0	0	0	0	0	0	36
10:15	0	34	5	0	9	0	0	0	0	0	0	0	0	48
10:30	0	32	7	0	11	1	0	0	0	0	0	0	0	51
10:45	0	40	9	1	3	0	0	0	0	0	0	0	0	53
11:00	0	43	4	0	8	0	0	0	0	0	0	0	0	55
11:15	0	35	9	0	6	0	0	0	0	0	0	0	0	50
11:30	0	43	4	0	3	0	0	0	0	0	0	0	0	50
11:45	0	34	4	0	3	0	0	0	0	0	0	0	0	41
TOTAL	2	844	208	4	138	1	1	0	1	1	0	0	0	1,200

AM PEAK HOUR	10:30 AM
AM PEAK VOLUME	209

PM	SOUTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	40	5	0	5	0	0	0	0	0	0	0	0	50
12:15	0	29	10	0	8	1	0	0	0	0	0	0	0	48
12:30	0	24	13	2	4	0	0	0	0	0	0	0	0	43
12:45	0	27	6	0	9	0	0	0	0	0	0	0	0	42
13:00	0	31	8	0	12	0	0	0	0	0	0	0	0	51
13:15	0	32	7	0	5	1	0	0	0	0	0	0	0	45
13:30	0	27	10	0	9	0	0	0	0	0	0	0	0	46
13:45	0	39	6	1	6	0	0	0	0	0	0	0	0	52
14:00	1	36	8	0	5	0	0	0	0	0	0	0	0	50
14:15	0	23	8	1	6	0	0	0	0	0	0	0	0	38
14:30	0	37	9	0	3	0	0	0	0	0	0	0	0	49
14:45	0	33	12	0	4	0	0	0	0	0	0	0	0	49
15:00	0	24	6	0	6	0	0	0	0	0	0	0	0	36
15:15	0	34	8	1	5	1	0	0	0	0	0	0	0	49
15:30	0	27	10	0	7	0	0	0	0	0	0	0	0	44
15:45	0	40	6	0	5	0	0	0	0	0	0	0	0	51
16:00	0	35	3	0	5	0	0	0	0	0	0	0	0	43
16:15	1	36	7	0	8	0	0	1	0	0	0	0	0	53
16:30	0	24	7	1	6	0	0	0	0	0	0	0	0	38
16:45	0	32	5	0	6	0	0	0	0	0	0	0	0	43
17:00	0	37	9	0	7	0	0	0	0	0	0	0	0	53
17:15	0	29	12	0	6	0	1	0	0	0	0	0	0	48
17:30	0	41	7	0	5	0	0	0	0	0	0	0	0	53
17:45	1	45	10	0	3	0	0	0	0	0	0	0	0	59
18:00	0	29	10	0	4	0	0	0	0	0	0	0	0	43
18:15	0	25	3	0	4	0	0	0	0	0	0	0	0	32
18:30	0	31	8	0	6	0	0	0	0	0	0	0	0	45
18:45	0	40	7	2	4	0	0	0	0	0	0	0	0	53
19:00	0	20	9	0	4	0	0	0	0	0	0	0	0	33
19:15	0	18	12	0	5	0	0	0	0	0	0	0	0	35
19:30	0	26	6	1	4	0	0	0	0	0	0	0	0	37
19:45	0	25	7	0	5	0	0	0	0	0	0	0	0	37
20:00	0	32	7	0	4	0	0	0	0	0	0	0	0	43
20:15	0	24	6	0	4	0	0	0	0	0	0	0	0	34
20:30	0	16	3	0	2	0	0	0	0	0	0	0	0	21
20:45	0	16	4	2	1	1	0	0	0	0	0	0	0	24
21:00	0	22	8	0	2	0	0	0	0	0	0	0	0	32
21:15	0	14	11	0	4	0	0	0	0	0	0	0	0	29
21:30	0	13	10	0	2	0	0	0	0	0	0	0	0	25
21:45	0	21	4	3	3	0	0	0	0	0	0	0	0	31
22:00	0	10	7	0	4	0	0	0	0	0	0	0	0	21
22:15	0	16	4	0	1	1	0	0	0	0	0	0	0	22
22:30	0	17	6	0	2	0	0	0	0	0	0	0	0	25
22:45	0	20	3	0	1	0	0	0	0	0	0	0	0	24
23:00	0	13	3	2	2	0	0	0	0	0	0	0	0	20
23:15	0	12	3	0	1	0	0	0	1	0	0	0	0	17
23:30	0	14	2	0	1	0	0	0	0	0	0	0	0	17
23:45	0	5	0	0	0	0	1	0	0	0	0	0	0	6
TOTAL	3	1,261	335	16	215	5	2	1	1	0	0	0	0	1,839

PM PEAK HOUR	5:00 PM
PM PEAK VOLUME	213

TOTAL: AM+PM	5	2,105	543	20	353	6	3	1	2	1	0	0	0	3,039
% OF TOTAL	0.2%	69.3%	17.9%	0.7%	11.6%	0.2%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, August 24, 2021
JOB #: 1/0/1900

CITY: Barstow
LOCATION: CLASS55 W. Main St - Avenue D to Avenue A.

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	17	3	1	0	0	0	0	0	0	0	0	0	21
0:15	0	13	0	0	2	0	0	0	0	0	0	0	0	15
0:30	0	15	0	0	0	0	0	0	0	0	0	0	0	15
0:45	0	11	1	0	1	0	0	0	0	0	0	0	0	13
1:00	0	15	2	0	0	0	0	0	0	0	0	0	0	17
1:15	0	7	0	1	0	0	0	0	0	0	0	0	0	8
1:30	0	8	0	0	1	0	0	1	0	0	0	0	0	10
1:45	0	10	1	0	0	0	0	0	0	0	0	0	0	11
2:00	0	6	0	0	1	0	0	0	0	0	0	0	0	7
2:15	0	9	0	0	0	0	0	0	0	0	0	0	0	9
2:30	0	6	4	0	1	0	0	0	1	0	0	0	0	12
2:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8
3:00	0	5	4	0	0	0	0	0	0	0	0	0	0	9
3:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9
3:30	0	4	1	0	0	1	0	0	0	0	0	0	0	6
3:45	0	11	1	0	0	1	0	0	0	0	0	0	0	13
4:00	0	6	3	0	0	0	0	0	0	0	0	0	0	9
4:15	0	9	3	0	0	0	0	0	0	0	0	0	0	12
4:30	0	7	1	0	0	0	0	0	0	0	0	0	0	8
4:45	0	11	3	0	3	0	0	0	0	0	0	0	0	17
5:00	0	7	4	0	4	0	0	0	0	0	0	0	0	15
5:15	0	24	2	0	4	0	0	0	0	0	0	0	0	30
5:30	0	30	5	0	5	2	0	0	0	0	0	0	0	42
5:45	1	31	6	0	4	1	0	0	0	0	0	0	0	43
6:00	0	34	2	0	3	1	0	0	0	0	0	0	0	40
6:15	0	34	4	0	2	0	0	0	0	0	0	0	0	40
6:30	0	43	7	0	5	0	0	0	0	0	0	0	0	55
6:45	0	78	18	4	6	0	0	0	0	0	0	0	0	106
7:00	0	77	10	1	10	1	0	0	0	0	0	0	0	99
7:15	0	52	8	0	8	1	0	1	0	0	0	0	0	70
7:30	0	51	8	0	4	0	0	0	0	0	0	0	0	63
7:45	0	69	17	1	16	0	0	0	0	0	0	0	0	103
8:00	1	62	11	4	9	1	0	0	0	0	0	0	0	88
8:15	1	80	16	0	7	0	0	0	1	0	0	0	0	105
8:30	0	91	11	0	7	0	0	0	0	0	0	0	0	109
8:45	0	119	14	2	9	0	0	0	2	0	0	0	0	146
9:00	0	121	19	6	7	0	0	1	0	0	0	0	0	154
9:15	1	67	18	2	5	2	0	0	2	0	0	0	0	97
9:30	0	70	11	1	11	0	1	0	0	0	0	0	0	94
9:45	2	85	15	1	6	2	0	0	0	0	0	0	0	111
10:00	0	89	10	1	15	2	0	0	0	1	0	0	0	118
10:15	1	72	11	1	10	0	0	0	0	0	0	0	0	95
10:30	0	88	17	0	7	2	0	0	1	0	0	0	0	115
10:45	0	100	15	0	8	0	0	0	0	0	0	0	0	123
11:00	0	84	16	1	11	0	0	0	0	0	0	0	0	112
11:15	1	95	10	1	13	1	0	0	0	0	0	0	0	121
11:30	0	99	13	1	10	0	0	1	0	0	0	0	0	124
11:45	1	89	14	1	7	0	0	0	0	0	0	0	0	112
TOTAL	9	2,127	340	30	222	18	1	4	7	1	0	0	0	2,759

AM PEAK HOUR	8:15 AM
AM PEAK VOLUME	514

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	99	22	0	8	0	1	2	0	0	0	0	0	132
12:15	0	91	14	0	9	1	1	1	0	0	0	0	0	117
12:30	0	101	14	1	8	0	0	0	0	0	0	0	0	124
12:45	1	107	18	1	8	0	0	0	0	0	0	0	0	135
13:00	0	105	14	0	8	1	0	0	0	0	0	0	0	128
13:15	0	84	17	0	9	0	0	2	0	0	0	0	0	112
13:30	0	106	12	0	7	0	0	0	0	0	0	0	0	125
13:45	0	94	12	0	7	0	0	1	0	0	0	0	1	115
14:00	2	95	9	1	6	0	0	0	0	0	0	0	0	113
14:15	0	109	15	0	0	1	0	0	0	0	0	0	0	125
14:30	0	112	11	0	8	1	1	0	0	0	0	0	0	133
14:45	1	97	25	0	9	1	0	0	0	0	0	0	0	133
15:00	1	101	20	1	9	1	0	0	0	0	0	0	0	133
15:15	1	111	22	0	6	1	0	0	0	0	1	0	0	142
15:30	0	123	18	1	7	1	0	0	0	0	0	0	0	150
15:45	3	108	15	0	7	0	0	0	0	0	0	0	0	133
16:00	0	120	14	4	6	1	0	0	0	0	0	0	0	145
16:15	0	111	13	0	9	1	0	0	0	0	0	0	0	134
16:30	1	89	22	0	4	2	0	0	0	0	0	0	0	118
16:45	1	100	10	1	8	1	0	0	0	0	0	0	0	121
17:00	1	69	12	1	10	0	0	0	0	0	0	0	0	93
17:15	1	86	13	2	6	0	0	0	0	0	0	0	0	108
17:30	0	78	26	0	8	0	0	0	0	0	0	0	0	112
17:45	0	77	13	1	7	0	0	0	0	0	0	0	0	98
18:00	0	75	12	0	8	0	0	0	0	0	0	0	0	95
18:15	0	79	15	0	5	0	0	0	0	0	0	0	0	99
18:30	0	76	4	0	6	0	0	0	0	0	0	0	0	86
18:45	0	72	14	0	7	0	0	0	0	0	0	0	0	93
19:00	0	87	11	0	7	0	0	0	0	0	0	0	0	105
19:15	0	79	5	0	3	0	0	0	0	0	0	0	0	87
19:30	0	65	5	1	4	0	0	0	0	0	0	0	0	75
19:45	1	68	6	1	4	1	0	0	0	0	0	0	0	81
20:00	0	77	11	0	2	0	0	0	0	0	0	0	0	90
20:15	1	55	13	0	6	0	0	0	0	0	0	0	0	75
20:30	0	66	6	0	3	0	0	0	0	0	0	0	0	75
20:45	0	42	4	0	0	0	0	0	0	0	0	0	0	46
21:00	0	56	4	0	1	0	0	0	0	0	0	0	0	61
21:15	1	33	4	0	2	0	0	0	0	0	0	0	0	40
21:30	0	38	4	0	0	0	0	0	0	0	0	0	0	42
21:45	1	40	4	0	2	0	0	0	0	0	0	0	0	47
22:00	1	36	4	0	2	0	0	0	0	0	0	0	0	43
22:15	0	36	6	0	2	0	0	0	0	0	0	0	0	44
22:30	0	28	0	0	1	0	0	0	0	0	0	0	0	29
22:45	0	30	4	0	0	0	0	0	0	0	0	0	0	34
23:00	1	36	8	0	1	0	0	0	0	0	0	0	0	46
23:15	0	25	2	0	1	0	0	0	0	0	0	0	0	28
23:30	0	16	3	0	0	0	0	0	1	0	0	0	0	20
23:45	0	16	2	0	0	0	0	0	0	0	0	0	0	18
TOTAL	19	3,604	532	16	241	14	3	6	1	0	1	0	1	4,438

PM PEAK HOUR	3:15 PM
PM PEAK VOLUME	570

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	28	5,731	872	46	463	32	4	10	8	1	1	0	1	7,197
% OF TOTAL	0.4%	79.6%	12.1%	0.6%	6.4%	0.4%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

TOTAL: ALL	848	10,581	1,584	80	850	120	29	20	22	9	2	5	3	14,153
% OF TOTAL	11.8%	147.0%	22.0%	1.1%	11.8%	1.7%	0.4%	0.3%	0.3%	0.1%	0.0%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, August 24, 2021
JOB #: 1/0/1900

CITY: Barstow
LOCATION: CLASS55 W. Main St - Avenue D to Avenue A.

AM	WESTBOUND														PM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL	Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	1	15	1	0	1	0	0	0	0	0	0	0	0	18	12:00	9	79	13	1	14	0	1	0	0	0	0	0	0	117
0:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7	12:15	18	98	16	0	5	2	1	0	0	0	0	0	0	140
0:30	3	8	0	0	1	0	0	0	0	0	0	0	0	12	12:30	12	98	11	0	5	2	0	0	0	0	0	0	0	128
0:45	1	8	0	0	1	1	0	0	0	0	0	0	0	11	12:45	25	82	7	0	8	5	1	0	0	0	0	0	0	128
1:00	0	11	3	0	2	1	0	0	0	0	0	0	0	17	13:00	18	72	12	2	7	0	0	1	0	0	0	0	1	113
1:15	0	13	3	0	0	0	0	0	0	0	0	0	0	16	13:15	15	83	11	1	7	2	2	0	0	1	0	0	0	122
1:30	0	8	4	0	0	0	0	0	0	0	0	0	0	12	13:30	15	75	11	1	7	2	2	0	1	0	0	0	0	114
1:45	0	3	1	0	0	0	0	1	0	0	0	0	0	5	13:45	14	69	13	0	3	0	0	0	0	0	0	0	0	99
2:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8	14:00	20	94	8	0	10	4	3	0	0	0	0	1	0	140
2:15	0	5	1	0	1	0	0	0	0	0	0	0	0	7	14:15	24	83	15	0	6	2	0	1	0	1	0	0	0	132
2:30	0	8	0	0	2	0	1	0	0	0	0	0	0	11	14:30	32	98	11	0	5	1	0	1	0	0	0	1	0	149
2:45	0	3	1	0	1	0	0	0	0	0	0	0	0	5	14:45	34	101	8	0	2	3	1	2	1	0	0	0	0	152
3:00	0	6	3	0	1	0	0	0	0	0	0	0	0	10	15:00	25	102	10	1	7	2	1	0	0	0	0	0	0	148
3:15	0	5	0	0	1	0	0	0	0	0	0	0	0	6	15:15	39	81	10	0	8	0	1	0	0	0	1	0	0	140
3:30	0	6	4	0	0	0	0	0	0	0	0	0	0	10	15:30	26	108	16	1	5	5	1	0	1	1	0	0	0	164
3:45	1	5	0	0	1	0	0	0	0	0	0	0	0	7	15:45	30	69	14	3	5	1	1	0	0	0	0	0	0	123
4:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5	16:00	36	94	13	2	9	4	0	1	0	0	0	0	0	159
4:15	0	12	1	0	2	1	0	0	0	0	0	0	0	16	16:15	25	101	15	0	10	2	0	0	0	0	0	0	0	153
4:30	0	9	2	0	0	0	0	0	0	0	0	0	0	11	16:30	22	116	14	1	7	3	0	1	0	0	0	0	0	164
4:45	0	8	4	0	0	0	0	0	0	0	0	0	0	12	16:45	15	107	11	0	8	0	0	1	0	0	0	0	0	142
5:00	0	10	1	0	3	0	0	0	0	0	0	0	0	14	17:00	18	105	9	0	10	1	1	0	0	1	0	0	0	145
5:15	0	20	4	1	0	0	0	0	0	0	0	0	0	25	17:15	20	76	14	0	5	2	0	0	0	0	0	0	0	117
5:30	0	16	3	0	0	0	0	0	0	0	0	0	0	19	17:30	20	77	14	0	4	0	1	0	0	0	0	0	0	116
5:45	1	18	1	1	3	0	0	0	1	0	0	0	0	25	17:45	16	68	13	0	5	0	0	0	0	0	0	1	0	103
6:00	0	26	3	1	3	0	0	0	0	0	0	0	0	33	18:00	10	72	11	0	2	1	0	0	0	0	0	0	0	96
6:15	1	19	6	1	4	0	0	0	0	0	0	0	0	31	18:15	12	60	3	0	2	0	0	0	0	0	0	0	0	77
6:30	0	21	10	3	3	0	0	0	0	0	0	0	0	37	18:30	8	72	8	0	4	1	0	0	0	0	0	0	0	93
6:45	0	51	10	0	7	2	0	0	1	0	0	0	0	71	18:45	4	44	3	0	2	0	0	0	0	1	0	0	0	54
7:00	0	74	10	0	6	1	0	0	1	0	0	0	0	92	19:00	13	44	8	0	3	0	0	0	0	0	0	1	0	69
7:15	0	49	9	1	6	0	0	0	0	0	0	0	0	65	19:15	10	61	4	0	5	0	0	0	1	1	0	0	0	82
7:30	1	33	10	1	6	1	1	0	0	0	0	0	0	53	19:30	11	50	9	1	5	0	0	0	0	0	0	0	0	76
7:45	0	62	10	1	11	0	0	0	0	0	0	0	0	84	19:45	6	51	6	0	3	1	0	0	0	0	0	0	0	67
8:00	0	51	11	1	6	1	0	0	1	0	0	0	0	71	20:00	3	66	10	1	4	0	0	0	0	0	0	0	0	84
8:15	8	68	14	0	2	4	0	0	0	0	0	0	0	96	20:15	8	53	9	0	2	0	1	0	0	0	0	0	0	73
8:30	4	95	14	1	2	1	0	0	0	0	0	0	0	117	20:30	8	57	5	1	2	0	0	0	0	0	0	0	0	73
8:45	11	89	13	2	5	1	0	0	1	0	0	1	0	123	20:45	1	37	8	0	1	1	0	0	0	0	0	0	0	48
9:00	10	76	12	2	7	2	0	0	1	0	0	0	0	110	21:00	5	38	4	0	3	1	0	0	0	0	0	0	0	51
9:15	5	69	11	0	7	0	0	0	0	0	0	0	0	92	21:15	6	33	2	0	2	0	0	0	0	0	0	0	0	43
9:30	8	66	9	0	8	1	0	0	2	0	0	0	0	94	21:30	7	33	1	0	1	0	0	0	0	0	0	0	0	42
9:45	10	53	12	0	6	2	0	0	1	0	0	0	0	84	21:45	6	28	2	0	0	0	0	0	0	0	0	0	0	36
10:00	10	65	13	0	15	3	1	0	0	0	0	0	1	108	22:00	3	39	1	0	0	0	0	0	0	0	0	0	0	43
10:15	13	69	10	0	7	2	0	0	0	0	0	0	0	101	22:15	3	27	5	0	0	0	0	0	0	0	0	0	0	35
10:30	9	86	9	0	6	0	0	0	0	0	0	0	0	110	22:30	4	39	3	0	1	0	0	0	0	0	0	0	0	47
10:45	13	67	9	0	8	3	2	0	0	0	0	0	0	102	22:45	4	19	4	0	0	0	0	0	0	0	0	0	0	27
11:00	12	78	13	0	9	2	1	1	0	0	0	0	0	116	23:00	1	16	4	0	0	0	0	0	0	0	0	0	0	21
11:15	8	83	13	0	11	5	1	0	0	0	0	0	0	121	23:15	5	14	3	1	2	2	0	0	0	0	0	0	0	27
11:30	12	92	17	1	3	3	0	0	1	2	0	0	0	131	23:30	1	10	1	0	3	0	0	0	0	0	0	0	0	15
11:45	9	83	20	0	8	1	0	0	0	0	0	0	0	121	23:45	2	13	1	0	1	0	0	0	0	0	0	0	0	17
TOTAL	151	1,738	308	17	177	38	7	2	10	2	0	1	1	2,452	TOTAL	669	3,112	404	17	210	50	18	8	4	6	1	4	1	4,504

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	489

PM PEAK HOUR	4:00 PM
PM PEAK VOLUME	618

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	820	4,850	712	34	387	88	25	10	14	8	1	5	2	6,956
% OF TOTAL	11.8%	69.7%	10.2%	0.5%	5.6%	1.3%	0.4%	0.1%	0.2%	0.1%	0.0%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 25, 2021
JOB #: 1/0/1900

CITY: Barstow
LOCATION: CLASS55 W. Main St - Avenue D to Avenue A.

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
0:15	0	11	3	0	2	0	0	0	0	0	0	0	0	16
0:30	0	7	1	0	0	0	0	0	0	0	0	0	0	8
0:45	0	10	0	0	0	0	0	1	0	0	0	0	0	11
1:00	0	13	3	0	0	0	0	0	1	0	0	0	0	17
1:15	0	11	0	0	1	0	0	0	0	0	0	0	0	12
1:30	0	7	1	0	0	0	0	0	0	0	0	0	0	8
1:45	0	9	1	0	0	0	0	0	1	0	0	0	0	11
2:00	0	8	0	0	1	0	0	0	0	0	0	0	0	9
2:15	0	6	2	0	0	0	0	0	0	0	0	0	0	8
2:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
2:45	0	5	1	0	1	0	0	0	0	0	0	0	0	7
3:00	0	6	0	0	1	0	0	0	0	0	0	0	0	7
3:15	0	12	4	0	0	0	0	0	0	0	0	0	0	16
3:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
3:45	0	14	2	1	0	0	0	0	0	0	0	0	0	17
4:00	0	7	1	0	1	0	0	0	0	0	0	0	0	9
4:15	0	5	3	0	1	0	0	0	0	0	0	0	0	9
4:30	0	14	2	0	0	0	0	0	0	0	0	0	0	16
4:45	0	11	2	0	0	0	0	0	0	0	0	0	0	13
5:00	0	15	5	0	3	0	0	1	0	0	0	0	0	24
5:15	0	27	4	0	3	0	0	0	0	0	0	0	0	34
5:30	0	29	7	0	5	0	0	1	0	0	0	0	0	42
5:45	0	27	7	1	2	1	0	0	0	0	0	0	0	38
6:00	0	28	7	0	3	0	0	0	0	0	0	0	0	38
6:15	0	26	2	0	3	2	0	1	0	0	0	0	0	34
6:30	0	43	6	0	2	1	0	0	0	0	0	0	0	52
6:45	0	98	6	5	7	0	0	0	0	0	0	0	0	116
7:00	0	67	12	0	10	0	0	0	1	0	0	0	0	90
7:15	1	51	11	0	11	1	0	0	0	0	0	0	0	75
7:30	0	39	10	2	9	0	0	1	1	0	0	0	0	62
7:45	0	79	11	1	12	1	0	1	0	0	0	0	0	105
8:00	0	74	15	2	11	0	0	0	0	0	0	0	0	102
8:15	0	88	9	1	9	2	0	0	0	0	0	0	0	109
8:30	0	100	18	1	9	2	0	0	0	0	0	0	1	131
8:45	1	99	14	0	9	1	0	0	0	0	0	0	0	124
9:00	1	123	16	6	6	0	0	0	0	0	0	0	0	152
9:15	1	81	12	0	4	0	0	0	0	0	0	0	0	98
9:30	1	88	12	1	4	0	0	0	0	0	0	0	0	106
9:45	0	98	11	1	7	1	0	0	0	0	0	0	0	118
10:00	0	75	15	0	4	1	0	0	1	0	0	0	0	96
10:15	0	85	18	0	9	1	0	1	0	0	0	0	0	114
10:30	0	85	13	0	5	0	0	0	0	0	0	0	0	103
10:45	0	73	18	0	9	0	0	0	0	0	0	0	0	100
11:00	0	94	20	0	5	0	0	0	0	0	0	0	0	119
11:15	0	100	12	0	10	0	0	1	1	0	0	0	0	124
11:30	1	104	9	0	7	2	0	0	0	0	0	0	0	123
11:45	0	90	12	1	12	1	0	1	1	0	0	0	0	118
TOTAL	6	2,171	338	23	198	17	0	9	7	0	0	0	1	2,770

AM PEAK HOUR	8:15 AM
AM PEAK VOLUME	516

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	91	15	0	12	0	0	0	0	0	0	0	0	119
12:15	0	105	13	0	12	1	0	0	0	0	0	0	0	131
12:30	1	119	22	1	8	0	0	0	0	0	0	0	0	151
12:45	1	95	16	0	8	2	0	0	0	0	0	0	0	122
13:00	0	104	12	0	5	0	0	1	0	1	0	0	0	123
13:15	1	104	11	0	6	1	0	0	0	0	0	0	0	123
13:30	1	127	17	1	7	0	0	0	0	0	0	0	0	153
13:45	1	101	18	0	7	2	0	0	1	1	0	0	0	131
14:00	0	107	12	0	5	0	0	0	0	0	0	0	0	124
14:15	1	112	23	2	4	2	0	0	1	0	0	0	0	145
14:30	0	105	13	2	12	1	0	1	0	0	0	0	0	134
14:45	0	80	12	1	5	0	0	0	0	0	0	0	0	98
15:00	2	114	12	0	5	0	0	0	0	0	0	0	0	133
15:15	0	88	11	0	5	0	0	0	0	0	0	0	0	104
15:30	0	79	12	0	2	0	0	0	0	0	0	0	0	93
15:45	1	86	14	0	9	0	0	0	0	0	0	0	0	110
16:00	2	95	13	1	10	0	0	0	0	0	0	1	0	122
16:15	1	98	14	0	7	0	0	0	0	0	0	0	0	120
16:30	0	107	20	0	5	0	0	0	0	0	0	0	0	132
16:45	0	121	11	1	6	0	0	0	0	0	0	0	0	139
17:00	0	95	12	0	9	1	0	0	0	0	0	0	0	117
17:15	0	95	4	0	6	1	0	0	0	0	0	0	0	106
17:30	1	82	11	0	8	0	0	0	0	0	0	0	0	102
17:45	1	90	7	0	3	0	0	1	0	0	0	0	0	102
18:00	0	75	12	0	1	1	0	0	0	0	0	0	0	89
18:15	0	83	7	0	3	0	0	0	0	0	0	0	0	93
18:30	0	80	9	1	7	1	0	0	0	0	0	0	0	98
18:45	1	76	12	0	5	1	0	0	0	0	0	0	0	95
19:00	0	55	9	0	2	0	0	0	0	0	0	0	0	66
19:15	0	69	9	0	10	1	0	0	0	0	0	0	0	89
19:30	0	74	10	0	5	0	0	0	0	0	0	0	0	89
19:45	1	54	10	0	4	0	0	0	0	0	0	0	0	69
20:00	1	57	7	0	5	0	0	0	0	0	0	0	0	70
20:15	0	55	4	0	3	0	0	1	0	0	0	0	0	63
20:30	0	53	7	1	1	1	0	0	0	0	0	0	0	63
20:45	1	46	7	0	0	0	0	0	0	0	0	0	0	54
21:00	1	56	5	0	1	0	0	0	0	0	0	0	0	63
21:15	0	48	5	0	0	0	0	0	0	0	0	0	0	53
21:30	0	46	4	0	2	0	0	0	0	0	0	0	0	52
21:45	0	30	5	0	3	0	0	0	0	0	0	0	0	38
22:00	0	36	4	0	1	0	0	0	0	0	0	0	0	41
22:15	0	34	3	0	0	0	0	0	0	0	0	0	0	37
22:30	0	32	0	0	1	0	0	0	0	0	0	0	0	33
22:45	0	32	5	0	2	1	0	1	0	0	0	0	0	41
23:00	0	26	6	0	0	0	0	0	0	0	0	0	0	32
23:15	0	21	1	0	2	0	0	0	0	0	0	0	0	24
23:30	0	13	0	0	0	0	0	0	0	0	0	0	0	13
23:45	0	11	5	0	1	0	0	0	0	0	0	0	0	17
TOTAL	20	3,562	471	11	225	17	0	5	2	2	0	1	0	4,316

PM PEAK HOUR	1:30 PM
PM PEAK VOLUME	553

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	26	5,733	809	34	423	34	0	14	9	2	0	1	1	7,086
% OF TOTAL	0.4%	80.9%	11.4%	0.5%	6.0%	0.5%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

TOTAL: ALL	1,188	9,862	1,453	62	745	105	25	22	24	5	4	10	3	13,508
% OF TOTAL	16.8%	139.2%	20.5%	0.9%	10.5%	1.5%	0.4%	0.3%	0.3%	0.1%	0.1%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 25, 2021
JOB #: 1/0/1900

CITY: Barstow
LOCATION: CLASS55 W. Main St - Avenue D to Avenue A.

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	2	13	1	0	1	0	0	0	0	0	0	0	0	17
0:15	2	16	2	0	1	0	0	0	0	0	0	0	0	21
0:30	1	10	1	0	1	0	0	0	0	0	0	0	0	13
0:45	2	9	3	0	1	0	0	0	0	0	0	0	0	15
1:00	3	10	2	0	0	0	0	0	0	0	0	0	0	15
1:15	0	4	4	0	0	0	0	0	0	0	0	0	0	8
1:30	0	11	1	0	1	0	0	0	0	0	0	0	0	13
1:45	1	5	2	0	0	0	0	0	0	0	0	0	0	8
2:00	2	3	1	0	0	1	0	0	0	0	0	0	0	7
2:15	1	4	1	0	0	0	0	0	0	0	0	0	0	6
2:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
2:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
3:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
3:15	0	7	2	0	0	0	0	0	0	0	0	0	0	9
3:30	0	6	2	0	0	0	0	0	0	0	0	0	0	8
3:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
4:00	2	10	2	0	0	0	0	0	1	0	0	0	0	15
4:15	0	13	1	0	2	0	0	0	0	0	0	0	0	16
4:30	1	7	2	0	2	0	0	0	0	0	0	0	0	12
4:45	0	10	2	0	0	0	0	0	0	0	0	0	0	12
5:00	3	16	3	0	5	0	0	0	0	0	0	0	0	27
5:15	2	14	4	1	0	0	0	1	0	0	0	0	0	22
5:30	1	15	2	0	1	0	1	0	0	0	0	0	0	20
5:45	1	21	7	1	2	0	0	0	0	0	0	0	0	32
6:00	1	22	1	1	2	0	0	0	0	0	0	0	0	27
6:15	0	19	8	1	5	0	0	0	1	0	0	0	0	34
6:30	1	29	12	2	8	0	0	0	0	0	0	0	0	52
6:45	2	56	9	0	4	1	0	0	0	0	0	0	0	72
7:00	3	59	12	2	5	0	0	0	0	0	0	0	0	81
7:15	3	38	6	1	4	0	1	0	1	0	0	0	0	54
7:30	3	41	5	1	7	0	0	0	0	0	0	0	0	57
7:45	8	60	9	0	5	1	0	0	1	0	0	0	0	84
8:00	5	47	12	3	7	1	0	1	0	0	0	0	0	76
8:15	3	56	14	0	7	1	0	0	0	0	0	0	0	81
8:30	4	54	8	1	4	1	1	0	0	0	0	0	0	73
8:45	5	43	10	2	5	1	0	0	0	0	0	0	0	66
9:00	7	53	8	1	5	0	1	1	0	0	0	0	0	76
9:15	5	41	14	2	6	1	1	0	0	0	0	0	0	70
9:30	9	56	8	1	7	2	0	1	0	0	0	0	0	84
9:45	12	57	7	0	9	1	1	0	0	0	0	0	0	87
10:00	11	65	15	1	9	3	1	0	0	0	0	0	0	105
10:15	11	53	8	0	8	0	1	0	0	0	0	0	0	81
10:30	12	68	17	0	13	2	0	0	1	0	0	0	0	113
10:45	16	63	11	0	5	1	1	0	1	1	0	0	0	99
11:00	4	73	10	0	5	4	0	1	0	0	0	0	0	97
11:15	22	81	13	1	7	4	0	0	1	0	1	0	0	130
11:30	23	66	16	0	9	1	1	0	1	1	0	1	0	119
11:45	18	82	19	0	5	2	1	0	1	1	0	0	0	129
TOTAL	212	1,509	302	22	168	28	11	5	9	3	1	1	0	2,271

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	475

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	25	53	13	0	5	2	1	0	0	0	0	1	0	100
12:15	32	50	9	0	3	2	1	0	1	0	0	0	0	98
12:30	28	70	5	0	4	4	1	0	0	0	0	1	1	114
12:45	40	63	6	0	3	2	1	0	1	0	1	0	0	117
13:00	34	55	8	0	3	3	0	0	1	0	1	0	0	105
13:15	35	63	9	2	4	1	0	0	0	0	0	1	0	115
13:30	46	58	10	0	11	1	1	0	0	0	0	0	0	127
13:45	51	54	6	0	8	2	0	1	0	0	0	0	0	122
14:00	40	47	8	0	2	1	0	0	0	0	0	0	0	98
14:15	52	44	10	0	8	1	0	0	0	0	1	1	1	118
14:30	49	96	11	0	4	2	0	1	0	0	0	1	0	164
14:45	42	76	7	2	3	3	2	0	1	0	0	1	0	137
15:00	63	70	8	1	5	3	1	0	0	0	0	0	0	151
15:15	52	59	8	0	4	0	0	0	0	0	0	0	0	123
15:30	24	69	5	0	2	2	0	0	0	0	0	1	0	103
15:45	19	80	8	1	6	1	2	0	0	0	0	0	0	117
16:00	25	83	8	0	8	2	0	0	0	0	0	0	0	126
16:15	23	85	14	0	5	0	0	0	0	0	0	0	0	127
16:30	33	79	7	0	6	1	0	0	0	0	0	0	0	126
16:45	20	85	17	0	4	1	0	0	0	0	0	0	0	127
17:00	21	80	10	0	5	1	0	0	0	0	0	0	0	117
17:15	21	74	6	0	2	1	0	0	0	0	0	0	0	104
17:30	13	81	13	0	3	1	0	0	0	0	0	0	0	111
17:45	27	79	5	0	5	1	0	0	0	0	0	0	0	117
18:00	14	64	9	0	1	0	0	0	0	0	0	0	0	88
18:15	10	54	11	0	3	0	0	0	0	0	0	0	0	78
18:30	12	68	4	0	5	0	1	0	0	0	0	0	0	90
18:45	13	58	8	0	3	0	0	0	1	0	0	1	0	84
19:00	4	58	5	0	4	1	0	0	0	0	0	0	0	72
19:15	12	63	5	0	1	0	1	1	0	0	0	0	0	83
19:30	11	61	11	0	3	0	0	0	1	0	0	0	0	87
19:45	11	60	9	0	6	1	0	0	0	0	0	0	0	87
20:00	6	51	10	0	4	1	0	0	0	0	0	0	0	72
20:15	6	56	11	0	2	0	0	0	0	0	0	0	0	75
20:30	5	46	5	0	2	0	0	0	0	0	0	0	0	58
20:45	5	31	5	0	3	0	0	0	0	0	0	0	0	44
21:00	4	31	7	0	1	0	1	0	0	0	0	0	0	44
21:15	3	44	1	0	2	0	1	0	0	0	0	0	0	51
21:30	2	24	6	0	0	0	0	0	0	0	0	0	0	32
21:45	1	30	3	0	0	0	0	0	0	0	0	0	0	34
22:00	3	33	2	0	1	2	0	0	0	0	0	0	0	41
22:15	1	19	3	0	0	0	0	0	0	0	0	0	0	23
22:30	2	28	2	0	0	0	0	0	0	0	0	0	0	32
22:45	1	20	3	0	0	0	0	0	0	0	0	0	0	24
23:00	2	24	3	0	0	0	0	0	0	0	0	0	0	29
23:15	4	20	2	0	0	0	0	0	0	0	0	0	0	26
23:30	2	11	4	0	0	0	0	0	0	0	0	0	0	17
23:45	1	13	2	0	0	0	0	0	0	0	0	0	0	16
TOTAL	950	2,620	342	6	154	43	14	3	6	0	3	8	2	4,151

PM PEAK HOUR	2:30 PM
PM PEAK VOLUME	575

TOTAL: AM+PM	1,162	4,129	644	28	322	71	25	8	15	3	4	9	2	6,422
% OF TOTAL	18.1%	64.3%	10.0%	0.4%	5.0%	1.1%	0.4%	0.1%	0.2%	0.0%	0.1%	0.1%	0.0%	100.0%

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, August 26, 2021
JOB #: 1/0/1900

CITY: Barstow
LOCATION: CLASS55 W. Main St - Avenue D to Avenue A.

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	27	3	0	0	0	0	0	0	0	0	0	0	30
0:15	0	19	2	0	2	0	0	0	0	0	0	0	0	23
0:30	0	12	0	0	0	0	0	0	0	0	0	0	0	12
0:45	0	10	2	0	0	0	0	0	0	0	0	0	0	12
1:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
1:15	0	4	3	0	0	0	0	1	0	0	0	0	0	8
1:30	0	12	1	1	0	0	0	0	1	0	0	0	0	15
1:45	0	11	3	0	0	0	0	0	0	0	0	0	0	14
2:00	0	10	1	0	0	0	0	0	2	0	0	0	0	13
2:15	0	7	1	0	1	0	0	0	0	0	0	0	0	9
2:30	0	12	1	0	0	0	0	0	0	0	0	0	0	13
2:45	0	10	1	0	0	0	0	0	0	0	0	0	0	11
3:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
3:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5
3:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
3:45	0	9	1	0	0	0	0	1	0	0	0	0	0	11
4:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
4:15	0	7	0	0	1	0	0	0	0	0	0	0	0	8
4:30	0	8	3	0	1	0	0	0	0	0	0	0	0	12
4:45	0	17	3	0	1	0	0	0	0	0	0	0	0	21
5:00	0	17	5	0	2	0	0	0	0	0	0	0	0	24
5:15	0	26	5	0	6	1	0	0	0	0	0	0	0	38
5:30	0	22	3	0	4	0	0	0	0	0	0	0	0	29
5:45	0	24	6	0	4	0	0	0	0	0	0	0	0	34
6:00	0	26	5	0	3	0	0	0	0	0	0	0	0	34
6:15	0	29	4	0	4	2	0	0	1	0	0	0	0	40
6:30	1	43	12	0	5	0	0	0	0	0	0	0	0	61
6:45	1	85	9	3	11	2	0	0	1	0	0	0	0	112
7:00	1	83	12	1	5	1	0	1	1	0	0	0	0	105
7:15	0	44	11	1	8	0	0	0	0	0	0	0	0	64
7:30	0	59	9	0	8	0	0	0	0	0	0	0	0	76
7:45	1	76	7	0	13	0	0	0	0	0	0	0	0	97
8:00	0	65	13	3	11	0	0	0	0	0	0	0	0	92
8:15	0	77	13	1	6	2	0	1	1	0	0	0	0	101
8:30	0	81	16	0	8	0	1	0	0	0	0	0	0	106
8:45	1	102	21	0	18	0	0	0	0	0	0	0	0	142
9:00	1	88	17	4	13	2	0	0	0	0	0	0	0	125
9:15	1	78	10	1	9	0	0	0	0	0	0	0	0	99
9:30	0	73	16	1	8	1	0	1	0	0	0	0	0	100
9:45	0	76	13	0	8	0	0	0	1	0	0	0	0	98
10:00	0	59	20	0	4	0	0	0	0	0	0	0	0	83
10:15	0	54	14	2	8	1	0	1	0	0	0	0	0	80
10:30	0	76	14	0	19	2	0	0	0	0	0	0	0	111
10:45	0	89	13	1	13	0	0	1	0	0	0	0	0	117
11:00	0	73	15	0	12	1	0	2	0	0	0	0	0	103
11:15	1	80	13	0	5	1	0	0	0	0	0	0	0	100
11:30	0	91	13	0	8	1	0	0	0	0	0	0	0	113
11:45	1	82	18	1	14	2	0	0	0	0	0	0	0	118
TOTAL	9	1,987	355	20	243	19	1	9	8	0	0	0	0	2,651

AM PEAK HOUR	8:15 AM
AM PEAK VOLUME	474

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	90	24	0	14	2	1	0	1	0	0	1	0	133
12:15	0	82	21	0	15	1	0	0	0	0	0	0	0	119
12:30	0	77	8	0	13	0	0	2	0	0	0	0	0	100
12:45	0	84	11	0	10	0	0	1	0	0	0	0	0	106
13:00	0	86	15	0	11	0	0	0	0	0	0	0	0	112
13:15	1	82	21	0	12	1	0	0	0	0	0	0	0	117
13:30	0	100	19	0	11	0	0	1	0	0	0	0	0	131
13:45	0	82	15	0	8	0	2	1	0	0	0	0	0	108
14:00	2	92	16	0	7	0	0	1	0	0	0	0	0	118
14:15	0	89	17	0	8	0	0	0	0	0	0	0	0	114
14:30	0	97	13	0	10	0	0	0	0	0	0	0	0	120
14:45	0	100	17	1	12	0	0	0	1	0	0	0	0	131
15:00	0	104	15	0	17	3	0	0	0	0	0	0	0	139
15:15	1	134	16	0	6	0	0	0	0	0	0	0	0	157
15:30	1	105	15	1	8	0	0	0	0	0	0	0	0	130
15:45	0	131	13	1	10	0	0	0	0	0	0	0	0	155
16:00	1	117	15	2	8	1	0	0	0	0	0	0	0	144
16:15	1	101	18	3	8	0	0	2	0	0	0	0	0	133
16:30	1	106	10	1	6	0	0	0	0	0	0	0	0	124
16:45	0	88	21	1	9	2	0	1	1	0	0	0	0	123
17:00	1	84	16	0	7	1	0	0	0	0	0	0	0	109
17:15	0	87	17	1	8	0	0	0	0	0	0	0	0	113
17:30	0	57	7	0	8	0	0	1	0	0	0	0	0	73
17:45	0	84	17	1	5	0	0	0	0	0	0	0	0	107
18:00	0	69	6	1	5	0	0	0	0	0	0	0	0	81
18:15	0	71	15	0	5	0	0	0	0	0	0	0	0	91
18:30	1	63	10	1	6	0	0	1	0	0	0	0	0	82
18:45	0	67	14	0	11	0	0	0	0	0	0	0	0	92
19:00	0	63	12	0	6	0	0	0	1	0	0	0	0	82
19:15	0	72	14	0	3	0	0	0	0	0	0	0	0	89
19:30	0	64	12	0	2	0	0	0	0	0	0	0	0	78
19:45	0	61	7	0	3	0	0	0	0	0	0	0	0	71
20:00	1	79	4	0	3	1	0	0	0	0	0	0	0	88
20:15	0	65	1	0	3	0	0	0	0	0	0	0	0	69
20:30	0	39	6	0	0	0	0	0	0	0	0	0	0	45
20:45	1	47	6	0	5	0	1	0	0	0	0	0	0	60
21:00	1	49	4	0	1	0	0	1	0	0	0	0	0	56
21:15	0	45	7	0	1	0	0	0	0	0	0	0	0	53
21:30	2	31	3	0	8	0	0	0	0	0	0	0	0	44
21:45	2	41	6	0	2	0	0	0	0	0	0	0	0	51
22:00	0	36	2	0	2	0	0	0	1	0	0	0	0	41
22:15	0	42	2	0	1	0	0	0	0	0	0	0	0	45
22:30	0	33	3	0	1	0	0	0	0	0	0	0	0	37
22:45	0	30	3	0	0	0	0	0	0	0	0	0	0	33
23:00	0	32	3	0	3	0	0	0	0	0	0	0	0	38
23:15	0	24	3	0	0	0	0	0	0	0	0	0	0	27
23:30	0	25	3	0	0	0	0	0	1	0	0	0	0	29
23:45	0	17	2	1	1	0	0	0	0	0	0	0	0	21
TOTAL	17	3,424	525	15	303	12	4	12	6	0	0	1	0	4,319

PM PEAK HOUR	3:15 PM
PM PEAK VOLUME	586

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	26	5,411	880	35	546	31	5	21	14	0	0	1	0	6,970
% OF TOTAL	0.4%	77.6%	12.6%	0.5%	7.8%	0.4%	0.1%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	100.0%

TOTAL: ALL	1,138	9,775	1,536	63	927	90	19	32	36	1	1	11	1	13,630
% OF TOTAL	16.3%	140.2%	22.0%	0.9%	13.3%	1.3%	0.3%	0.5%	0.5%	0.0%	0.0%	0.2%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, August 26, 2021
JOB #: 1/0/1900

CITY: Barstow
LOCATION: CLASS55 W. Main St - Avenue D to Avenue A.

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	2	22	3	0	0	0	0	0	0	0	0	0	0	27
0:15	1	13	2	0	0	1	0	0	0	0	0	0	0	17
0:30	2	5	1	0	2	0	0	0	0	0	0	0	0	10
0:45	0	9	1	1	0	0	0	0	0	0	0	0	0	11
1:00	0	7	3	0	0	0	0	0	1	0	0	0	0	11
1:15	1	9	2	0	0	0	0	0	0	0	0	0	0	12
1:30	0	4	2	0	0	0	0	0	0	0	0	0	0	6
1:45	1	11	0	0	0	0	0	0	0	0	0	0	0	12
2:00	0	3	3	0	1	0	0	0	0	0	0	0	0	7
2:15	1	4	2	0	1	0	0	0	0	0	0	0	0	8
2:30	1	6	0	0	0	0	0	0	0	0	0	0	0	7
2:45	0	12	1	0	0	0	0	0	0	0	0	0	0	13
3:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
3:15	0	7	0	0	1	0	0	0	0	0	0	0	0	8
3:30	0	4	2	0	0	0	0	0	0	0	0	0	0	6
3:45	3	3	1	0	0	0	0	0	0	0	0	0	0	7
4:00	1	3	1	0	0	0	0	0	0	0	0	0	0	5
4:15	1	6	4	0	2	0	0	0	0	0	0	0	0	13
4:30	0	9	2	0	2	0	0	0	0	0	0	0	0	13
4:45	0	12	2	0	2	0	0	0	1	0	0	0	0	17
5:00	3	17	3	0	2	0	0	1	0	0	0	0	0	26
5:15	2	16	4	0	1	0	0	0	0	0	0	0	0	23
5:30	2	15	5	0	1	0	0	0	0	0	0	0	0	23
5:45	3	22	3	2	1	0	0	0	0	0	0	0	0	31
6:00	2	17	4	0	2	1	0	0	0	0	0	1	0	27
6:15	1	14	11	0	2	1	1	0	0	0	0	0	0	30
6:30	1	29	8	2	6	0	1	0	0	0	0	0	0	47
6:45	6	47	5	0	4	0	0	0	1	0	0	0	0	63
7:00	12	58	4	0	6	1	0	0	0	0	0	0	0	81
7:15	5	39	12	2	6	1	0	1	0	0	0	0	0	66
7:30	5	42	9	1	5	1	0	0	1	0	0	0	0	64
7:45	15	54	11	1	5	0	0	0	0	0	0	0	1	87
8:00	6	43	10	1	8	0	1	0	0	0	0	0	0	69
8:15	8	56	12	1	8	2	0	0	1	0	0	0	0	88
8:30	11	79	16	1	6	0	1	0	0	0	0	0	0	114
8:45	9	80	13	3	2	0	0	2	0	0	0	0	0	109
9:00	14	77	15	0	13	1	0	0	1	0	0	1	0	122
9:15	8	59	19	0	12	0	0	0	0	0	0	0	0	98
9:30	8	49	5	0	10	0	0	0	0	0	0	0	0	72
9:45	10	64	10	0	10	2	0	0	0	0	0	0	0	96
10:00	8	62	15	0	8	3	0	0	1	0	0	0	0	97
10:15	10	51	12	0	9	1	0	0	0	0	0	0	0	83
10:30	17	68	10	1	8	1	1	0	0	0	0	0	0	106
10:45	10	83	8	0	15	1	0	0	3	0	0	0	0	120
11:00	13	66	11	0	6	1	0	0	0	0	0	0	0	97
11:15	19	71	9	0	8	2	0	0	0	0	0	1	0	110
11:30	22	65	14	0	8	1	0	1	0	0	0	0	0	111
11:45	23	85	13	0	5	2	0	0	0	0	0	0	0	128
TOTAL	267	1,580	304	16	188	23	5	5	10	0	0	3	1	2,402

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	446

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	13	78	12	1	10	2	1	0	0	0	0	2	0	119
12:15	16	72	12	0	6	2	0	0	0	0	0	0	0	108
12:30	32	66	6	0	10	1	0	0	1	0	0	0	0	116
12:45	18	70	7	0	10	1	0	0	2	0	0	0	0	108
13:00	20	78	16	0	8	2	1	0	0	0	0	1	0	126
13:15	24	83	12	1	6	1	0	0	0	0	0	0	0	127
13:30	35	51	14	0	8	2	0	0	0	1	1	0	0	112
13:45	32	42	9	0	3	0	1	1	0	0	0	1	0	89
14:00	22	45	11	0	13	0	1	0	0	0	0	0	0	92
14:15	40	70	9	0	6	0	0	1	0	0	0	0	0	126
14:30	45	83	11	0	5	2	0	0	0	0	0	1	0	147
14:45	26	93	9	1	5	2	1	0	2	0	0	0	0	139
15:00	35	97	4	0	7	3	0	0	0	0	0	0	0	146
15:15	34	73	13	0	6	1	0	0	3	0	0	0	0	130
15:30	35	85	14	1	8	1	1	0	0	0	0	0	0	145
15:45	32	83	7	1	4	1	0	0	0	0	0	1	0	129
16:00	30	74	13	1	5	2	1	0	1	0	0	1	0	128
16:15	33	89	12	2	2	1	0	0	0	0	0	0	0	139
16:30	30	87	8	1	4	2	0	1	1	0	0	0	0	134
16:45	35	102	6	1	6	1	0	0	0	0	0	0	0	151
17:00	32	101	12	0	6	1	0	0	0	0	0	0	0	152
17:15	25	70	13	1	7	1	0	0	0	0	0	0	0	117
17:30	17	66	5	0	7	2	0	0	0	0	0	0	0	97
17:45	28	46	2	0	3	0	0	0	0	0	0	0	0	79
18:00	11	54	8	0	7	1	0	1	0	0	0	0	0	82
18:15	19	55	5	1	3	1	0	1	0	0	0	0	0	85
18:30	14	52	10	0	1	0	1	0	1	0	0	0	0	79
18:45	10	55	7	0	0	0	0	0	0	0	0	0	0	72
19:00	6	56	4	0	4	0	0	0	0	0	0	0	0	70
19:15	12	56	13	0	0	0	0	0	0	0	0	0	0	81
19:30	11	54	6	0	4	1	0	0	0	0	0	0	0	76
19:45	4	56	8	0	3	0	0	0	0	0	0	0	0	71
20:00	7	56	7	0	1	1	0	0	0	0	0	0	0	72
20:15	9	49	6	0	3	0	0	0	0	0	0	0	0	67
20:30	8	59	2	0	2	0	0	0	0	0	0	0	0	71
20:45	5	54	3	0	1	0	0	0	0	0	0	0	0	63
21:00	3	25	5	0	3	0	0	0	0	0	0	0	0	36
21:15	6	37	2	0	2	0	0	0	0	0	0	0	0	47
21:30	4	39	4	0	0	0	0	0	1	0	0	0	0	48
21:45	5	30	4	0	0	0	1	0	0	0	0	0	0	40
22:00	5	35	3	0	0	0	0	0	0	0	0	0	0	43
22:15	4	29	7	0	0	0	0	1	0	0	0	0	0	41
22:30	3	26	3	0	1	0	0	0	0	0	0	0	0	33
22:45	5	24	3	0	1	0	0	0	0	0	0	0	0	33
23:00	3	28	2	0	0	0	0	0	0	0	0	0	0	33
23:15	0	22	1	0	1	0	0	0	0	0	0	0	0	24
23:30	0	11	1	0	0	0	0	0	0	0	0	0	0	12
23:45	2	18	1	0	1	1	0	0	0	0	0	0	0	23
TOTAL	845	2,784	352	12	193	36	9	6	12	1	1	7	0	4,258

PM PEAK HOUR	4:15 PM
PM PEAK VOLUME	576

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	1,112	4,364	656	28	381	59	14	11	22	1	1	10	1	6,660
% OF TOTAL	16.7%	65.5%	9.8%	0.4%	5.7%	0.9%	0.2%	0.2%	0.3%	0.0%	0.0%	0.2%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, August 24, 2021
JOB #:

CITY: Barstow
LOCATION: CLASS56 W. Main St - Avenue A to First Ave.

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	14	4	0	0	0	0	0	0	0	0	0	0	18
0:15	0	12	1	0	2	0	0	0	0	0	0	0	0	15
0:30	0	14	1	0	0	0	0	0	0	0	0	0	0	15
0:45	0	12	1	0	3	0	0	0	0	0	0	0	0	16
1:00	0	13	2	0	1	0	0	0	0	0	0	0	0	16
1:15	0	4	3	0	1	0	0	0	0	0	0	0	0	8
1:30	0	9	0	0	2	0	0	1	0	0	0	0	0	12
1:45	0	10	2	0	0	0	0	0	0	0	0	0	0	12
2:00	0	6	1	0	2	0	0	0	0	0	0	0	0	9
2:15	0	7	1	0	0	0	0	0	0	0	0	0	0	8
2:30	0	4	2	0	3	0	0	0	1	0	0	0	0	10
2:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8
3:00	0	6	2	0	2	0	0	0	0	0	0	0	0	10
3:15	0	10	1	0	0	0	0	0	0	0	0	0	0	11
3:30	0	5	0	0	1	0	0	0	0	0	0	0	0	6
3:45	0	12	2	0	0	1	0	0	0	0	0	0	0	15
4:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
4:15	0	6	3	0	2	0	0	0	0	0	0	0	0	11
4:30	0	6	1	0	0	0	0	0	0	0	0	0	0	7
4:45	0	10	3	0	3	0	0	0	0	0	0	0	0	16
5:00	0	9	2	0	6	0	0	0	0	0	0	0	0	17
5:15	0	23	3	0	6	0	0	0	0	0	0	0	0	32
5:30	0	29	5	0	7	2	0	0	0	0	0	0	0	43
5:45	1	21	8	0	5	1	0	0	0	0	0	0	0	36
6:00	0	30	4	1	3	0	0	0	0	0	0	0	0	38
6:15	0	29	9	0	3	0	0	0	0	0	0	0	0	41
6:30	0	32	4	0	4	0	0	0	0	0	0	0	0	40
6:45	0	45	13	0	6	0	0	0	0	0	0	0	0	64
7:00	0	54	11	1	17	0	0	0	0	0	0	0	0	83
7:15	0	33	4	0	11	0	0	1	0	0	0	0	0	49
7:30	0	46	9	0	10	0	0	0	0	0	0	0	0	65
7:45	0	55	19	0	11	0	0	0	0	0	0	0	0	85
8:00	1	50	11	0	9	2	0	1	0	0	0	0	0	74
8:15	0	63	20	0	11	0	1	0	1	0	0	0	0	96
8:30	1	59	21	0	7	0	0	0	0	0	0	0	0	88
8:45	0	97	18	0	14	1	0	0	2	0	0	0	0	132
9:00	0	97	34	0	13	2	1	1	0	0	0	0	0	148
9:15	1	75	18	1	11	0	1	0	0	0	1	0	0	108
9:30	0	54	9	0	12	0	0	0	1	0	0	0	0	76
9:45	0	69	21	0	14	1	0	1	0	0	0	0	0	106
10:00	0	76	16	0	19	1	0	0	2	0	0	0	0	114
10:15	0	65	21	0	11	1	0	0	0	0	0	0	0	98
10:30	0	79	20	0	9	2	0	1	2	0	0	0	0	113
10:45	0	88	25	0	6	2	0	0	0	0	0	0	0	121
11:00	0	75	21	0	14	0	0	0	0	0	0	0	0	110
11:15	0	85	13	1	17	2	0	0	0	0	0	0	0	118
11:30	1	86	19	0	11	0	1	1	0	0	0	0	0	119
11:45	0	73	12	0	12	0	0	0	0	0	0	0	0	97
TOTAL	5	1,773	420	4	301	18	4	7	9	0	1	0	0	2,542

AM PEAK HOUR	8:30 AM
AM PEAK VOLUME	476

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	89	20	0	13	1	1	2	0	0	0	0	0	126
12:15	0	79	15	1	22	0	0	0	0	0	1	0	0	118
12:30	0	85	17	2	10	1	1	1	0	0	0	0	0	117
12:45	0	83	27	1	15	1	0	0	0	0	0	0	0	127
13:00	0	85	20	1	15	1	1	0	0	0	0	0	0	123
13:15	0	72	16	1	10	2	1	0	0	0	0	1	0	103
13:30	0	89	23	1	10	1	1	0	0	0	0	1	0	126
13:45	0	67	16	0	12	0	2	1	1	0	0	0	0	99
14:00	0	73	15	0	11	2	1	0	0	0	0	2	0	104
14:15	1	87	21	0	5	1	1	0	0	0	0	0	0	116
14:30	0	110	20	0	13	2	1	0	0	0	0	0	0	146
14:45	1	95	25	0	17	1	0	0	0	0	0	0	0	139
15:00	0	84	21	0	13	0	0	0	0	0	0	1	0	119
15:15	0	95	26	1	12	3	0	0	0	0	0	0	1	138
15:30	0	94	18	1	13	2	1	0	0	0	1	1	0	131
15:45	0	94	22	0	11	0	1	0	0	0	0	0	0	128
16:00	0	82	28	0	12	2	0	0	0	0	0	0	0	124
16:15	0	93	18	0	17	2	1	0	0	0	1	0	0	132
16:30	0	77	23	0	15	1	1	1	0	0	0	0	0	118
16:45	1	82	16	1	3	4	0	1	0	0	0	0	0	108
17:00	0	64	17	0	15	0	2	0	0	0	0	0	0	98
17:15	0	85	20	1	9	0	0	0	0	0	0	0	0	115
17:30	0	60	25	0	11	4	1	0	0	0	0	0	0	101
17:45	0	73	14	0	11	2	0	0	0	0	0	0	0	100
18:00	0	75	13	0	13	0	2	0	0	0	0	0	0	103
18:15	0	76	17	0	9	0	1	0	0	0	0	0	0	103
18:30	0	69	9	0	10	0	1	0	0	0	0	0	0	89
18:45	0	66	13	0	13	0	0	0	0	0	0	0	0	92
19:00	0	83	8	2	10	0	1	0	0	0	0	0	0	104
19:15	0	73	11	0	5	3	1	0	0	0	0	0	0	93
19:30	0	56	7	0	6	0	1	0	0	0	0	0	0	70
19:45	0	58	8	2	4	0	2	0	0	0	0	0	0	74
20:00	0	60	13	0	7	2	1	0	0	0	0	0	0	83
20:15	0	50	15	0	11	0	1	0	0	0	0	0	0	77
20:30	0	60	6	0	5	0	1	0	0	0	0	0	0	72
20:45	0	46	3	0	1	1	0	0	0	0	0	0	0	51
21:00	0	47	7	0	3	0	1	0	0	0	0	0	0	58
21:15	0	34	5	0	2	0	0	0	0	0	0	0	0	41
21:30	0	34	8	0	0	0	1	0	0	0	0	0	0	43
21:45	0	36	4	0	4	0	0	0	0	0	0	0	0	44
22:00	0	32	7	0	3	0	0	0	0	0	0	0	0	42
22:15	0	38	3	0	5	1	0	0	0	0	0	0	0	47
22:30	0	21	5	0	0	0	0	0	0	0	0	0	0	26
22:45	0	24	5	0	0	0	0	0	0	0	0	0	0	29
23:00	1	30	11	0	3	0	0	0	0	0	0	0	0	45
23:15	0	23	4	0	1	0	0	0	0	0	0	0	0	28
23:30	0	18	2	0	2	0	0	0	1	0	0	0	0	23
23:45	0	15	3	0	1	0	0	0	0	0	0	0	0	19
TOTAL	4	3,121	670	15	413	40	31	6	2	0	3	6	1	4,312

PM PEAK HOUR	2:30 PM
PM PEAK VOLUME	542

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	9	4,894	1,090	19	714	58	35	13	11	0	4	6	1	6,854
% OF TOTAL	0.1%	71.4%	15.9%	0.3%	10.4%	0.8%	0.5%	0.2%	0.2%	0.0%	0.1%	0.1%	0.0%	100.0%

TOTAL: ALL	22	8,783	2,566	74	###	100	41	28	23	0	4	7	1	13,226
% OF TOTAL	0.3%	128.1%	37.4%	1.1%	23.0%	1.5%	0.6%	0.4%	0.3%	0.0%	0.1%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, August 24, 2021
JOB #:

CITY: Barstow
LOCATION: CLASS56 W. Main St - Avenue A to First Ave.

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	11	4	0	1	0	0	0	0	0	0	0	0	16
0:15	0	7	0	0	2	0	0	0	0	0	0	0	0	9
0:30	0	9	6	0	2	0	0	0	1	0	0	0	0	18
0:45	0	7	4	0	1	0	0	0	0	0	0	0	0	12
1:00	0	8	5	0	4	0	0	0	0	0	0	0	0	17
1:15	0	12	6	0	1	0	0	0	0	0	0	0	0	19
1:30	0	7	6	0	0	0	0	0	0	0	0	0	0	13
1:45	0	2	3	0	0	0	0	1	0	0	0	0	0	6
2:00	0	4	4	1	0	0	0	0	0	0	0	0	0	9
2:15	0	2	3	0	2	0	0	0	0	0	0	0	0	7
2:30	0	4	4	0	2	0	0	0	0	0	0	0	0	10
2:45	0	3	1	0	2	0	0	0	0	0	0	0	0	6
3:00	0	2	4	0	2	0	0	1	0	0	0	0	0	9
3:15	0	1	3	0	1	0	0	0	0	0	0	0	0	5
3:30	0	6	4	0	1	0	0	0	0	0	0	0	0	11
3:45	0	3	2	0	0	0	0	0	0	0	0	0	0	5
4:00	0	3	3	0	0	0	0	0	0	0	0	0	0	6
4:15	0	5	3	0	4	0	0	0	0	0	0	0	0	12
4:30	0	5	4	0	1	0	0	0	0	0	0	0	0	10
4:45	0	11	1	0	2	0	0	0	0	0	0	0	0	14
5:00	0	6	2	0	2	0	0	0	0	0	0	0	0	10
5:15	0	10	6	0	2	0	0	0	0	0	0	0	0	18
5:30	0	11	7	0	3	0	0	0	0	0	0	0	0	21
5:45	1	9	7	1	2	0	0	0	1	0	0	0	0	21
6:00	0	16	6	0	3	0	0	0	0	0	0	0	0	25
6:15	0	15	5	0	5	0	0	0	0	0	0	0	0	25
6:30	0	13	14	3	6	0	0	0	0	0	0	0	0	36
6:45	0	34	7	0	15	1	0	0	0	0	0	0	0	57
7:00	0	32	20	1	10	0	0	0	1	0	0	0	0	64
7:15	0	40	11	4	12	0	0	0	0	0	0	0	0	67
7:30	0	29	13	0	13	0	0	0	0	0	0	0	0	55
7:45	0	39	25	1	11	0	0	0	0	0	0	0	0	76
8:00	0	39	21	0	12	0	0	0	1	0	0	0	0	73
8:15	0	56	17	2	11	2	0	0	1	0	0	0	0	89
8:30	0	54	33	1	12	2	0	0	0	0	0	0	0	102
8:45	0	65	29	4	14	0	0	0	1	0	0	0	0	113
9:00	0	58	17	2	15	1	0	0	0	0	0	1	0	94
9:15	0	43	21	0	16	0	0	0	0	0	0	0	0	80
9:30	0	57	18	0	13	1	0	1	1	0	0	0	0	91
9:45	0	50	22	1	12	1	1	0	0	0	0	0	0	87
10:00	0	50	26	0	18	1	0	1	0	0	0	0	0	96
10:15	0	55	20	0	14	1	0	0	0	0	0	0	0	90
10:30	0	64	21	1	11	3	0	0	0	0	0	0	0	100
10:45	0	49	17	1	16	1	0	2	0	0	0	0	0	86
11:00	0	71	26	1	10	1	0	0	0	0	0	0	0	109
11:15	0	72	26	0	20	3	0	0	0	0	0	0	0	121
11:30	0	73	29	1	16	1	0	0	0	0	0	0	0	120
11:45	0	62	28	0	14	2	1	0	1	0	0	0	0	108
TOTAL	1	1,284	564	25	336	21	2	6	8	0	0	1	0	2,248

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	458

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	49	28	2	22	0	0	0	0	0	0	0	0	102
12:15	1	87	27	0	20	1	0	1	0	0	0	0	0	137
12:30	0	72	24	2	12	1	0	1	1	0	0	0	0	113
12:45	0	73	21	1	19	0	0	1	0	0	0	0	0	115
13:00	1	50	24	4	25	0	0	0	0	0	0	0	0	104
13:15	0	71	25	1	12	0	0	1	0	0	0	0	0	110
13:30	0	82	25	0	14	0	0	0	0	0	0	0	0	121
13:45	0	65	15	0	15	1	0	0	0	0	0	0	0	96
14:00	0	73	29	2	23	3	0	0	0	0	0	0	0	130
14:15	1	69	25	1	20	0	0	1	0	0	0	0	0	117
14:30	1	60	25	1	18	2	1	0	0	0	0	0	0	108
14:45	0	84	29	0	8	1	0	0	0	0	0	0	0	122
15:00	0	79	26	2	19	0	0	1	0	0	0	0	0	127
15:15	0	78	29	0	18	0	0	0	0	0	0	0	0	125
15:30	0	100	28	0	23	2	0	0	0	0	0	0	0	153
15:45	0	68	30	1	18	2	0	0	0	0	0	0	0	119
16:00	0	82	27	5	24	1	0	0	0	0	0	0	0	139
16:15	0	99	28	1	12	0	0	0	1	0	0	0	0	141
16:30	1	94	31	1	16	0	0	1	0	0	0	0	0	144
16:45	0	68	32	1	18	1	0	0	0	0	0	0	0	120
17:00	0	77	29	0	11	1	0	0	0	0	0	0	0	118
17:15	0	73	27	0	16	0	1	0	0	0	0	0	0	117
17:30	0	61	24	1	13	1	0	0	0	0	0	0	0	100
17:45	1	74	19	0	13	0	0	1	0	0	0	0	0	108
18:00	1	56	20	0	7	0	0	0	0	0	0	0	0	84
18:15	0	48	24	0	7	0	0	0	1	0	0	0	0	80
18:30	0	52	21	0	9	0	0	0	0	0	0	0	0	82
18:45	1	34	17	1	2	1	0	0	0	0	0	0	0	56
19:00	0	40	19	0	9	0	1	0	0	0	0	0	0	69
19:15	1	57	17	0	6	0	0	0	1	0	0	0	0	82
19:30	0	42	10	1	10	0	1	0	0	0	0	0	0	64
19:45	0	45	8	0	8	1	0	0	0	0	0	0	0	62
20:00	0	40	15	0	11	0	0	0	0	0	0	0	0	66
20:15	0	50	15	0	5	0	0	0	0	0	0	0	0	70
20:30	0	50	21	1	4	1	0	0	0	0	0	0	0	77
20:45	0	34	9	0	7	0	0	1	0	0	0	0	0	51
21:00	0	26	13	0	6	1	0	0	0	0	0	0	0	46
21:15	0	32	8	0	3	0	0	0	0	0	0	0	0	43
21:30	0	30	15	1	1	0	0	0	0	0	0	0	0	47
21:45	0	27	5	0	3	0	0	0	0	0	0	0	0	35
22:00	0	31	9	0	1	0	0	0	0	0	0	0	0	41
22:15	1	30	3	0	3	0	0	0	0	0	0	0	0	37
22:30	1	28	9	0	3	0	0	0	0	0	0	0	0	41
22:45	0	17	6	0	1	0	0	0	0	0	0	0	0	24
23:00	0	13	5	0	4	0	0	0	0	0	0	0	0	22
23:15	0	13	9	0	3	0	0	0	0	0	0	0	0	25
23:30	0	11	6	0	4	0	0	0	0	0	0	0	0	21
23:45	0	11	1	0	1	0	0	0	0	0	0	0	0	13
TOTAL	12	2,605	912	30	527	21	4	9	4	0	0	0	0	4,124

PM PEAK HOUR	3:30 PM
PM PEAK VOLUME	552

TOTAL: AM+PM	13	3,889	1,476	55	863	42	6	15	12	0	0	1	0	6,372
% OF TOTAL	0.2%	61.0%	23.2%	0.9%	13.5%	0.7%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	100.0%

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 25, 2021
JOB #:

CITY: Barstow
LOCATION: CLASS56 W. Main St - Avenue A to First Ave.

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	19	2	0	0	0	0	0	0	0	0	0	0	21
0:15	0	10	3	0	3	0	0	0	0	0	0	0	0	16
0:30	0	8	1	0	0	0	0	0	0	0	0	0	0	9
0:45	0	10	1	0	0	0	0	1	0	0	0	0	0	12
1:00	0	10	3	0	1	0	0	0	1	0	0	0	0	15
1:15	0	9	2	0	0	0	0	0	0	0	0	0	0	11
1:30	0	6	2	0	1	0	0	0	0	0	0	0	0	9
1:45	0	10	2	0	0	0	0	0	0	0	0	0	0	12
2:00	0	7	1	0	1	0	0	0	0	0	0	0	0	9
2:15	0	3	4	0	0	0	0	0	0	0	0	0	0	7
2:30	0	6	1	0	0	0	0	0	0	0	0	0	0	7
2:45	0	6	0	0	1	0	0	0	0	0	0	0	0	7
3:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6
3:15	0	6	3	0	1	0	0	0	0	0	0	0	0	10
3:30	0	5	1	0	0	0	0	0	0	0	0	0	0	6
3:45	0	9	3	0	1	0	0	0	0	0	0	0	0	13
4:00	0	12	0	0	2	0	0	0	0	0	0	0	0	14
4:15	0	4	3	0	2	0	0	0	0	0	0	0	0	9
4:30	0	9	2	0	1	0	0	0	0	0	0	0	0	12
4:45	0	7	3	0	0	0	0	0	0	0	0	0	0	10
5:00	0	15	6	0	3	0	0	0	0	0	0	0	0	24
5:15	0	24	5	0	7	0	0	1	0	0	0	0	0	37
5:30	0	28	5	0	5	0	0	1	0	0	0	0	0	39
5:45	0	30	6	0	5	1	0	0	0	0	0	0	0	42
6:00	0	30	4	0	7	0	0	0	0	0	0	0	0	41
6:15	0	20	6	1	4	2	0	0	0	0	0	0	0	33
6:30	0	32	6	0	1	1	0	0	0	0	0	0	0	40
6:45	0	56	8	3	9	0	0	0	0	0	0	0	0	76
7:00	0	45	11	0	12	0	0	0	1	0	0	0	0	69
7:15	0	42	8	1	13	0	0	0	0	0	0	0	0	64
7:30	0	43	6	0	12	0	0	1	1	0	0	0	0	63
7:45	0	55	13	0	19	0	0	0	0	0	0	0	0	87
8:00	0	64	19	0	9	2	0	1	0	0	0	0	0	95
8:15	0	65	17	0	12	0	0	0	0	0	0	0	0	94
8:30	0	77	22	0	11	2	1	0	0	0	0	0	0	113
8:45	1	66	16	0	19	1	1	1	0	0	0	0	0	105
9:00	0	106	25	1	9	1	0	0	0	0	0	0	0	142
9:15	0	69	11	0	8	1	1	0	0	0	0	0	0	90
9:30	0	65	15	0	12	1	0	0	0	0	0	0	0	93
9:45	0	76	15	0	12	2	0	0	0	0	0	0	0	105
10:00	0	63	17	0	13	0	2	0	0	0	0	0	0	95
10:15	0	71	20	0	19	0	0	1	0	0	1	0	0	112
10:30	0	67	20	1	14	0	0	0	0	0	0	1	0	103
10:45	0	58	19	0	11	1	0	0	0	0	0	0	0	89
11:00	0	78	25	0	12	1	0	0	0	0	0	0	1	117
11:15	1	82	25	0	13	1	0	0	1	0	0	0	0	123
11:30	0	95	24	0	15	0	1	0	0	0	0	0	0	135
11:45	0	62	16	0	18	5	1	0	1	0	0	0	0	103
TOTAL	2	1,745	427	7	319	22	7	7	5	0	1	1	1	2,544

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	478

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	74	19	0	16	0	2	1	0	0	0	0	0	112
12:15	0	91	23	0	15	3	0	0	0	0	0	0	0	132
12:30	0	88	26	1	15	0	1	0	0	0	0	0	0	131
12:45	1	97	25	0	18	1	2	0	1	0	0	0	0	145
13:00	0	83	21	0	15	1	0	0	0	0	0	0	0	120
13:15	1	71	23	0	12	3	1	0	0	0	0	0	0	111
13:30	0	109	25	0	14	2	0	1	0	0	0	0	0	151
13:45	1	80	19	0	13	1	2	0	1	0	0	0	0	117
14:00	0	67	19	0	15	1	0	0	0	0	0	0	0	102
14:15	0	93	19	0	15	1	1	0	1	0	0	0	0	130
14:30	1	95	17	0	19	0	0	0	0	0	0	0	0	132
14:45	0	61	18	1	9	0	0	0	0	0	0	0	0	89
15:00	0	90	29	0	8	1	0	0	0	0	0	0	0	128
15:15	0	69	19	0	12	1	0	0	0	0	0	0	0	101
15:30	0	63	14	0	11	2	1	0	0	0	0	0	0	91
15:45	1	72	18	0	14	0	0	0	0	0	0	0	0	105
16:00	0	88	15	1	12	3	0	0	0	0	0	0	0	119
16:15	0	76	18	1	9	1	1	0	0	0	0	1	0	107
16:30	0	90	14	0	9	2	1	0	0	0	0	0	0	116
16:45	1	92	14	0	11	0	0	0	0	0	0	0	0	118
17:00	1	79	19	0	11	2	0	0	0	0	0	0	0	112
17:15	0	95	15	0	6	0	0	0	0	0	0	0	0	116
17:30	1	70	14	0	11	0	0	0	0	0	0	0	0	96
17:45	1	75	13	0	9	2	0	1	0	0	0	0	0	101
18:00	0	65	12	0	4	1	1	0	0	0	0	0	0	83
18:15	0	75	13	1	6	0	1	0	0	0	0	0	0	96
18:30	0	65	15	0	9	0	0	0	0	0	0	0	0	89
18:45	0	64	12	0	12	1	0	0	0	0	0	0	0	89
19:00	1	49	10	0	4	0	2	0	0	0	0	0	0	66
19:15	0	60	13	0	12	1	0	0	0	0	0	0	0	86
19:30	2	59	17	0	6	0	0	0	0	0	0	0	0	84
19:45	1	47	15	0	4	0	2	0	0	0	0	0	0	69
20:00	1	52	11	0	8	2	0	0	0	0	0	0	0	74
20:15	0	44	3	0	6	1	0	1	0	0	0	0	0	55
20:30	0	47	14	1	4	0	0	0	0	0	0	0	0	66
20:45	0	47	9	0	3	1	1	0	0	0	0	0	0	61
21:00	0	49	7	0	6	0	0	0	0	0	0	0	0	62
21:15	0	49	6	0	0	0	0	0	0	0	0	0	0	55
21:30	0	46	7	0	3	1	0	0	0	0	0	0	0	57
21:45	0	25	6	0	3	1	0	0	0	0	0	0	0	35
22:00	0	29	10	0	1	0	0	0	0	0	0	0	0	40
22:15	0	28	6	0	0	0	0	0	0	0	0	0	0	34
22:30	0	28	6	0	1	0	0	0	0	0	0	0	0	35
22:45	0	33	7	0	1	0	0	1	0	0	0	0	0	42
23:00	0	25	7	0	2	0	0	0	0	0	0	0	0	34
23:15	0	24	3	0	2	0	0	0	0	0	0	0	0	29
23:30	0	12	2	0	0	0	0	0	0	0	0	0	0	14
23:45	0	9	5	0	1	0	0	0	0	0	0	0	0	15
TOTAL	14	2,999	672	6	397	36	19	5	3	0	0	1	0	4,152

PM PEAK HOUR	12:15 PM
PM PEAK VOLUME	528

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	16	4,744	1,099	13	716	58	26	12	8	0	1	2	1	6,696
% OF TOTAL	0.2%	70.8%	16.4%	0.2%	10.7%	0.9%	0.4%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

TOTAL: ALL	22	8,000	2,808	64	###	77	27	29	14	0	4	2	1	12,662
% OF TOTAL	0.3%	119.5%	41.9%	1.0%	24.1%	1.1%	0.4%	0.4%	0.2%	0.0%	0.1%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, August 25, 2021
JOB #:

CITY: Barstow
LOCATION: CLASS56 W. Main St - Avenue A to First Ave.

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	13	5	0	1	0	0	0	0	0	0	0	0	19
0:15	0	9	4	0	2	0	0	0	0	0	0	0	0	15
0:30	0	6	2	0	2	0	0	0	0	0	1	0	0	11
0:45	0	10	3	0	1	0	0	0	0	0	0	0	0	14
1:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
1:15	0	5	2	0	4	0	0	0	0	0	0	0	0	11
1:30	0	7	2	0	2	0	0	0	0	0	0	0	0	11
1:45	0	5	1	0	1	0	0	0	0	0	0	0	0	7
2:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6
2:15	0	5	1	0	1	0	0	0	0	0	0	0	0	7
2:30	0	5	0	0	1	0	0	0	0	0	0	0	0	6
2:45	0	4	4	0	0	0	0	0	0	0	0	0	0	8
3:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6
3:15	0	6	1	0	2	0	0	0	0	0	0	0	0	9
3:30	0	3	2	0	1	0	0	0	0	0	0	0	0	6
3:45	0	3	2	0	1	0	0	0	0	0	0	0	0	6
4:00	0	10	1	0	0	0	0	0	1	0	0	0	0	12
4:15	0	8	3	0	3	0	0	0	0	0	0	0	0	14
4:30	0	4	1	0	4	0	0	0	0	0	0	0	0	9
4:45	0	8	4	0	1	0	0	0	0	0	0	0	0	13
5:00	0	13	4	0	4	0	0	0	0	0	0	0	0	21
5:15	0	6	4	1	4	0	0	1	0	0	0	0	0	16
5:30	0	8	6	1	4	0	0	0	0	0	0	0	0	19
5:45	0	12	10	0	6	0	0	0	0	0	0	0	0	28
6:00	0	8	4	0	6	0	0	0	0	0	0	0	0	18
6:15	0	9	8	0	9	0	0	1	0	0	0	0	0	27
6:30	0	25	12	1	14	0	0	0	0	0	0	0	0	52
6:45	0	29	11	1	8	0	0	0	0	0	0	0	0	49
7:00	0	25	19	4	3	1	0	0	0	0	0	0	0	52
7:15	0	25	10	0	9	0	0	0	0	0	1	0	0	45
7:30	0	31	10	0	13	0	0	0	0	0	0	0	0	54
7:45	0	54	17	0	9	1	0	0	0	0	0	0	0	81
8:00	0	32	22	0	17	0	0	0	0	0	0	0	0	71
8:15	0	43	22	0	15	1	0	0	0	0	0	0	0	81
8:30	0	46	46	2	21	0	0	0	0	0	0	0	0	115
8:45	0	45	35	7	13	0	0	0	0	0	0	0	0	100
9:00	0	42	25	1	15	0	0	0	0	0	0	0	0	83
9:15	0	36	30	1	17	1	0	0	0	0	0	0	0	85
9:30	2	46	24	0	13	3	0	0	0	0	0	0	0	88
9:45	0	41	18	1	19	0	0	2	0	0	0	0	0	81
10:00	2	27	22	0	14	0	0	0	1	0	0	0	0	66
10:15	0	31	19	0	15	0	0	0	0	0	0	0	0	65
10:30	0	43	36	1	9	0	0	0	0	0	0	0	0	89
10:45	0	46	27	0	16	1	0	0	0	0	0	0	0	90
11:00	0	45	31	0	24	0	0	0	1	0	0	0	0	101
11:15	0	50	31	1	24	0	0	1	0	0	0	0	0	107
11:30	0	34	30	4	17	0	0	0	0	0	0	0	0	85
11:45	0	53	40	1	20	0	0	1	0	0	0	0	0	115
TOTAL	4	1,030	617	27	387	8	0	6	3	0	2	0	0	2,084

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	408

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	47	31	0	21	0	0	0	0	0	0	0	0	99
12:15	0	57	29	0	21	0	0	0	1	0	0	0	0	108
12:30	0	49	26	1	17	0	0	0	1	0	0	0	0	94
12:45	0	48	42	3	22	0	0	0	0	0	0	0	0	115
13:00	0	71	37	1	19	0	0	2	0	0	0	0	0	130
13:15	0	56	37	0	14	0	0	1	0	0	0	0	0	108
13:30	0	57	40	0	27	0	0	0	0	0	0	0	0	124
13:45	0	50	48	0	24	0	0	0	0	0	0	0	0	122
14:00	0	62	25	4	14	1	0	2	0	0	0	0	0	108
14:15	0	59	35	1	23	0	0	1	0	0	0	0	0	119
14:30	1	51	35	2	15	0	0	0	0	0	0	0	0	104
14:45	0	64	37	0	15	0	0	1	1	0	0	0	0	118
15:00	0	41	36	1	20	0	0	0	0	0	1	0	0	99
15:15	0	42	34	1	23	0	0	1	0	0	0	0	0	101
15:30	0	64	26	1	8	0	0	0	0	0	0	0	0	99
15:45	0	72	32	0	13	0	0	0	0	0	0	0	0	117
16:00	0	80	18	1	15	1	0	0	0	0	0	0	0	115
16:15	0	75	29	0	11	2	0	0	0	0	0	0	0	117
16:30	0	81	33	0	10	0	0	0	0	0	0	0	0	124
16:45	0	58	37	0	13	0	0	0	0	0	0	0	0	108
17:00	0	63	35	0	8	0	0	1	0	0	0	0	0	107
17:15	0	75	16	1	10	0	0	0	0	0	0	0	0	102
17:30	0	72	23	1	16	1	0	0	0	0	0	0	0	113
17:45	0	64	35	1	10	0	0	0	0	0	0	0	0	110
18:00	0	51	15	1	5	2	0	0	0	0	0	0	0	74
18:15	0	42	21	1	9	0	0	0	0	0	0	0	0	73
18:30	0	50	24	0	8	0	1	0	0	0	0	0	0	83
18:45	0	50	24	0	11	0	0	0	0	0	0	0	0	85
19:00	0	40	18	0	8	1	0	1	0	0	0	0	0	68
19:15	0	53	15	0	3	0	0	1	0	0	0	0	0	72
19:30	0	42	20	1	8	0	0	0	0	0	0	0	0	71
19:45	0	45	14	0	12	2	0	0	0	0	0	0	0	73
20:00	0	41	18	0	9	0	0	0	0	0	0	0	0	68
20:15	1	42	20	0	7	0	0	0	0	0	0	0	0	70
20:30	0	31	13	0	5	0	0	0	0	0	0	0	0	49
20:45	0	27	16	2	3	1	0	0	0	0	0	0	0	49
21:00	0	27	13	0	9	0	0	0	0	0	0	0	0	49
21:15	0	35	10	0	2	0	0	0	0	0	0	0	0	47
21:30	0	20	9	0	3	0	0	0	0	0	0	0	0	32
21:45	0	32	6	0	2	0	0	0	0	0	0	0	0	40
22:00	0	26	13	0	3	0	0	0	0	0	0	0	0	42
22:15	0	17	5	0	2	0	0	0	0	0	0	0	0	24
22:30	0	21	12	0	2	0	0	0	0	0	0	0	0	35
22:45	0	17	10	0	0	0	0	0	0	0	0	0	0	27
23:00	0	16	8	0	3	0	0	0	0	0	0	0	0	27
23:15	0	19	4	0	3	0	0	0	0	0	0	0	0	26
23:30	0	11	5	0	4	0	0	0	0	0	0	0	0	20
23:45	0	13	3	0	1	0	0	0	0	0	0	0	0	17
TOTAL	2	2,226	1,092	24	511	11	1	11	3	0	1	0	0	3,882

PM PEAK HOUR	1:00 PM
PM PEAK VOLUME	484

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	6	3,256	1,709	51	898	19	1	17	6	0	3	0	0	5,966
% OF TOTAL	0.1%	54.6%	28.6%	0.9%	15.1%	0.3%	0.0%	0.3%	0.1%	0.0%	0.1%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS1 Lenwood Rd S of Main St.

AM	NORTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
0:15	0	12	0	0	0	0	0	0	1	0	0	0	0	13
0:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
0:45	0	1	0	0	0	0	0	1	0	0	0	0	0	2
1:00	0	3	0	0	0	0	0	0	2	0	0	0	0	5
1:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
1:30	0	6	0	0	0	0	0	0	1	0	0	0	0	7
1:45	0	0	0	0	0	0	0	0	0	0	0	1	0	1
2:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2:30	0	2	2	0	0	0	0	0	1	0	0	0	0	5
2:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00	0	5	0	0	0	0	0	0	1	0	0	0	0	6
3:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
3:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
4:00	0	0	1	0	0	0	0	0	2	0	0	0	0	3
4:15	0	0	0	0	1	0	0	0	1	0	0	0	0	2
4:30	0	3	0	0	1	0	0	0	1	0	0	0	0	5
4:45	0	8	0	0	0	0	0	0	1	0	0	0	0	9
5:00	0	3	0	0	0	1	0	0	4	0	0	0	0	8
4:30	0	3	2	0	2	0	0	1	0	0	0	0	0	8
4:45	0	11	1	0	4	0	0	0	1	0	0	0	0	17
5:00	1	7	1	0	3	0	0	0	1	0	1	0	0	14
5:15	0	9	0	1	1	0	0	0	1	0	0	0	0	12
5:30	0	13	4	0	5	1	0	1	2	0	0	0	0	26
5:45	0	8	1	0	2	0	0	0	1	0	0	0	0	12
6:00	0	7	4	0	4	1	0	1	0	0	0	0	0	17
6:15	0	17	1	1	3	0	0	1	3	0	0	1	0	27
6:30	0	12	0	1	1	0	0	1	0	0	0	0	0	15
6:45	0	7	0	1	2	1	0	0	0	0	0	0	0	11
7:00	0	12	4	0	6	0	0	0	0	0	0	0	0	22
7:15	0	13	4	1	2	0	0	1	1	0	0	0	0	22
7:30	0	15	3	0	0	0	0	0	0	0	0	0	0	18
7:45	0	11	0	0	1	0	0	0	1	0	0	0	0	13
8:00	1	6	1	0	1	0	0	3	1	0	0	1	0	14
8:15	0	13	0	1	1	1	0	0	0	0	0	0	0	16
8:30	0	8	3	0	1	1	0	0	0	0	0	0	0	13
8:45	0	7	4	0	0	0	0	0	0	0	0	0	0	11
9:00	0	18	2	0	5	0	0	0	0	0	0	0	0	25
9:15	0	20	2	1	0	0	0	1	0	0	0	0	0	24
9:30	0	11	2	0	0	0	0	1	1	0	0	0	0	15
9:45	0	13	4	0	3	0	0	0	2	0	0	0	0	22
10:00	0	19	5	0	3	0	0	0	1	0	0	0	0	28
10:15	0	12	4	1	0	0	0	2	1	0	0	0	0	20
10:30	0	29	1	0	2	0	0	0	1	0	0	0	0	33
10:45	0	13	3	0	2	0	0	0	1	0	0	0	0	19
11:00	0	22	7	0	1	0	0	0	0	0	0	0	0	30
TOTAL	2	411	66	8	57	6	0	14	34	0	1	3	0	602

AM PEAK HOUR	9:45 AM
AM PEAK VOLUME	103

PM	NORTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	19	4	2	1	0	0	0	0	0	0	0	0	26
12:15	0	19	5	1	3	0	0	0	2	0	0	1	0	31
12:30	1	14	1	0	3	0	0	2	1	0	1	0	0	23
12:45	0	20	3	0	0	0	0	0	2	0	0	0	0	25
13:00	0	27	1	1	3	1	0	0	2	0	0	0	0	35
13:15	1	21	6	0	0	0	0	0	1	0	0	0	0	29
13:30	0	18	7	1	2	0	0	2	1	0	0	0	0	31
13:45	0	15	6	0	2	0	0	0	2	0	0	0	0	25
14:00	0	22	1	1	2	1	0	0	0	0	0	0	0	27
14:15	0	27	2	0	0	0	0	2	2	0	0	0	0	33
14:30	0	19	2	1	0	0	0	0	1	0	0	0	0	23
14:45	0	36	2	0	2	0	1	0	0	0	0	0	0	41
15:00	0	25	3	1	0	2	0	0	1	0	0	0	0	32
15:15	0	28	10	0	2	0	0	2	1	0	0	0	0	43
15:30	1	24	3	0	0	0	0	1	1	0	0	0	0	30
15:45	0	24	3	0	0	0	0	0	1	0	0	0	0	28
16:00	0	33	7	1	1	0	0	0	0	0	0	0	0	42
16:15	1	28	1	1	0	1	0	0	0	0	0	0	0	32
16:30	0	39	7	0	1	0	0	1	0	0	0	0	0	48
16:45	0	27	3	0	0	0	0	1	0	0	0	0	0	31
17:00	0	25	1	1	2	0	0	0	0	0	0	0	0	29
17:15	0	38	5	0	3	0	0	0	1	0	0	0	0	47
17:30	0	27	2	0	0	0	0	1	0	0	0	0	0	30
17:45	0	35	8	0	1	0	0	0	0	0	0	0	0	44
18:00	0	25	5	1	1	0	0	0	2	0	0	0	0	34
18:15	0	27	6	0	3	0	0	1	0	0	0	0	0	37
18:30	0	23	3	0	2	0	0	0	0	0	0	0	0	28
18:45	1	35	3	0	1	0	0	0	0	0	0	0	0	40
19:00	0	20	5	1	0	0	0	0	1	0	0	0	0	27
19:15	0	24	3	0	2	0	0	1	0	0	0	0	0	30
19:30	0	23	3	0	1	0	0	0	0	0	0	0	0	27
19:45	0	20	1	0	2	0	0	0	0	0	0	0	0	23
20:00	1	15	5	0	0	0	0	0	1	0	0	0	0	22
20:15	0	18	3	0	0	0	0	0	0	0	0	0	0	21
20:30	0	20	1	0	1	3	0	0	1	0	0	0	0	26
20:45	0	20	0	0	0	0	0	0	2	0	0	0	0	22
21:00	0	12	1	0	1	0	0	0	0	0	0	0	0	14
21:15	0	13	3	0	0	0	0	0	1	0	0	0	0	17
21:30	0	16	0	0	1	0	0	0	0	0	0	0	0	17
21:45	0	8	0	0	1	0	0	0	1	0	0	0	0	10
22:00	0	15	3	0	0	0	0	0	0	0	0	0	0	18
22:15	0	13	1	0	1	0	0	0	2	0	0	0	0	17
22:30	0	13	3	0	0	0	0	0	0	0	0	0	0	16
22:45	0	13	3	0	0	0	0	0	0	0	0	0	0	16
23:00	0	21	0	0	1	1	0	0	2	0	0	0	0	25
23:15	0	4	0	0	0	0	0	0	1	0	0	0	0	5
23:30	0	8	1	0	0	0	0	0	0	0	0	0	0	9
23:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8
TOTAL	6	1,024	146	13	46	9	1	14	33	0	1	1	0	1,294

PM PEAK HOUR	5:15 PM
PM PEAK VOLUME	155

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	8	1,435	212	21	103	15	1	28	67	0	2	4	0	1,896
% OF TOTAL	0.4%	75.7%	11.2%	1.1%	5.4%	0.8%	0.1%	1.5%	3.5%	0.0%	0.1%	0.2%	0.0%	100.0%

TOTAL: ALL	12	2,519	408	41	294	20	1	53	114	3	5	5	1	3,476
% OF TOTAL	0.6%	132.9%	21.5%	2.2%	15.5%	1.1%	0.1%	2.8%	6.0%	0.2%	0.3%	0.3%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS1 Lenwood Rd S of Main St.

AM	SOUTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	4	0	0	0	0	0	0	1	0	0	0	0	5
0:15	0	1	1	0	0	0	0	0	1	0	0	0	0	3
0:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
1:15	0	1	0	0	0	0	0	0	2	0	0	0	0	3
1:30	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
2:30	0	2	0	0	0	0	0	0	1	0	0	0	0	3
2:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00	0	2	1	0	0	0	0	1	0	0	0	0	0	4
3:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30	0	1	2	0	0	0	0	0	0	0	0	0	0	3
3:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
4:00	0	2	1	0	0	0	0	1	2	0	0	0	0	6
4:15	0	4	2	0	2	0	0	0	0	0	0	0	0	8
4:30	0	2	0	0	0	0	0	0	2	0	0	0	0	4
4:45	0	6	0	0	1	0	0	0	0	0	0	0	0	7
5:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
5:15	0	7	2	0	0	0	0	0	0	0	0	1	0	10
5:30	0	9	0	0	1	0	0	0	1	0	0	0	0	11
5:45	0	9	0	0	3	0	0	0	0	0	0	0	0	12
6:00	0	8	1	0	2	0	0	0	0	0	0	0	0	11
6:15	0	21	2	0	4	0	0	1	0	0	0	0	0	28
6:30	0	15	0	1	3	0	0	0	0	1	0	0	0	20
6:45	1	14	1	0	1	1	0	0	1	0	0	0	0	19
7:00	0	15	1	0	3	1	0	1	0	0	0	0	0	21
7:15	0	8	4	1	1	0	0	0	0	0	0	0	0	14
7:30	0	18	2	1	2	0	0	0	1	0	0	0	0	24
7:45	1	20	5	0	1	0	0	1	1	0	0	0	0	29
8:00	0	15	3	0	2	0	0	0	0	0	0	0	0	20
8:15	0	10	1	0	1	0	0	0	1	0	0	0	0	13
8:30	0	19	2	1	1	0	0	0	0	0	0	0	0	23
8:45	0	24	3	1	5	0	0	0	1	0	0	0	0	34
9:00	0	11	6	1	2	0	0	0	3	0	0	0	0	23
9:15	0	9	1	0	3	0	0	0	1	0	0	0	0	14
9:30	0	13	2	1	1	0	0	0	1	0	0	0	0	18
9:45	0	12	1	0	2	0	0	2	1	0	0	0	0	18
10:00	0	18	1	1	6	0	0	0	1	0	0	0	0	27
10:15	0	27	3	0	4	0	0	0	0	0	1	0	0	35
10:30	0	20	3	0	2	0	0	0	0	0	0	0	0	25
10:45	0	23	5	1	6	1	0	0	0	0	0	0	0	36
11:00	0	17	5	0	4	0	0	0	1	0	0	0	0	27
11:15	0	22	4	0	3	0	0	2	0	0	0	0	0	31
11:30	0	9	4	1	3	0	0	1	2	0	0	0	0	20
11:45	0	26	3	0	4	0	0	1	0	0	0	0	0	34
TOTAL	2	465	75	10	73	3	0	12	25	1	1	1	0	668

AM PEAK HOUR	10:15 AM
AM PEAK VOLUME	123

PM	SOUTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	13	7	0	4	0	0	0	0	0	0	0	0	24
12:15	0	16	1	0	1	0	0	0	0	0	0	0	0	18
12:30	0	16	2	2	3	0	0	2	1	0	0	0	0	26
12:45	0	18	2	0	3	0	0	0	0	0	0	0	0	23
13:00	0	12	6	0	10	0	0	2	1	0	0	0	0	31
13:15	0	14	3	0	5	1	0	1	1	0	0	0	0	25
13:30	1	21	6	0	3	0	0	0	0	0	0	0	0	31
13:45	0	16	5	1	4	0	0	0	1	1	0	0	0	28
14:00	0	14	3	0	1	0	0	0	0	0	1	0	0	19
14:15	0	22	2	0	4	0	0	0	0	0	0	0	0	28
14:30	0	15	4	1	4	0	0	1	1	0	0	0	1	27
14:45	0	24	5	0	1	0	0	1	0	0	0	0	0	31
15:00	0	20	1	0	4	0	0	1	0	0	0	0	0	26
15:15	0	16	2	0	2	0	0	0	0	0	0	0	0	20
15:30	0	14	5	1	1	0	0	0	0	0	0	0	0	21
15:45	0	31	0	0	5	0	0	0	0	0	0	0	0	36
16:00	0	21	6	0	4	0	0	0	0	0	0	0	0	31
16:15	0	28	1	0	3	0	0	1	1	0	0	0	0	34
16:30	0	20	4	1	7	0	0	0	1	0	0	0	0	33
16:45	0	17	4	0	5	0	0	0	0	0	0	0	0	26
17:00	0	23	6	0	5	0	0	0	0	0	1	0	0	35
17:15	0	25	2	0	8	0	0	1	0	0	0	0	0	36
17:30	0	17	2	1	2	0	0	0	1	0	0	0	0	23
17:45	0	15	3	0	1	0	0	0	1	0	0	0	0	20
18:00	0	12	10	0	3	0	0	0	2	0	0	0	0	27
18:15	0	9	3	0	4	0	0	1	0	0	0	0	0	17
18:30	1	15	4	2	3	0	0	0	0	0	0	0	0	25
18:45	0	12	1	0	4	0	0	0	2	0	0	0	0	19
19:00	0	6	1	0	2	0	0	0	0	0	0	0	0	9
19:15	0	15	3	0	1	0	0	0	0	0	0	0	0	19
19:30	0	10	2	1	1	0	0	0	0	0	0	0	0	14
19:45	0	8	2	0	1	0	0	0	1	0	0	0	0	12
20:00	0	8	1	0	2	0	0	0	2	0	0	0	0	13
20:15	0	8	3	0	1	0	0	0	0	1	0	0	0	13
20:30	0	5	0	0	3	0	0	0	0	0	0	0	0	8
20:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8
21:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
21:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
21:30	0	5	1	0	0	0	0	0	0	0	0	0	0	6
21:45	0	4	0	0	0	0	0	0	1	0	0	0	0	5
22:00	0	6	2	0	1	0	0	0	1	0	0	0	0	10
22:15	0	5	2	0	0	0	0	0	3	0	0	0	0	10
22:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
22:45	0	5	1	0	0	1	0	1	0	0	0	0	0	8
23:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
23:15	0	5	0	0	1	0	0	0	0	0	0	0	0	6
23:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
23:45	0	3	1	0	1	0	0	1	1	0	0	0	0	7
TOTAL	2	619	121	10	118	2	0	13	22	2	2	0	1	912

PM PEAK HOUR	3:45 PM
PM PEAK VOLUME	134

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	4	1,084	196	20	191	5	0	25	47	3	3	1	1	1,580
% OF TOTAL	0.3%	68.6%	12.4%	1.3%	12.1%	0.3%	0.0%	1.6%	3.0%	0.2%	0.2%	0.1%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS1 Lenwood Rd S of Main St.

AM	COMBINED													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	10	0	0	0	0	0	0	1	0	0	0	0	11
0:15	0	13	1	0	0	0	0	0	2	0	0	0	0	16
0:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
0:45	0	2	0	0	0	0	0	1	0	0	0	0	0	3
1:00	0	5	1	0	0	0	0	0	2	0	0	0	0	8
1:15	0	5	0	0	0	0	0	0	2	0	0	0	0	7
1:30	0	6	0	0	0	0	0	1	1	0	0	0	0	8
1:45	0	1	0	0	0	0	0	0	0	0	0	1	0	2
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7
2:30	0	4	2	0	0	0	0	0	2	0	0	0	0	8
2:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
3:00	0	7	1	0	0	0	0	1	1	0	0	0	0	10
3:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
3:30	0	6	2	0	0	0	0	0	0	0	0	0	0	8
3:45	0	9	0	0	0	0	0	0	0	0	0	0	0	9
4:00	0	2	2	0	0	0	0	1	4	0	0	0	0	9
4:15	0	4	2	0	3	0	0	0	1	0	0	0	0	10
4:30	0	5	0	0	1	0	0	0	3	0	0	0	0	9
4:45	0	14	0	0	1	0	0	0	1	0	0	0	0	16
5:00	0	9	0	0	0	1	0	0	4	0	0	0	0	14
5:15	0	10	4	0	2	0	0	1	0	0	0	1	0	18
5:30	0	20	1	0	5	0	0	0	2	0	0	0	0	28
5:45	1	16	1	0	6	0	0	0	1	0	1	0	0	26
6:00	0	17	1	1	3	0	0	0	1	0	0	0	0	23
6:15	0	34	6	0	9	1	0	2	2	0	0	0	0	54
6:30	0	23	1	1	5	0	0	0	1	1	0	0	0	32
6:45	1	21	5	0	5	2	0	1	1	0	0	0	0	36
7:00	0	32	2	1	6	1	0	2	3	0	0	1	0	48
7:15	0	20	4	2	2	0	0	1	0	0	0	0	0	29
7:30	0	25	2	2	4	1	0	0	1	0	0	0	0	35
7:45	1	32	9	0	7	0	0	1	1	0	0	0	0	51
8:00	0	28	7	1	4	0	0	1	1	0	0	0	0	42
8:15	0	25	4	0	1	0	0	0	1	0	0	0	0	31
8:30	0	30	2	1	2	0	0	0	1	0	0	0	0	36
8:45	1	30	4	1	6	0	0	3	2	0	0	1	0	48
9:00	0	24	6	2	3	1	0	0	3	0	0	0	0	39
9:15	0	17	4	0	4	1	0	0	1	0	0	0	0	27
9:30	0	20	6	1	1	0	0	0	1	0	0	0	0	29
9:45	0	30	3	0	7	0	0	2	1	0	0	0	0	43
10:00	0	38	3	2	6	0	0	1	1	0	0	0	0	51
10:15	0	38	5	0	4	0	0	1	1	0	1	0	0	50
10:30	0	33	7	0	5	0	0	0	2	0	0	0	0	47
10:45	0	42	10	1	9	1	0	0	1	0	0	0	0	64
11:00	0	29	9	1	4	0	0	2	2	0	0	0	0	47
11:15	0	51	5	0	5	0	0	2	1	0	0	0	0	64
11:30	0	22	7	1	5	0	0	1	3	0	0	0	0	39
11:45	0	48	10	0	5	0	0	1	0	0	0	0	0	64
TOTAL	4	876	141	18	130	9	0	26	59	1	2	4	0	1,270

AM PEAK HOUR	10:30 AM
AM PEAK VOLUME	222

PM	COMBINED													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	32	11	2	5	0	0	0	0	0	0	0	0	50
12:15	0	35	6	1	4	0	0	0	2	0	0	1	0	49
12:30	1	30	3	2	6	0	0	4	2	0	1	0	0	49
12:45	0	38	5	0	3	0	0	0	2	0	0	0	0	48
13:00	0	39	7	1	13	1	0	2	3	0	0	0	0	66
13:15	1	35	9	0	5	1	0	1	2	0	0	0	0	54
13:30	1	39	13	1	5	0	0	2	1	0	0	0	0	62
13:45	0	31	11	1	6	0	0	0	3	1	0	0	0	53
14:00	0	36	4	1	3	1	0	0	0	0	1	0	0	46
14:15	0	49	4	0	4	0	0	2	2	0	0	0	0	61
14:30	0	34	6	2	4	0	0	1	2	0	0	0	1	50
14:45	0	60	7	0	3	0	1	1	0	0	0	0	0	72
15:00	0	45	4	1	4	2	0	1	1	0	0	0	0	58
15:15	0	44	12	0	4	0	0	2	1	0	0	0	0	63
15:30	1	38	8	1	1	0	0	1	1	0	0	0	0	51
15:45	0	55	3	0	5	0	0	0	1	0	0	0	0	64
16:00	0	54	13	1	5	0	0	0	0	0	0	0	0	73
16:15	1	56	2	1	3	1	0	1	1	0	0	0	0	66
16:30	0	59	11	1	8	0	0	1	1	0	0	0	0	81
16:45	0	44	7	0	5	0	0	1	0	0	0	0	0	57
17:00	0	48	7	1	7	0	0	0	0	0	1	0	0	64
17:15	0	63	7	0	11	0	0	1	1	0	0	0	0	83
17:30	0	44	4	1	2	0	0	1	1	0	0	0	0	53
17:45	0	50	11	0	2	0	0	0	1	0	0	0	0	64
18:00	0	37	15	1	4	0	0	0	4	0	0	0	0	61
18:15	0	36	9	0	7	0	0	2	0	0	0	0	0	54
18:30	1	38	7	2	5	0	0	0	0	0	0	0	0	53
18:45	1	47	4	0	5	0	0	0	2	0	0	0	0	59
19:00	0	26	6	1	2	0	0	0	1	0	0	0	0	36
19:15	0	39	6	0	3	0	0	1	0	0	0	0	0	49
19:30	0	33	5	1	2	0	0	0	0	0	0	0	0	41
19:45	0	28	3	0	3	0	0	0	1	0	0	0	0	35
20:00	1	23	6	0	2	0	0	0	3	0	0	0	0	35
20:15	0	26	6	0	1	0	0	0	0	1	0	0	0	34
20:30	0	25	1	0	4	3	0	0	1	0	0	0	0	34
20:45	0	28	0	0	0	0	0	0	2	0	0	0	0	30
21:00	0	19	1	0	1	0	0	0	0	0	0	0	0	21
21:15	0	15	3	0	0	0	0	0	1	0	0	0	0	19
21:30	0	21	1	0	1	0	0	0	0	0	0	0	0	23
21:45	0	12	0	0	1	0	0	0	2	0	0	0	0	15
22:00	0	21	5	0	1	0	0	0	1	0	0	0	0	28
22:15	0	18	3	0	1	0	0	0	5	0	0	0	0	27
22:30	0	19	3	0	0	0	0	0	0	0	0	0	0	22
22:45	0	18	4	0	0	1	0	1	0	0	0	0	0	24
23:00	0	27	1	0	1	1	0	0	2	0	0	0	0	32
23:15	0	9	0	0	1	0	0	0	1	0	0	0	0	11
23:30	0	9	2	0	0	0	0	0	0	0	0	0	0	11
23:45	0	11	1	0	1	0	0	1	1	0	0	0	0	15
TOTAL	8	1,643	267	23	164	11	1	27	55	2	3	1	1	2,206

PM PEAK HOUR	4:30 PM
PM PEAK VOLUME	285

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	12	2,519	408	41	294	20	1	53	114	3	5	5	1	3,476
% OF TOTAL	0.3%	72.5%	11.7%	1.2%	8.5%	0.6%	0.0%	1.5%	3.3%	0.1%	0.1%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS1 Lenwood Rd S of Main St.

AM	NORTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	6	1	0	1	0	0	0	2	0	0	0	0	10
0:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8
0:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
0:45	0	3	1	0	0	0	0	0	1	0	0	0	0	5
1:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
1:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5
1:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
1:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2:45	0	3	0	0	0	0	0	0	1	0	1	0	0	5
3:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:15	0	3	0	0	0	0	0	0	3	0	0	0	0	6
3:30	0	2	0	0	0	0	0	0	1	0	0	0	0	3
3:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
4:00	0	1	0	0	1	1	0	1	1	0	0	0	0	5
4:15	0	1	1	0	0	0	0	0	1	0	0	0	0	3
4:30	0	0	0	0	1	0	0	1	0	0	0	0	0	2
4:45	0	3	1	0	1	0	0	0	0	0	0	0	0	5
5:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8
5:15	0	4	0	0	1	0	0	1	1	0	0	0	0	7
5:30	3	20	1	0	5	1	0	0	1	0	1	0	0	32
5:45	0	9	0	0	3	0	0	1	2	0	0	0	1	16
6:00	0	6	1	1	1	0	0	3	4	0	0	0	0	16
6:15	1	8	2	0	4	0	0	0	1	0	0	0	0	16
6:30	0	9	0	0	2	0	0	2	2	0	0	0	0	15
6:45	0	12	1	0	3	0	0	2	1	0	0	0	0	19
7:00	0	13	4	1	0	0	0	1	3	0	0	0	1	23
7:15	0	6	2	0	1	0	0	1	1	0	0	0	0	11
7:30	0	20	3	1	0	0	0	0	2	0	0	0	0	26
7:45	0	11	2	0	0	1	0	2	1	0	0	0	0	17
8:00	0	17	2	1	0	0	0	0	0	0	0	0	0	20
8:15	0	12	1	0	0	2	0	1	0	0	0	0	0	16
8:30	0	12	4	0	1	1	0	0	1	0	0	0	0	19
8:45	0	8	3	0	2	0	0	0	2	0	0	0	0	15
9:00	0	18	0	1	2	0	0	0	1	0	1	0	0	23
9:15	0	9	1	0	5	0	0	3	4	0	0	0	0	22
9:30	0	13	2	1	0	0	0	0	0	0	0	0	0	16
9:45	0	18	4	1	4	0	0	0	1	0	0	0	0	28
10:00	0	14	1	1	1	0	0	1	0	0	0	0	0	18
10:15	0	17	1	0	5	0	0	1	1	0	0	0	0	25
10:30	0	21	3	0	3	0	0	2	0	0	0	0	0	29
10:45	0	15	3	0	3	0	0	0	1	0	0	0	0	22
11:00	0	15	5	1	5	0	0	0	0	0	0	0	0	26
11:15	0	19	2	0	0	0	0	0	0	0	0	0	0	21
11:30	0	18	3	0	2	1	0	0	0	0	0	0	0	24
11:45	0	18	7	0	4	1	0	0	0	0	0	0	0	30
TOTAL	4	427	65	9	64	8	0	23	40	0	3	0	2	645

AM PEAK HOUR	10:15 AM
AM PEAK VOLUME	102

PM	NORTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	23	2	3	2	0	0	2	2	0	0	0	0	35
12:15	0	23	4	0	4	0	0	0	1	0	0	0	0	32
12:30	0	18	3	0	1	0	0	0	1	0	0	0	0	23
12:45	0	16	4	0	2	0	0	0	0	0	0	0	0	22
13:00	1	18	4	1	3	0	0	1	0	0	0	0	0	28
13:15	0	22	6	1	0	0	0	1	0	0	0	0	0	30
13:30	0	15	6	0	0	0	0	0	3	0	1	0	0	25
13:45	0	12	4	0	6	0	0	0	1	0	0	0	0	23
14:00	0	27	1	1	3	0	0	1	0	0	0	0	0	33
14:15	1	20	2	0	2	0	0	1	2	0	0	0	0	28
14:30	0	18	7	0	2	0	0	0	1	0	0	0	0	28
14:45	0	20	8	0	1	1	0	0	1	0	0	0	0	31
15:00	0	21	1	1	0	0	0	0	1	0	0	0	0	24
15:15	0	25	4	0	2	0	0	2	1	0	0	0	0	34
15:30	0	34	8	0	1	0	0	1	0	0	0	0	0	44
15:45	0	25	8	0	2	0	0	3	0	0	0	0	0	38
16:00	0	29	1	1	2	0	0	1	0	0	0	0	0	34
16:15	0	20	3	0	1	0	0	0	0	0	0	0	0	24
16:30	0	29	5	0	1	2	0	0	0	0	0	0	0	37
16:45	0	30	2	0	1	0	0	0	0	0	0	0	0	33
17:00	0	28	7	1	3	0	0	0	1	0	0	0	0	40
17:15	0	41	5	0	0	0	0	0	0	0	0	0	0	46
17:30	0	29	1	0	1	0	0	0	1	0	0	0	0	32
17:45	0	36	5	0	2	0	0	0	1	0	0	0	0	44
18:00	0	27	4	1	2	0	0	1	0	0	0	0	0	35
18:15	0	23	1	0	1	0	0	0	0	0	0	0	0	25
18:30	0	27	2	0	1	0	0	0	1	0	0	0	0	31
18:45	0	19	2	0	0	0	0	1	2	0	0	0	0	24
19:00	0	38	5	2	0	0	0	0	1	0	0	0	0	46
19:15	0	25	3	0	3	0	0	0	0	0	0	0	0	31
19:30	0	26	3	0	2	0	0	1	0	0	0	0	0	32
19:45	0	18	2	0	0	0	0	0	0	0	0	0	0	20
20:00	0	24	6	0	1	0	0	0	0	0	0	1	0	32
20:15	0	19	3	0	1	0	0	0	0	0	0	0	0	23
20:30	0	11	3	1	1	0	0	0	1	0	0	0	0	17
20:45	0	18	7	0	0	0	0	0	0	0	0	0	0	25
21:00	0	15	9	0	1	0	0	0	0	0	1	0	0	26
21:15	0	15	1	0	1	0	0	0	0	0	0	0	0	17
21:30	0	20	1	0	1	0	0	0	0	0	0	0	0	22
21:45	0	5	2	0	0	0	0	0	2	0	0	0	0	9
22:00	0	20	1	0	0	0	0	0	0	0	0	0	0	21
22:15	0	6	2	0	1	0	0	0	0	0	0	0	0	9
22:30	0	13	2	0	0	0	0	0	0	0	0	0	0	15
22:45	0	14	1	0	0	0	0	0	0	0	0	0	0	15
23:00	0	12	1	0	0	0	0	0	2	0	0	0	0	15
23:15	0	3	2	0	0	0	0	0	0	0	0	0	0	5
23:30	0	8	0	0	0	0	0	0	1	0	0	0	0	9
23:45	0	9	3	0	1	0	0	0	0	0	0	0	0	13
TOTAL	3	994	167	13	59	3	0	16	27	0	2	1	0	1,285

PM PEAK HOUR	5:00 PM
PM PEAK VOLUME	162

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	7	1,421	232	22	123	11	0	39	67	0	5	1	2	1,930
% OF TOTAL	0.4%	73.6%	12.0%	1.1%	6.4%	0.6%	0.0%	2.0%	3.5%	0.0%	0.3%	0.1%	0.1%	100.0%

TOTAL: ALL	13	2,523	451	46	332	19	0	69	141	2	8	1	3	3,608
% OF TOTAL	0.7%	130.7%	23.4%	2.4%	17.2%	1.0%	0.0%	3.6%	7.3%	0.1%	0.4%	0.1%	0.2%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS1 Lenwood Rd S of Main St.

AM	SOUTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	1	3	1	0	0	0	0	0	0	0	0	0	0	5
0:15	0	2	4	0	0	0	0	0	0	0	0	0	0	6
0:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
0:45	0	2	1	0	0	0	0	0	1	0	0	0	0	4
1:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30	0	0	2	0	0	0	0	0	1	2	0	0	0	5
1:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:15	0	1	0	0	1	0	0	1	0	0	0	0	0	3
2:30	0	1	0	0	0	0	0	0	3	0	1	0	0	5
2:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:45	0	5	1	0	1	0	0	0	0	0	0	0	0	7
4:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6
4:30	0	4	1	0	0	0	0	1	0	0	0	0	0	6
4:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
5:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
5:15	0	4	2	0	3	0	0	0	1	0	0	0	0	10
5:30	0	7	1	0	3	0	0	0	0	0	0	0	0	11
5:45	0	7	2	0	4	0	0	1	2	0	0	0	0	16
6:00	0	13	6	0	1	0	0	0	1	0	0	0	0	21
6:15	1	12	6	0	5	0	0	0	0	0	0	0	0	24
6:30	0	23	1	1	2	0	0	0	0	0	0	0	0	27
6:45	0	20	2	0	2	0	0	1	1	0	0	0	0	26
7:00	0	6	1	0	4	0	0	0	0	0	0	0	0	11
7:15	0	13	4	0	3	0	0	1	1	0	0	0	0	22
7:30	0	24	4	1	0	0	0	1	2	0	0	0	0	32
7:45	0	19	3	0	1	0	0	1	2	0	0	0	0	26
8:00	0	18	3	1	4	0	0	0	0	0	0	0	0	26
8:15	0	14	1	0	1	0	0	1	1	0	0	0	0	18
8:30	0	17	5	1	1	0	0	1	2	0	0	0	0	27
8:45	0	21	1	0	1	0	0	1	0	0	0	0	0	24
9:00	0	10	3	0	1	0	0	0	3	0	0	0	1	18
9:15	0	16	0	0	2	0	0	0	1	0	0	0	0	19
9:30	0	14	4	2	1	0	0	0	0	0	0	0	0	21
9:45	0	24	5	0	4	0	0	0	1	0	0	0	0	34
10:00	0	10	1	1	1	0	0	1	0	0	0	0	0	14
10:15	1	22	1	0	3	0	0	0	0	0	0	0	0	27
10:30	0	17	3	2	3	0	0	0	0	0	1	0	0	26
10:45	0	19	2	2	5	0	0	0	0	0	0	0	0	28
11:00	0	17	2	0	1	0	0	1	0	0	0	0	0	21
11:15	0	11	4	1	8	0	0	0	0	0	0	0	0	24
11:30	0	18	3	1	2	0	0	0	2	0	0	0	0	26
11:45	0	17	2	0	3	1	0	0	1	0	0	0	0	24
TOTAL	3	461	84	13	72	2	0	12	26	2	2	0	1	678

PM	SOUTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	19	7	0	3	0	0	0	2	0	0	0	0	31
12:15	0	10	1	0	3	0	0	0	2	0	0	0	0	16
12:30	0	18	2	1	9	0	0	0	0	0	0	0	0	30
12:45	0	15	4	0	6	1	0	0	1	0	0	0	0	27
13:00	0	20	3	0	6	0	0	0	2	0	0	0	0	31
13:15	0	14	4	0	8	1	0	2	1	0	0	0	0	30
13:30	0	10	2	0	3	0	0	0	3	0	0	0	0	18
13:45	1	20	5	2	5	0	0	2	1	0	0	0	0	36
14:00	0	15	9	0	3	0	0	0	0	0	0	0	0	27
14:15	0	15	3	0	3	0	0	0	1	0	0	0	0	22
14:30	0	21	5	1	2	0	0	2	0	0	0	0	0	31
14:45	0	22	1	0	4	0	0	0	3	0	0	0	0	30
15:00	0	17	3	0	5	0	0	0	3	0	0	0	0	28
15:15	0	17	5	0	6	1	0	0	0	0	0	0	0	29
15:30	0	22	1	1	5	0	0	1	2	0	0	0	0	32
15:45	0	19	4	0	4	0	0	2	2	0	0	0	0	31
16:00	1	19	9	0	6	0	0	0	1	0	0	0	0	36
16:15	0	21	2	0	3	0	0	0	0	0	0	0	0	26
16:30	0	20	4	1	6	0	0	0	0	0	0	0	0	31
16:45	0	25	1	0	8	0	0	0	0	0	0	0	0	34
17:00	0	24	4	1	6	0	0	1	0	0	0	0	0	36
17:15	0	27	4	0	5	0	0	0	0	0	0	0	0	36
17:30	0	20	5	1	5	0	0	1	1	0	0	0	0	33
17:45	1	13	4	1	3	0	0	0	0	0	0	0	0	22
18:00	0	17	3	0	0	0	0	1	4	0	0	0	0	25
18:15	0	24	4	0	1	0	0	1	0	0	0	0	0	30
18:30	0	14	3	1	1	1	0	0	1	0	0	0	0	21
18:45	0	20	3	1	2	0	0	0	3	0	0	0	0	29
19:00	0	6	1	0	2	0	0	0	0	0	0	0	0	9
19:15	0	6	1	0	3	0	0	0	3	0	0	0	0	13
19:30	0	4	2	0	0	1	0	2	0	0	0	0	0	9
19:45	0	7	3	0	0	0	0	0	1	0	0	0	0	11
20:00	0	9	0	0	5	0	0	1	1	0	0	0	0	16
20:15	0	9	2	0	0	0	0	0	0	0	0	0	0	11
20:30	0	14	1	0	4	1	0	1	0	0	0	0	0	21
20:45	0	10	2	0	0	0	0	0	2	0	0	0	0	14
21:00	0	7	0	0	0	0	0	0	0	0	1	0	0	8
21:15	0	6	2	0	1	0	0	0	2	0	0	0	0	11
21:30	0	7	1	0	1	0	0	0	1	0	0	0	0	10
21:45	0	6	3	0	0	0	0	0	1	0	0	0	0	10
22:00	0	9	1	0	0	0	0	0	2	0	0	0	0	12
22:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	6	1	0	0	0	0	0	0	0	0	0	0	7
22:45	0	4	2	0	0	0	0	0	1	0	0	0	0	7
23:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
23:15	0	2	3	0	0	0	0	0	0	0	0	0	0	5
23:30	0	0	2	0	0	0	0	1	1	0	0	0	0	4
23:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
TOTAL	3	641	135	11	137	6	0	18	48	0	1	0	0	1,000

AM PEAK HOUR	7:15 AM
AM PEAK VOLUME	106
PM PEAK HOUR	4:45 PM
PM PEAK VOLUME	139

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	6	1,102	219	24	209	8	0	30	74	2	3	0	1	1,678
% OF TOTAL	0.4%	65.7%	13.1%	1.4%	12.5%	0.5%	0.0%	1.8%	4.4%	0.1%	0.2%	0.0%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS1 Lenwood Rd S of Main St.

AM	COMBINED													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	1	9	2	0	1	0	0	0	2	0	0	0	0	15
0:15	0	10	4	0	0	0	0	0	0	0	0	0	0	14
0:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
0:45	0	5	2	0	0	0	0	0	2	0	0	0	0	9
1:00	0	1	0	0	2	1	0	0	0	0	0	0	0	4
1:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5
1:30	0	3	2	0	0	0	0	0	1	2	0	0	0	8
1:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
2:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:15	0	6	0	0	1	0	0	1	0	0	0	0	0	8
2:30	0	5	0	0	0	0	0	0	3	0	1	0	0	9
2:45	0	4	0	0	0	0	0	0	1	0	1	0	0	6
3:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
3:15	0	3	0	0	0	0	0	0	3	0	0	0	0	6
3:30	0	5	0	0	0	0	0	0	1	0	0	0	0	6
3:45	0	7	2	0	1	0	0	0	0	0	0	0	0	10
4:00	0	2	0	0	1	1	0	1	1	0	0	0	0	6
4:15	0	7	1	0	0	0	0	0	1	0	0	0	0	9
4:30	0	4	1	0	1	0	0	2	0	0	0	0	0	8
4:45	0	9	2	0	1	0	0	0	0	0	0	0	0	12
5:00	0	11	2	0	1	0	0	0	0	0	0	0	0	14
5:15	0	8	2	0	4	0	0	1	2	0	0	0	0	17
5:30	3	27	2	0	8	1	0	0	1	0	1	0	0	43
5:45	0	16	2	0	7	0	0	2	4	0	0	0	1	32
6:00	0	19	7	1	2	0	0	3	5	0	0	0	0	37
6:15	2	20	8	0	9	0	0	0	1	0	0	0	0	40
6:30	0	32	1	1	4	0	0	2	2	0	0	0	0	42
6:45	0	32	3	0	5	0	0	3	2	0	0	0	0	45
7:00	0	19	5	1	4	0	0	1	3	0	0	0	1	34
7:15	0	19	6	0	4	0	0	2	2	0	0	0	0	33
7:30	0	44	7	2	0	0	0	1	4	0	0	0	0	58
7:45	0	30	5	0	1	1	0	3	3	0	0	0	0	43
8:00	0	35	5	2	4	0	0	0	0	0	0	0	0	46
8:15	0	26	2	0	1	2	0	2	1	0	0	0	0	34
8:30	0	29	9	1	2	1	0	1	3	0	0	0	0	46
8:45	0	29	4	0	3	0	0	1	2	0	0	0	0	39
9:00	0	28	3	1	3	0	0	0	4	0	1	0	1	41
9:15	0	25	1	0	7	0	0	3	5	0	0	0	0	41
9:30	0	27	6	3	1	0	0	0	0	0	0	0	0	37
9:45	0	42	9	1	8	0	0	0	2	0	0	0	0	62
10:00	0	24	2	2	2	0	0	2	0	0	0	0	0	32
10:15	1	39	2	0	8	0	0	1	1	0	0	0	0	52
10:30	0	38	6	2	6	0	0	2	0	0	1	0	0	55
10:45	0	34	5	2	8	0	0	0	1	0	0	0	0	50
11:00	0	32	7	1	6	0	0	1	0	0	0	0	0	47
11:15	0	30	6	1	8	0	0	0	0	0	0	0	0	45
11:30	0	36	6	1	4	1	0	0	2	0	0	0	0	50
11:45	0	35	9	0	7	2	0	0	1	0	0	0	0	54
TOTAL	7	888	149	22	136	10	0	35	66	2	5	0	3	1,323

PM	COMBINED													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	42	9	3	5	0	0	2	4	0	0	0	0	66
12:15	0	33	5	0	7	0	0	0	3	0	0	0	0	48
12:30	0	36	5	1	10	0	0	0	1	0	0	0	0	53
12:45	0	31	8	0	8	1	0	0	1	0	0	0	0	49
13:00	1	38	7	1	9	0	0	1	2	0	0	0	0	59
13:15	0	36	10	1	8	1	0	3	1	0	0	0	0	60
13:30	0	25	8	0	3	0	0	0	6	0	1	0	0	43
13:45	1	32	9	2	11	0	0	2	2	0	0	0	0	59
14:00	0	42	10	1	6	0	0	1	0	0	0	0	0	60
14:15	1	35	5	0	5	0	0	1	3	0	0	0	0	50
14:30	0	39	12	1	4	0	0	2	1	0	0	0	0	59
14:45	0	42	9	0	5	1	0	0	4	0	0	0	0	61
15:00	0	38	4	1	5	0	0	0	4	0	0	0	0	52
15:15	0	42	9	0	8	1	0	2	1	0	0	0	0	63
15:30	0	56	9	1	6	0	0	2	2	0	0	0	0	76
15:45	0	44	12	0	6	0	0	5	2	0	0	0	0	69
16:00	1	48	10	1	8	0	0	1	1	0	0	0	0	70
16:15	0	41	5	0	4	0	0	0	0	0	0	0	0	50
16:30	0	49	9	1	7	2	0	0	0	0	0	0	0	68
16:45	0	55	3	0	9	0	0	0	0	0	0	0	0	67
17:00	0	52	11	2	9	0	0	1	1	0	0	0	0	76
17:15	0	68	9	0	5	0	0	0	0	0	0	0	0	82
17:30	0	49	6	1	6	0	0	1	2	0	0	0	0	65
17:45	1	49	9	1	5	0	0	0	1	0	0	0	0	66
18:00	0	44	7	1	2	0	0	2	4	0	0	0	0	60
18:15	0	47	5	0	2	0	0	1	0	0	0	0	0	55
18:30	0	41	5	1	2	1	0	0	2	0	0	0	0	52
18:45	0	39	5	1	2	0	0	1	5	0	0	0	0	53
19:00	0	44	6	2	2	0	0	0	1	0	0	0	0	55
19:15	0	31	4	0	6	0	0	0	3	0	0	0	0	44
19:30	0	30	5	0	2	1	0	3	0	0	0	0	0	41
19:45	0	25	5	0	0	0	0	0	1	0	0	0	0	31
20:00	0	33	6	0	6	0	0	1	1	0	0	1	0	48
20:15	0	28	5	0	1	0	0	0	0	0	0	0	0	34
20:30	0	25	4	1	5	1	0	1	1	0	0	0	0	38
20:45	0	28	9	0	0	0	0	0	2	0	0	0	0	39
21:00	0	22	9	0	1	0	0	0	0	0	2	0	0	34
21:15	0	21	3	0	2	0	0	0	2	0	0	0	0	28
21:30	0	27	2	0	2	0	0	0	1	0	0	0	0	32
21:45	0	11	5	0	0	0	0	0	3	0	0	0	0	19
22:00	0	29	2	0	0	0	0	0	2	0	0	0	0	33
22:15	0	8	2	0	1	0	0	0	0	0	0	0	0	11
22:30	0	19	3	0	0	0	0	0	0	0	0	0	0	22
22:45	0	18	3	0	0	0	0	0	1	0	0	0	0	22
23:00	0	18	3	0	0	0	0	0	2	0	0	0	0	23
23:15	0	5	5	0	0	0	0	0	0	0	0	0	0	10
23:30	0	8	2	0	0	0	0	1	2	0	0	0	0	13
23:45	0	12	4	0	1	0	0	0	0	0	0	0	0	17
TOTAL	6	1,635	302	24	196	9	0	34	75	0	3	1	0	2,285

AM PEAK HOUR	10:15 AM
AM PEAK VOLUME	204
PM PEAK HOUR	4:30 PM
PM PEAK VOLUME	293

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	13	2,523	451	46	332	19	0	69	141	2	8	1	3	3,608
% OF TOTAL	0.4%	69.9%	12.5%	1.3%	9.2%	0.5%	0.0%	1.9%	3.9%	0.1%	0.2%	0.0%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS3 Main St W of SR-58.

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	8	1	0	1	0	0	0	0	0	0	0	0	10
0:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8
0:30	1	6	0	0	0	0	0	0	0	0	0	0	0	7
0:45	0	7	1	0	0	0	0	0	0	0	0	0	0	8
1:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
1:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6
1:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3
1:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
2:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2:45	0	8	1	0	0	0	0	0	1	0	0	0	0	10
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:15	0	6	1	0	1	0	0	0	1	0	0	0	0	9
3:30	0	10	1	0	0	0	0	0	1	0	0	0	0	12
3:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
4:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
4:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9
4:30	0	12	3	0	0	0	0	0	0	0	0	0	0	15
4:45	0	26	3	0	2	0	0	0	0	0	0	0	0	31
5:00	0	25	5	1	1	0	0	0	1	0	0	0	0	33
4:30	0	29	6	0	2	1	0	0	1	0	0	0	0	39
4:45	0	50	11	0	2	0	0	0	0	0	0	0	0	63
5:00	0	61	8	2	1	0	0	0	0	0	0	0	0	72
5:15	1	62	11	0	4	1	0	0	0	0	0	0	0	79
5:30	0	50	5	0	4	0	0	0	1	0	2	0	0	62
5:45	0	61	6	2	4	1	0	0	0	0	0	0	0	74
6:00	0	70	6	3	3	4	0	0	2	0	0	0	0	88
6:15	0	99	9	1	4	0	0	0	1	0	0	0	0	114
6:30	0	41	9	1	5	0	0	0	0	0	0	0	0	56
6:45	0	73	8	0	5	0	0	0	1	0	0	0	0	87
7:00	0	64	11	1	3	2	0	0	1	0	0	0	0	82
7:15	1	56	4	0	1	1	1	0	1	0	0	0	0	65
7:30	0	73	10	2	2	0	0	1	0	0	0	0	0	88
7:45	1	109	9	5	6	0	0	0	0	0	0	0	1	131
8:00	0	91	7	0	2	1	0	0	2	0	1	0	0	104
8:15	0	52	5	0	1	2	1	0	1	0	0	0	0	62
8:30	0	62	3	0	3	0	0	1	0	0	0	0	0	69
8:45	0	12	1	0	0	1	0	0	1	0	0	0	0	15
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15	0	14	2	0	0	0	0	0	0	0	0	0	0	16
9:30	0	57	8	0	5	0	0	0	0	0	0	0	1	71
9:45	0	59	6	1	5	1	0	0	2	0	0	0	0	74
10:00	1	53	3	0	1	0	0	0	0	0	0	1	0	59
10:15	0	42	14	0	3	1	0	0	1	0	0	0	0	61
10:30	1	56	7	1	4	1	0	0	0	0	0	0	0	70
10:45	0	45	6	1	4	1	0	1	0	0	0	0	0	58
11:00	0	20	6	0	1	1	0	0	0	0	0	0	0	28
TOTAL	6	1,627	200	21	80	19	2	3	19	0	3	1	2	1,983

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	20	3	0	3	0	0	0	0	0	0	0	0	26
12:30	1	53	9	1	2	1	0	0	0	0	0	0	0	67
12:45	1	54	16	0	5	0	0	0	1	0	1	0	0	78
13:00	1	67	5	0	4	1	0	1	2	0	0	0	0	81
13:15	0	78	14	0	1	0	1	0	0	0	0	0	0	94
13:30	0	99	17	1	6	1	0	0	1	0	0	0	0	125
13:45	0	62	11	1	4	0	0	0	2	0	0	0	0	80
14:00	1	72	7	0	2	1	0	0	0	0	0	0	0	83
14:15	1	54	11	1	5	0	0	0	2	0	0	0	0	74
14:30	1	76	6	2	2	0	0	0	1	0	0	0	0	88
14:45	0	60	6	0	1	0	0	0	1	0	0	0	0	68
15:00	2	106	11	0	4	0	0	0	0	0	0	0	0	123
15:15	1	64	4	1	2	1	0	0	1	0	0	0	0	74
15:30	1	73	10	2	3	2	0	0	0	0	0	0	0	91
15:45	0	63	8	1	4	0	0	0	1	0	0	0	0	77
16:00	0	47	10	0	3	0	0	0	0	0	0	0	0	60
16:15	1	62	8	0	3	1	0	0	0	0	0	0	0	75
16:30	0	82	6	2	2	1	0	0	0	1	0	0	0	94
16:45	1	65	7	0	0	0	0	0	0	0	0	0	0	73
17:00	0	21	6	0	2	0	0	0	0	0	0	0	0	29
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	29	3	0	0	0	0	0	0	0	0	0	0	32
19:30	0	25	2	1	1	0	0	0	0	0	1	0	0	30
19:45	0	35	4	0	0	0	0	0	0	0	0	0	0	39
20:00	0	28	2	0	0	0	0	0	0	0	0	0	0	30
20:15	0	27	1	1	0	0	0	0	0	0	0	0	0	29
20:30	0	18	1	0	1	0	0	0	0	0	0	0	0	20
20:45	1	30	1	0	0	0	0	0	0	0	0	0	0	32
21:00	0	20	2	0	0	0	0	0	0	0	0	0	0	22
21:15	0	19	2	0	0	0	0	0	0	0	0	0	0	21
21:30	0	24	1	0	0	0	0	0	0	0	0	0	0	25
21:45	0	26	2	0	0	0	0	0	0	0	0	0	0	28
22:00	0	17	0	0	1	0	0	0	0	0	0	0	0	18
22:15	0	16	0	0	0	0	0	0	0	0	0	0	0	16
22:30	0	16	1	0	0	0	0	0	0	0	0	0	0	17
22:45	1	14	0	0	0	0	0	0	0	0	0	0	0	15
23:00	0	41	4	0	2	0	0	0	0	0	0	0	0	47
23:15	0	11	1	0	0	0	0	0	0	0	0	0	0	12
23:30	0	13	1	0	0	0	0	0	0	0	0	0	0	14
23:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
TOTAL	14	1,693	204	14	63	9	1	1	12	1	2	0	0	2,014

AM PEAK HOUR	7:15 AM
AM PEAK VOLUME	388

PM PEAK HOUR	1:15 PM
PM PEAK VOLUME	382

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	20	3,320	404	35	143	28	3	4	31	1	5	1	2	3,997
% OF TOTAL	0.5%	83.1%	10.1%	0.9%	3.6%	0.7%	0.1%	0.1%	0.8%	0.0%	0.1%	0.0%	0.1%	100.0%

TOTAL: ALL	152	7,076	882	66	333	72	10	10	66	9	5	2	6	8,689
% OF TOTAL	3.8%	177.0%	22.1%	1.7%	8.3%	1.8%	0.3%	0.3%	1.7%	0.2%	0.1%	0.1%	0.2%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS3 Main St W of SR-58.

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
0:15	0	13	2	0	1	0	0	0	0	0	0	0	0	16
0:30	0	10	1	0	0	0	0	0	0	0	0	0	0	11
0:45	0	7	1	0	0	0	0	0	0	0	0	0	0	8
1:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
1:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9
1:30	0	5	1	0	0	0	0	0	0	0	0	0	0	6
1:45	0	7	1	0	0	0	0	0	0	0	0	0	0	8
2:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:15	0	6	0	0	0	0	0	0	0	1	0	0	0	7
2:30	0	4	0	0	0	0	0	0	1	0	0	0	0	5
2:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:00	1	3	0	0	0	0	0	0	1	0	0	0	0	5
3:15	0	5	2	0	0	0	0	0	0	0	0	0	0	7
3:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
3:45	0	9	0	0	0	0	0	0	0	0	0	0	0	9
4:00	0	2	3	0	0	0	0	0	3	0	0	0	0	8
4:15	0	4	0	0	0	0	0	0	1	0	0	0	0	5
4:30	0	4	1	0	0	0	0	0	2	0	0	0	0	7
4:45	0	4	0	0	1	0	0	0	0	0	0	0	0	5
5:00	0	10	0	0	1	0	0	0	1	0	0	0	0	12
5:15	0	6	0	0	1	1	0	0	0	0	0	0	0	8
5:30	0	14	6	0	2	1	0	0	1	0	0	0	0	24
5:45	0	15	3	1	1	0	0	0	1	0	0	0	0	21
6:00	0	18	3	2	4	1	0	0	2	0	0	0	0	30
6:15	0	23	4	4	2	0	0	0	0	0	0	0	0	33
6:30	0	41	7	2	2	0	0	0	0	0	0	0	1	53
6:45	0	28	6	0	3	0	0	0	0	0	0	0	0	37
7:00	0	33	4	0	1	1	0	0	1	0	0	0	0	40
7:15	0	37	7	2	0	0	0	0	2	0	0	0	0	48
7:30	0	28	4	0	1	2	0	0	0	1	0	0	0	36
7:45	0	29	7	1	1	1	0	0	0	0	0	0	0	39
8:00	1	46	4	1	2	1	1	0	0	0	0	0	0	56
8:15	2	40	2	2	4	3	1	0	0	1	0	0	0	55
8:30	2	69	5	0	1	0	0	0	0	0	0	0	0	77
8:45	5	48	2	0	4	0	0	0	0	0	0	0	0	59
9:00	6	45	8	0	2	0	1	2	1	1	0	0	0	66
9:15	2	44	7	0	1	1	0	0	2	0	0	0	0	57
9:30	5	27	5	0	1	0	0	0	0	0	0	0	0	38
9:45	4	34	8	0	4	1	0	0	0	0	0	0	0	51
10:00	3	42	6	0	3	0	0	1	0	0	0	0	0	55
10:15	1	33	5	1	2	2	0	0	1	0	0	0	0	45
10:30	4	43	7	2	1	1	0	0	0	0	0	0	0	58
10:45	3	39	7	0	6	1	1	0	1	0	0	0	0	58
11:00	4	54	7	0	4	0	0	0	0	0	0	0	0	69
11:15	2	51	12	0	1	1	1	0	0	0	0	0	0	68
11:30	3	50	6	0	5	0	0	0	1	0	0	0	0	65
11:45	8	58	5	0	4	0	0	0	1	0	0	0	0	76
TOTAL	56	1,124	161	18	66	18	5	3	23	4	0	0	1	1,479

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	278

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	2	57	8	1	6	3	0	0	1	0	0	0	0	78
12:15	2	54	5	0	4	3	0	0	3	0	0	0	0	71
12:30	4	57	5	0	4	0	0	0	1	0	0	1	0	72
12:45	4	53	8	2	4	1	0	1	0	0	0	0	0	73
13:00	4	75	14	1	6	0	0	0	0	0	0	0	0	100
13:15	6	65	10	1	4	4	1	0	0	0	0	0	0	91
13:30	2	61	9	0	4	2	0	0	0	0	0	0	0	78
13:45	4	78	11	0	3	1	0	0	0	0	0	0	0	97
14:00	4	68	13	0	1	2	0	0	0	0	0	0	0	88
14:15	1	72	4	1	3	0	0	0	0	0	0	0	0	81
14:30	7	66	10	2	4	0	0	1	0	0	0	0	0	90
14:45	4	84	13	0	4	0	0	0	0	0	0	0	0	105
15:00	1	96	10	0	1	0	0	0	1	0	0	0	0	109
15:15	2	81	9	0	7	2	0	0	0	1	0	0	0	102
15:30	4	74	7	1	8	1	0	0	0	0	0	0	0	95
15:45	4	71	11	0	6	0	0	0	0	1	0	0	1	94
16:00	3	93	16	0	4	0	0	0	1	0	0	0	0	117
16:15	2	83	6	0	4	1	0	0	0	1	0	0	0	97
16:30	1	77	9	0	6	1	0	0	0	1	0	0	0	95
16:45	2	96	9	0	1	0	1	0	0	0	0	0	0	109
17:00	3	94	9	0	3	0	0	0	1	0	0	0	0	110
17:15	0	81	9	0	2	0	0	0	0	0	0	0	0	92
17:30	1	83	14	0	7	0	0	0	0	0	0	0	0	105
17:45	1	63	6	0	3	0	0	0	0	0	0	0	0	73
18:00	0	80	7	0	3	0	0	0	0	0	0	0	0	90
18:15	0	55	7	3	2	2	0	0	1	0	0	0	0	70
18:30	1	49	8	0	2	0	0	0	1	0	0	0	0	61
18:45	1	48	6	0	1	0	0	0	0	0	0	0	0	56
19:00	0	50	5	0	1	0	0	0	0	0	0	0	0	56
19:15	0	54	5	1	1	0	0	0	0	0	0	0	0	61
19:30	0	46	3	0	1	1	0	0	1	0	0	0	0	52
19:45	2	44	8	0	5	0	0	0	0	0	0	0	0	59
20:00	0	35	6	0	3	0	0	0	0	0	0	0	0	44
20:15	1	37	4	0	0	0	0	0	0	0	0	0	0	42
20:30	0	32	4	0	1	0	0	0	0	0	0	0	0	37
20:45	0	45	4	0	1	0	0	0	0	0	0	0	0	50
21:00	1	35	1	0	1	0	0	0	0	0	0	0	0	38
21:15	0	38	4	0	0	1	0	0	0	0	0	0	0	43
21:30	0	24	4	0	1	0	0	0	0	0	0	0	1	30
21:45	0	26	1	0	0	0	0	0	0	0	0	0	0	27
22:00	0	20	4	0	0	0	0	0	0	0	0	0	0	24
22:15	0	31	1	0	0	1	0	0	0	0	0	0	0	33
22:30	1	36	5	0	0	0	0	1	1	0	0	0	1	45
22:45	0	15	4	0	1	0	0	0	0	0	0	0	0	20
23:00	1	29	0	0	0	0	0	0	0	0	0	0	0	30
23:15	0	9	1	0	0	0	0	0	0	0	0	0	0	10
23:30	0	7	0	0	1	0	0	0	0	0	0	0	0	8
23:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
TOTAL	76	2,632	317	13	124	26	2	3	12	4	0	1	3	3,213

PM PEAK HOUR	4:00 PM
PM PEAK VOLUME	418

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	132	3,756	478	31	190	44	7	6	35	8	0	1	4	4,692
% OF TOTAL	2.8%	80.1%	10.2%	0.7%	4.0%	0.9%	0.1%	0.1%	0.7%	0.2%	0.0%	0.0%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS3 Main St W of SR-58.

AM	COMBINED													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	18	1	0	1	0	0	0	0	0	0	0	0	20
0:15	0	21	2	0	1	0	0	0	0	0	0	0	0	24
0:30	1	16	1	0	0	0	0	0	0	0	0	0	0	18
0:45	0	14	2	0	0	0	0	0	0	0	0	0	0	16
1:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
1:15	0	14	1	0	0	0	0	0	0	0	0	0	0	15
1:30	0	7	2	0	0	0	0	0	0	0	0	0	0	9
1:45	0	11	1	0	0	0	0	0	0	0	0	0	0	12
2:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
2:15	0	7	0	0	0	0	0	0	0	1	0	0	0	8
2:30	0	8	0	0	0	0	0	0	1	0	0	0	0	9
2:45	0	10	1	0	0	0	0	0	1	0	0	0	0	12
3:00	1	4	0	0	0	0	0	0	1	0	0	0	0	6
3:15	0	11	3	0	1	0	0	0	1	0	0	0	0	16
3:30	0	15	1	0	0	0	0	0	1	0	0	0	0	17
3:45	0	14	0	0	0	0	0	0	0	0	0	0	0	14
4:00	0	9	4	0	0	0	0	0	3	0	0	0	0	16
4:15	0	12	1	0	0	0	0	0	1	0	0	0	0	14
4:30	0	16	4	0	0	0	0	0	2	0	0	0	0	22
4:45	0	30	3	0	3	0	0	0	0	0	0	0	0	36
5:00	0	35	5	1	2	0	0	0	2	0	0	0	0	45
5:15	0	35	6	0	3	2	0	0	1	0	0	0	0	47
5:30	0	64	17	0	4	1	0	0	1	0	0	0	0	87
5:45	0	76	11	3	2	0	0	0	1	0	0	0	0	93
6:00	1	80	14	2	8	2	0	0	2	0	0	0	0	109
6:15	0	73	9	4	6	0	0	0	1	0	2	0	0	95
6:30	0	102	13	4	6	1	0	0	0	0	0	0	1	127
6:45	0	98	12	3	6	4	0	0	2	0	0	0	0	125
7:00	0	132	13	1	5	1	0	0	2	0	0	0	0	154
7:15	0	78	16	3	5	0	0	0	2	0	0	0	0	104
7:30	0	101	12	0	6	2	0	0	1	1	0	0	0	123
7:45	0	93	18	2	4	3	0	0	1	0	0	0	0	121
8:00	2	102	8	1	3	2	2	0	1	0	0	0	0	121
8:15	2	113	12	4	6	3	1	1	0	1	0	0	0	143
8:30	3	178	14	5	7	0	0	0	0	0	0	0	1	208
8:45	5	139	9	0	6	1	0	0	2	0	1	0	0	163
9:00	6	97	13	0	3	2	2	2	2	1	0	0	0	128
9:15	2	106	10	0	4	1	0	1	2	0	0	0	0	126
9:30	5	39	6	0	1	1	0	0	1	0	0	0	0	53
9:45	4	34	8	0	4	1	0	0	0	0	0	0	0	51
10:00	3	56	8	0	3	0	0	1	0	0	0	0	0	71
10:15	1	90	13	1	7	2	0	0	1	0	0	0	1	116
10:30	4	102	13	3	6	2	0	0	2	0	0	0	0	132
10:45	4	92	10	0	7	1	1	0	1	0	0	1	0	117
11:00	4	96	21	0	7	1	0	0	1	0	0	0	0	130
11:15	3	107	19	1	5	2	1	0	0	0	0	0	0	138
11:30	3	95	12	1	9	1	0	1	1	0	0	0	0	123
11:45	8	78	11	0	5	1	0	0	1	0	0	0	0	104
TOTAL	62	2,751	361	39	146	37	7	6	42	4	3	1	3	3,462

AM PEAK HOUR	8:15 AM
AM PEAK VOLUME	642

PM	COMBINED													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	2	57	8	1	6	3	0	0	1	0	0	0	0	78
12:15	2	74	8	0	7	3	0	0	3	0	0	0	0	97
12:30	5	110	14	1	6	1	0	0	1	0	0	1	0	139
12:45	5	107	24	2	9	1	0	1	1	0	1	0	0	151
13:00	5	142	19	1	10	1	0	1	2	0	0	0	0	181
13:15	6	143	24	1	5	4	2	0	0	0	0	0	0	185
13:30	2	160	26	1	10	3	0	0	1	0	0	0	0	203
13:45	4	140	22	1	7	1	0	0	2	0	0	0	0	177
14:00	5	140	20	0	3	3	0	0	0	0	0	0	0	171
14:15	2	126	15	2	8	0	0	0	2	0	0	0	0	155
14:30	8	142	16	4	6	0	0	1	1	0	0	0	0	178
14:45	4	144	19	0	5	0	0	0	1	0	0	0	0	173
15:00	3	202	21	0	5	0	0	0	1	0	0	0	0	232
15:15	3	145	13	1	9	3	0	0	1	1	0	0	0	176
15:30	5	147	17	3	11	3	0	0	0	0	0	0	0	186
15:45	4	134	19	1	10	0	0	0	1	1	0	0	1	171
16:00	3	140	26	0	7	0	0	0	1	0	0	0	0	177
16:15	3	145	14	0	7	2	0	0	0	1	0	0	0	172
16:30	1	159	15	2	8	2	0	0	0	2	0	0	0	189
16:45	3	161	16	0	1	0	1	0	0	0	0	0	0	182
17:00	3	115	15	0	5	0	0	0	1	0	0	0	0	139
17:15	0	81	9	0	2	0	0	0	0	0	0	0	0	92
17:30	1	83	14	0	7	0	0	0	0	0	0	0	0	105
17:45	1	63	6	0	3	0	0	0	0	0	0	0	0	73
18:00	0	80	7	0	3	0	0	0	0	0	0	0	0	90
18:15	0	55	7	3	2	2	0	0	1	0	0	0	0	70
18:30	1	49	8	0	2	0	0	0	1	0	0	0	0	61
18:45	1	48	6	0	1	0	0	0	0	0	0	0	0	56
19:00	0	50	5	0	1	0	0	0	0	0	0	0	0	56
19:15	0	83	8	1	1	0	0	0	0	0	0	0	0	93
19:30	0	71	5	1	2	1	0	0	1	0	1	0	0	82
19:45	2	79	12	0	5	0	0	0	0	0	0	0	0	98
20:00	0	63	8	0	3	0	0	0	0	0	0	0	0	74
20:15	1	64	5	1	0	0	0	0	0	0	0	0	0	71
20:30	0	50	5	0	2	0	0	0	0	0	0	0	0	57
20:45	1	75	5	0	1	0	0	0	0	0	0	0	0	82
21:00	1	55	3	0	1	0	0	0	0	0	0	0	0	60
21:15	0	57	6	0	0	1	0	0	0	0	0	0	0	64
21:30	0	48	5	0	1	0	0	0	0	0	0	0	1	55
21:45	0	52	3	0	0	0	0	0	0	0	0	0	0	55
22:00	0	37	4	0	1	0	0	0	0	0	0	0	0	42
22:15	0	47	1	0	0	1	0	0	0	0	0	0	0	49
22:30	1	52	6	0	0	0	0	1	1	0	0	0	1	62
22:45	1	29	4	0	1	0	0	0	0	0	0	0	0	35
23:00	1	70	4	0	2	0	0	0	0	0	0	0	0	77
23:15	0	20	2	0	0	0	0	0	0	0	0	0	0	22
23:30	0	20	1	0	1	0	0	0	0	0	0	0	0	22
23:45	0	11	1	0	0	0	0	0	0	0	0	0	0	12
TOTAL	90	4,325	521	27	187	35	3	4	24	5	2	1	3	5,227

PM PEAK HOUR	2:45 PM
PM PEAK VOLUME	767

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	152	7,076	882	66	333	72	10	10	66	9	5	2	6	8,689
% OF TOTAL	1.7%	81.4%	10.2%	0.8%	3.8%	0.8%	0.1%	0.1%	0.8%	0.1%	0.1%	0.0%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS3 Main St W of SR-58.

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
0:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7
0:30	0	8	2	0	0	0	0	0	0	0	0	0	0	10
0:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
1:00	0	2	0	0	0	0	0	0	1	0	0	0	0	3
1:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
1:30	0	6	2	0	1	0	0	0	0	0	0	0	0	9
1:45	0	4	0	0	1	0	0	0	0	0	0	0	0	5
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:15	0	3	0	0	0	0	0	0	1	0	0	0	0	4
2:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
2:45	0	3	0	0	0	0	0	0	0	0	1	0	0	4
3:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:30	0	4	1	0	0	0	0	0	0	0	0	0	0	5
3:45	0	10	1	0	0	0	0	0	0	0	0	0	0	11
4:00	0	10	2	0	1	0	0	0	0	0	0	0	0	13
4:15	0	8	2	0	0	1	0	0	0	0	0	0	0	11
4:30	0	19	3	0	0	0	0	0	0	0	0	0	0	22
4:45	0	20	3	0	3	0	0	0	0	0	0	0	0	26
5:00	0	18	4	1	3	0	0	0	0	0	0	0	0	26
5:15	0	30	6	0	1	0	0	0	0	0	0	0	0	37
5:30	1	44	11	0	1	0	0	0	0	0	0	0	0	57
5:45	2	73	5	0	2	0	0	0	0	0	0	0	0	82
6:00	0	46	6	2	2	0	0	0	0	0	0	0	0	56
6:15	0	48	5	0	3	0	0	0	0	0	0	0	0	56
6:30	0	57	11	3	4	2	0	0	0	0	2	0	0	79
6:45	0	64	10	2	0	1	0	0	0	0	4	0	0	81
7:00	0	99	11	0	4	2	0	0	0	0	3	0	0	119
7:15	0	42	2	1	2	0	0	0	0	0	0	0	0	47
7:30	0	44	8	1	7	1	0	0	1	0	0	0	0	62
7:45	0	90	3	0	2	1	0	1	2	0	5	0	0	104
8:00	0	67	12	0	4	1	0	0	0	0	2	0	0	86
8:15	0	87	13	3	2	3	0	1	0	0	0	1	1	111
8:30	0	111	7	3	6	4	1	0	0	0	0	0	1	133
8:45	0	72	3	0	2	0	0	1	1	0	2	0	0	81
9:00	1	50	5	0	1	2	0	1	1	1	4	0	0	66
9:15	0	50	10	1	3	2	0	0	2	0	3	0	0	71
9:30	0	56	3	1	2	2	0	0	2	0	0	1	0	67
9:45	0	59	12	0	1	1	0	0	0	0	2	0	0	75
10:00	0	51	5	0	2	2	0	1	0	0	1	0	0	62
10:15	1	60	5	0	5	0	0	0	1	0	2	0	0	74
10:30	1	57	11	1	10	0	0	0	1	0	4	0	0	85
10:45	1	62	5	0	4	1	0	1	2	0	1	0	0	77
11:00	1	53	6	1	4	0	0	0	0	0	0	0	0	65
11:15	0	54	5	0	3	1	0	0	1	0	0	0	0	64
11:30	0	61	16	1	3	0	0	1	0	0	0	0	0	82
11:45	0	46	9	1	7	0	0	1	0	0	0	0	1	65
TOTAL	8	1,788	225	22	96	27	1	8	16	1	36	2	3	2,233

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	2	47	7	0	6	0	0	0	0	0	0	0	0	62
12:15	0	52	10	0	0	0	0	0	0	0	1	0	0	63
12:30	1	52	9	2	5	0	0	0	1	0	0	0	0	70
12:45	0	49	10	0	2	1	0	0	1	0	0	0	0	63
13:00	0	50	7	0	6	0	0	0	1	0	0	0	0	64
13:15	0	48	2	0	6	1	1	0	0	0	0	0	0	58
13:30	0	56	9	2	2	0	0	1	0	0	0	0	0	70
13:45	0	53	10	0	1	0	0	0	1	0	0	0	0	65
14:00	1	55	6	0	3	0	0	1	2	0	0	0	0	68
14:15	0	58	9	0	5	0	0	0	1	0	0	0	0	73
14:30	0	57	4	1	5	0	0	0	0	0	0	0	0	67
14:45	0	76	15	0	3	3	0	0	0	0	0	0	0	97
15:00	2	92	12	0	4	0	0	0	0	0	0	0	0	110
15:15	0	119	15	1	3	2	0	0	1	0	0	0	0	141
15:30	0	85	5	3	2	0	0	1	0	0	0	0	0	96
15:45	0	68	11	0	7	0	0	0	2	0	0	0	0	88
16:00	0	68	7	1	2	0	0	0	0	0	0	0	0	78
16:15	1	56	7	0	0	0	0	1	0	0	0	0	0	65
16:30	2	53	8	2	3	0	0	1	0	0	0	0	0	69
16:45	0	58	9	0	1	4	0	0	0	0	0	0	0	72
17:00	1	64	7	0	2	0	0	0	0	0	0	0	0	74
17:15	0	74	8	0	1	0	0	0	1	0	0	0	0	84
17:30	1	75	5	3	2	0	0	0	0	0	0	0	0	86
17:45	0	67	11	0	3	0	0	1	2	0	0	0	0	84
18:00	1	52	3	1	3	0	0	1	0	0	0	0	0	61
18:15	1	45	6	1	2	0	0	0	0	0	0	0	0	55
18:30	0	52	3	0	0	0	0	0	1	0	0	0	0	56
18:45	0	56	4	0	1	0	0	0	0	0	0	0	0	61
19:00	1	35	2	0	1	0	0	0	1	0	0	0	0	40
19:15	0	39	2	1	2	0	0	0	0	0	0	0	0	44
19:30	0	38	5	1	0	0	0	0	0	0	0	0	0	44
19:45	0	29	1	0	0	1	0	0	0	0	0	0	0	31
20:00	1	26	2	0	0	0	0	0	1	0	0	0	0	30
20:15	0	20	4	0	1	0	0	0	0	0	0	0	0	25
20:30	0	25	2	0	1	0	0	0	0	0	0	0	0	28
20:45	0	25	1	0	1	1	0	0	1	0	0	0	0	29
21:00	0	18	3	0	0	0	0	0	0	0	0	0	0	21
21:15	0	31	4	0	0	0	0	0	0	0	0	0	0	35
21:30	0	25	3	0	0	0	0	0	0	0	0	0	0	28
21:45	0	19	2	0	0	0	0	0	0	0	2	0	0	23
22:00	0	26	0	0	1	0	0	0	0	0	0	0	0	27
22:15	0	12	1	0	0	0	0	0	0	0	0	0	0	13
22:30	0	20	0	0	0	0	0	0	0	0	0	0	0	20
22:45	0	17	1	0	0	0	0	0	0	0	0	0	0	18
23:00	0	54	4	0	0	0	0	0	0	0	0	0	0	58
23:15	0	13	0	0	0	0	0	0	0	0	0	0	0	13
23:30	0	9	1	0	0	0	0	0	0	0	0	0	0	10
23:45	0	12	0	0	0	0	0	0	0	0	0	0	0	12
TOTAL	15	2,230	257	19	87	13	1	7	17	0	3	0	0	2,649

AM PEAK HOUR	7:45 AM
AM PEAK VOLUME	434

PM PEAK HOUR	2:45 PM
PM PEAK VOLUME	444

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	23	4,018	482	41	183	40	2	15	33	1	39	2	3	4,882
% OF TOTAL	0.5%	82.3%	9.9%	0.8%	3.7%	0.8%	0.0%	0.3%	0.7%	0.0%	0.8%	0.0%	0.1%	100.0%

TOTAL: ALL	136	7,818	970	71	371	102	10	21	70	1	54	11	7	9,642
% OF TOTAL	2.8%	160.1%	19.9%	1.5%	7.6%	2.1%	0.2%	0.4%	1.4%	0.0%	1.1%	0.2%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS3 Main St W of SR-58.

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
0:15	0	9	2	0	0	0	0	0	0	0	0	0	0	11
0:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
0:45	0	12	1	0	0	0	0	0	0	0	0	0	0	13
1:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
1:15	0	11	0	0	1	0	0	0	0	0	0	0	0	12
1:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3
1:45	1	7	0	0	1	0	0	0	0	0	0	0	0	9
2:00	1	3	1	0	0	0	0	0	0	0	0	0	0	5
2:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:30	0	1	0	0	0	0	0	0	1	0	0	0	0	2
2:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
3:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
3:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
4:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
4:15	0	7	1	0	0	0	0	0	2	0	0	0	0	10
4:30	0	6	1	0	0	0	0	0	1	0	0	0	0	8
4:45	0	10	1	0	2	0	0	0	0	0	0	0	0	13
5:00	0	11	0	0	1	0	0	0	0	0	0	0	0	12
5:15	0	6	0	0	1	0	0	0	1	0	0	0	0	8
5:30	0	9	9	0	2	0	0	1	1	0	0	0	0	22
5:45	1	13	2	1	1	0	0	0	2	0	0	0	0	20
6:00	0	24	0	2	1	0	0	0	1	0	0	0	0	28
6:15	0	21	2	3	1	0	0	0	2	0	0	0	0	29
6:30	0	50	8	2	1	0	0	0	2	0	0	0	0	63
6:45	0	26	8	1	3	0	0	0	0	0	3	0	0	41
7:00	0	34	3	0	2	0	0	0	1	0	0	0	1	41
7:15	0	36	8	2	2	0	0	0	3	0	1	0	0	52
7:30	0	29	4	2	0	0	0	0	2	0	0	0	0	37
7:45	0	37	3	1	3	4	0	0	1	0	2	0	0	51
8:00	0	50	8	1	8	3	0	0	0	0	1	1	0	72
8:15	1	42	6	1	7	3	0	0	0	0	1	0	0	61
8:30	0	56	6	1	1	0	2	0	1	0	0	1	0	68
8:45	1	44	2	0	1	0	0	0	0	0	1	0	0	49
9:00	0	67	4	0	5	1	0	0	0	0	0	0	0	77
9:15	0	34	6	1	3	1	0	0	1	0	1	1	1	49
9:30	0	43	10	0	5	0	0	0	0	0	1	0	0	59
9:45	0	28	2	0	1	2	0	0	0	0	2	0	0	35
10:00	1	55	9	1	4	0	0	0	1	0	0	0	0	71
10:15	2	39	2	0	4	2	0	0	0	0	0	0	0	49
10:30	5	46	6	0	3	1	0	1	0	0	0	0	0	62
10:45	4	33	12	1	6	1	0	0	0	0	1	0	0	58
11:00	3	52	6	0	3	0	0	0	0	0	0	0	0	64
11:15	1	59	11	0	5	1	1	0	1	0	0	0	0	79
11:30	1	54	5	1	4	5	0	1	0	0	0	0	0	71
11:45	2	48	9	0	3	0	0	0	1	0	0	0	0	63
TOTAL	24	1,157	163	21	85	24	3	3	25	0	14	3	2	1,524

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	3	59	5	0	4	0	0	0	0	0	0	0	0	71
12:15	2	58	8	0	2	1	0	1	0	0	0	0	0	72
12:30	4	40	14	0	2	0	1	0	1	0	0	1	0	63
12:45	1	48	12	0	3	1	1	0	0	0	0	0	0	66
13:00	3	54	10	0	1	3	1	0	1	0	0	1	0	74
13:15	5	59	10	0	2	2	0	0	0	0	0	0	0	78
13:30	6	49	12	0	5	1	0	0	1	0	0	0	0	74
13:45	2	53	7	0	1	2	0	0	0	0	0	0	0	65
14:00	2	54	14	0	4	1	0	0	1	0	0	0	0	76
14:15	3	63	6	0	4	2	2	0	0	0	0	0	1	81
14:30	6	98	7	1	5	3	0	0	0	0	0	1	0	121
14:45	5	93	11	1	6	1	0	1	0	0	0	0	0	118
15:00	2	100	12	0	5	2	0	0	0	0	0	0	0	121
15:15	3	72	12	0	2	1	0	0	0	0	0	0	0	90
15:30	2	81	12	0	3	1	0	0	1	0	0	0	0	100
15:45	2	83	6	1	2	0	0	0	1	0	0	1	0	96
16:00	4	87	10	0	4	1	0	0	2	0	0	0	0	108
16:15	5	103	12	0	4	3	0	0	1	0	0	0	0	128
16:30	1	88	11	0	3	5	0	0	0	0	0	0	0	108
16:45	2	93	12	0	4	1	0	0	0	0	0	1	0	113
17:00	3	104	10	0	2	0	0	0	0	0	1	0	0	120
17:15	4	88	10	1	5	0	0	0	0	0	0	0	1	109
17:30	2	97	12	0	4	1	0	0	0	0	0	0	0	116
17:45	1	73	6	0	4	0	0	0	0	0	0	0	0	84
18:00	2	71	5	0	3	2	0	0	1	0	0	0	0	84
18:15	3	70	12	3	1	1	0	0	0	0	0	0	0	90
18:30	2	54	6	0	1	1	0	0	0	0	0	0	0	64
18:45	0	42	9	0	1	0	0	0	0	0	0	0	0	52
19:00	1	47	5	0	1	1	0	0	0	0	0	0	0	55
19:15	0	42	5	1	1	0	0	0	0	0	0	0	0	49
19:30	1	39	5	0	5	1	0	0	0	0	0	0	0	51
19:45	1	44	5	0	2	0	0	0	0	0	0	0	0	52
20:00	0	46	4	0	1	0	0	0	0	0	0	0	0	51
20:15	1	30	3	0	0	0	0	0	0	0	0	0	0	34
20:30	1	37	1	0	3	0	0	1	1	0	0	1	0	45
20:45	1	34	2	0	0	0	0	0	0	0	0	0	0	37
21:00	0	34	1	0	0	0	0	0	0	0	0	0	0	35
21:15	0	23	4	1	0	0	0	0	1	0	0	0	0	29
21:30	0	24	1	0	0	0	0	0	0	0	0	0	0	25
21:45	1	37	2	0	0	0	0	0	0	0	0	0	0	40
22:00	0	22	0	0	1	0	0	0	0	0	0	0	0	23
22:15	1	21	4	0	0	0	0	0	0	0	0	0	0	26
22:30	1	40	6	0	0	0	0	0	0	0	0	0	0	47
22:45	0	25	2	0	1	0	0	0	0	0	0	0	0	28
23:00	0	19	0	0	1	0	0	0	0	0	0	0	0	20
23:15	0	14	1	0	0	0	0	0	0	0	0	0	0	15
23:30	0	16	1	0	0	0	0	0	0	0	0	0	0	17
23:45	0	15	0	0	0	0	0	0	0	0	0	0	0	15
TOTAL	89	2,643	325	9	103	38	5	3	12	0	1	6	2	3,236

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	277

PM PEAK HOUR	4:15 PM
PM PEAK VOLUME	469

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	113	3,800	488	30	188	62	8	6	37	0	15	9	4	4,760
% OF TOTAL	2.4%	79.8%	10.3%	0.6%	3.9%	1.3%	0.2%	0.1%	0.8%	0.0%	0.3%	0.2%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS3 Main St W of SR-58.

AM	COMBINED													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	19	0	0	0	0	0	0	0	0	0	0	0	19
0:15	0	16	2	0	0	0	0	0	0	0	0	0	0	18
0:30	0	16	2	0	0	0	0	0	0	0	0	0	0	18
0:45	0	17	1	0	0	0	0	0	0	0	0	0	0	18
1:00	0	5	1	0	0	0	0	0	1	0	0	0	0	7
1:15	0	15	0	0	1	0	0	0	0	0	0	0	0	16
1:30	0	8	3	0	1	0	0	0	0	0	0	0	0	12
1:45	1	11	0	0	2	0	0	0	0	0	0	0	0	14
2:00	1	4	1	0	0	0	0	0	0	0	0	0	0	6
2:15	0	8	0	0	0	0	0	0	1	0	0	0	0	9
2:30	0	7	0	0	0	0	0	0	1	0	0	0	0	8
2:45	0	5	0	0	0	0	0	0	0	0	1	0	0	6
3:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
3:15	0	3	1	0	0	0	0	0	0	0	0	0	0	4
3:30	0	8	1	0	0	0	0	0	0	0	0	0	0	9
3:45	0	13	1	0	0	0	0	0	0	0	0	0	0	14
4:00	0	16	4	0	1	0	0	0	0	0	0	0	0	21
4:15	0	15	3	0	0	1	0	0	2	0	0	0	0	21
4:30	0	25	4	0	0	0	0	0	1	0	0	0	0	30
4:45	0	30	4	0	5	0	0	0	0	0	0	0	0	39
5:00	0	29	4	1	4	0	0	0	0	0	0	0	0	38
5:15	0	36	6	0	2	0	0	0	1	0	0	0	0	45
5:30	1	53	20	0	3	0	0	1	1	0	0	0	0	79
5:45	3	86	7	1	3	0	0	0	2	0	0	0	0	102
6:00	0	70	6	4	3	0	0	0	1	0	0	0	0	84
6:15	0	69	7	3	4	0	0	0	2	0	0	0	0	85
6:30	0	107	19	5	5	2	0	0	2	0	2	0	0	142
6:45	0	90	18	3	3	1	0	0	0	0	7	0	0	122
7:00	0	133	14	0	6	2	0	0	1	0	3	0	1	160
7:15	0	78	10	3	4	0	0	0	3	0	1	0	0	99
7:30	0	73	12	3	7	1	0	0	3	0	0	0	0	99
7:45	0	127	6	1	5	5	0	1	3	0	7	0	0	155
8:00	0	117	20	1	12	4	0	0	0	0	3	1	0	158
8:15	1	129	19	4	9	6	0	1	0	0	1	1	1	172
8:30	0	167	13	4	7	4	3	0	1	0	0	1	1	201
8:45	1	116	5	0	3	0	0	1	1	0	3	0	0	130
9:00	1	117	9	0	6	3	0	1	1	1	4	0	0	143
9:15	0	84	16	2	6	3	0	0	3	0	4	1	1	120
9:30	0	99	13	1	7	2	0	0	2	0	1	1	0	126
9:45	0	87	14	0	2	3	0	0	0	0	4	0	0	110
10:00	1	106	14	1	6	2	0	1	1	0	1	0	0	133
10:15	3	99	7	0	9	2	0	0	1	0	2	0	0	123
10:30	6	103	17	1	13	1	0	1	1	0	4	0	0	147
10:45	5	95	17	1	10	2	0	1	2	0	2	0	0	135
11:00	4	105	12	1	7	0	0	0	0	0	0	0	0	129
11:15	1	113	16	0	8	2	1	0	2	0	0	0	0	143
11:30	1	115	21	2	7	5	0	2	0	0	0	0	0	153
11:45	2	94	18	1	10	0	0	1	1	0	0	0	1	128
TOTAL	32	2,945	388	43	181	51	4	11	41	1	50	5	5	3,757

AM PEAK HOUR	7:45 AM
AM PEAK VOLUME	686

PM	COMBINED													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	5	106	12	0	10	0	0	0	0	0	0	0	0	133
12:15	2	110	18	0	2	1	0	1	0	0	1	0	0	135
12:30	5	92	23	2	7	0	1	0	2	0	0	1	0	133
12:45	1	97	22	0	5	2	1	0	1	0	0	0	0	129
13:00	3	104	17	0	7	3	1	0	2	0	0	1	0	138
13:15	5	107	12	0	8	3	1	0	0	0	0	0	0	136
13:30	6	105	21	2	7	1	0	1	1	0	0	0	0	144
13:45	2	106	17	0	2	2	0	0	1	0	0	0	0	130
14:00	3	109	20	0	7	1	0	1	3	0	0	0	0	144
14:15	3	121	15	0	9	2	2	0	1	0	0	0	1	154
14:30	6	155	11	2	10	3	0	0	0	0	0	1	0	188
14:45	5	169	26	1	9	4	0	1	0	0	0	0	0	215
15:00	4	192	24	0	9	2	0	0	0	0	0	0	0	231
15:15	3	191	27	1	5	3	0	0	1	0	0	0	0	231
15:30	2	166	17	3	5	1	0	1	1	0	0	0	0	196
15:45	2	151	17	1	9	0	0	0	3	0	0	1	0	184
16:00	4	155	17	1	6	1	0	0	2	0	0	0	0	186
16:15	6	159	19	0	4	3	0	1	1	0	0	0	0	193
16:30	3	141	19	2	6	5	0	1	0	0	0	0	0	177
16:45	2	151	21	0	5	5	0	0	0	0	0	1	0	185
17:00	4	168	17	0	4	0	0	0	0	0	1	0	0	194
17:15	4	162	18	1	6	0	0	0	1	0	0	0	1	193
17:30	3	172	17	3	6	1	0	0	0	0	0	0	0	202
17:45	1	140	17	0	7	0	0	1	2	0	0	0	0	168
18:00	3	123	8	1	6	2	0	1	1	0	0	0	0	145
18:15	4	115	18	4	3	1	0	0	0	0	0	0	0	145
18:30	2	106	9	0	1	1	0	0	1	0	0	0	0	120
18:45	0	98	13	0	2	0	0	0	0	0	0	0	0	113
19:00	2	82	7	0	2	1	0	0	1	0	0	0	0	95
19:15	0	81	7	2	3	0	0	0	0	0	0	0	0	93
19:30	1	77	10	1	5	1	0	0	0	0	0	0	0	95
19:45	1	73	6	0	2	1	0	0	0	0	0	0	0	83
20:00	1	72	6	0	1	0	0	0	1	0	0	0	0	81
20:15	1	50	7	0	1	0	0	0	0	0	0	0	0	59
20:30	1	62	3	0	4	0	0	1	1	0	0	1	0	73
20:45	1	59	3	0	1	1	0	0	1	0	0	0	0	66
21:00	0	52	4	0	0	0	0	0	0	0	0	0	0	56
21:15	0	54	8	1	0	0	0	0	1	0	0	0	0	64
21:30	0	49	4	0	0	0	0	0	0	0	0	0	0	53
21:45	1	56	4	0	0	0	0	0	0	0	2	0	0	63
22:00	0	48	0	0	2	0	0	0	0	0	0	0	0	50
22:15	1	33	5	0	0	0	0	0	0	0	0	0	0	39
22:30	1	60	6	0	0	0	0	0	0	0	0	0	0	67
22:45	0	42	3	0	1	0	0	0	0	0	0	0	0	46
23:00	0	73	4	0	1	0	0	0	0	0	0	0	0	78
23:15	0	27	1	0	0	0	0	0	0	0	0	0	0	28
23:30	0	25	2	0	0	0	0	0	0	0	0	0	0	27
23:45	0	27	0	0	0	0	0	0	0	0	0	0	0	27
TOTAL	104	4,873	582	28	190	51	6	10	29	0	4	6	2	5,885

PM PEAK HOUR	2:45 PM
PM PEAK VOLUME	873

TOTAL: AM+PM	136	7,818	970	71	371	102	10	21	70	1	54	11	7	9,642
% OF TOTAL	1.4%	81.1%	10.1%	0.7%	3.8%	1.1%	0.1%	0.2%	0.7%	0.0%	0.6%	0.1%	0.1%	100.0%

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Friday, March 10, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS3 Main St W of SR-58.

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
0:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
0:30	0	5	1	0	0	0	0	0	0	0	0	0	0	6
0:45	0	5	2	0	1	0	0	0	1	0	0	0	0	9
1:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
1:15	1	3	0	0	1	0	0	0	0	0	1	0	0	6
1:30	0	6	1	0	0	0	0	0	0	0	0	0	0	7
1:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
2:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:15	0	6	2	0	1	0	0	0	0	0	0	0	0	9
3:30	0	9	3	0	0	0	0	0	0	0	0	0	0	12
3:45	0	11	1	0	0	0	0	0	0	0	0	0	0	12
4:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
4:15	0	9	0	0	0	0	0	0	0	0	0	0	0	9
4:30	0	19	5	0	0	0	0	0	0	0	0	0	0	24
4:45	0	21	0	0	0	0	0	0	0	0	0	0	0	21
5:00	0	17	3	1	0	0	0	1	1	0	1	0	0	24
5:15	0	29	4	0	3	0	0	0	1	0	0	0	0	37
5:30	1	45	10	0	3	0	0	0	0	0	0	0	0	59
5:45	0	61	9	2	0	0	0	0	0	0	0	0	0	72
6:00	0	50	6	0	2	0	0	0	0	0	0	0	0	58
6:15	0	39	5	0	4	0	0	0	0	0	0	0	0	48
6:30	0	52	8	2	4	0	0	0	0	0	0	0	0	66
6:45	0	77	7	3	4	1	0	0	0	0	0	0	0	92
7:00	0	90	8	0	1	1	0	0	0	0	0	0	1	101
7:15	0	43	8	1	1	1	0	0	3	0	0	0	0	57
7:30	0	55	3	1	6	0	0	0	0	0	0	0	0	65
7:45	0	65	7	0	3	2	0	0	3	0	0	0	0	80
8:00	0	71	9	1	5	0	1	0	2	0	0	0	0	89
8:15	0	77	5	3	5	0	0	1	2	0	0	0	0	93
8:30	0	94	17	2	5	1	0	0	1	0	0	0	0	120
8:45	0	82	5	1	1	0	0	2	0	0	0	0	0	91
9:00	0	50	7	0	4	0	0	1	1	0	0	0	0	63
9:15	0	62	7	1	5	1	0	0	0	0	1	0	0	77
9:30	0	43	9	2	4	2	0	1	0	0	1	0	0	62
9:45	0	58	11	3	3	1	0	0	0	0	0	0	0	76
10:00	0	60	7	1	7	1	0	2	0	0	0	0	0	78
10:15	0	56	11	0	4	1	0	0	0	0	0	0	0	72
10:30	0	52	11	1	4	1	0	0	1	0	0	0	0	70
10:45	0	46	9	0	4	0	0	1	2	0	0	0	0	62
11:00	0	52	8	2	5	0	0	0	2	0	0	1	0	70
11:15	1	45	4	1	3	0	0	0	2	0	0	0	0	56
11:30	0	50	10	1	6	0	0	0	0	0	0	0	0	67
11:45	0	52	12	0	4	0	0	0	1	0	0	0	0	69
TOTAL	3	1,713	236	29	103	13	1	9	23	0	4	1	1	2,136

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	55	6	0	2	0	0	0	0	0	0	0	0	63
12:15	2	45	5	1	4	3	0	0	1	0	0	0	0	61
12:30	1	58	10	2	10	0	0	0	1	0	0	0	0	82
12:45	0	54	9	0	4	0	0	0	0	0	0	0	0	67
13:00	0	66	11	0	9	0	0	1	0	0	0	0	0	87
13:15	0	53	7	0	5	0	0	0	1	0	0	0	0	66
13:30	0	49	12	2	12	0	0	0	1	0	0	0	0	76
13:45	0	55	11	2	13	0	0	0	2	0	0	0	0	83
14:00	0	50	11	0	7	1	0	1	2	0	0	0	0	72
14:15	1	53	10	2	8	2	0	0	2	0	0	0	0	78
14:30	1	62	22	4	16	2	1	1	0	0	0	0	0	109
14:45	0	29	45	3	15	0	1	0	0	0	0	0	0	93
15:00	0	46	60	0	25	0	1	0	1	0	0	0	0	133
15:15	0	34	35	2	22	0	0	1	0	0	1	0	0	95
15:30	1	24	45	2	8	2	0	0	0	0	0	0	0	82
15:45	0	39	33	0	16	0	0	0	0	0	0	0	0	88
16:00	0	36	23	1	15	0	0	1	2	0	0	0	0	78
16:15	0	28	24	2	7	0	0	0	0	0	0	1	0	62
16:30	0	40	33	3	10	1	0	0	0	0	0	0	0	87
16:45	0	27	23	0	8	0	0	1	1	0	0	0	0	60
17:00	1	23	33	1	9	0	0	0	0	0	0	0	0	67
17:15	0	22	23	4	12	0	0	0	0	0	0	0	0	61
17:30	0	11	25	3	27	0	0	0	0	0	0	0	0	66
17:45	2	10	32	1	34	0	0	0	0	0	0	0	0	79
18:00	0	5	27	0	22	0	0	0	0	0	0	0	0	54
18:15	0	16	30	0	13	0	0	0	1	0	0	0	0	60
18:30	0	17	15	1	8	0	0	0	0	0	0	0	0	41
18:45	0	17	23	0	9	0	0	0	0	0	0	0	0	49
19:00	0	11	11	0	9	0	0	0	0	0	0	0	0	31
19:15	0	13	14	1	9	0	0	0	0	0	0	0	0	37
19:30	0	12	13	1	1	0	0	0	0	0	0	0	0	27
19:45	0	14	11	0	7	0	0	0	0	0	0	0	0	32
20:00	0	16	10	0	6	0	0	0	0	0	0	0	0	32
20:15	0	15	16	0	4	0	0	1	0	0	0	0	0	36
20:30	0	16	10	0	1	0	0	0	0	0	0	0	0	27
20:45	0	23	8	0	0	0	0	0	0	0	0	0	0	31
21:00	0	13	4	0	1	0	0	0	0	0	0	0	0	18
21:15	0	8	14	0	2	0	0	0	0	0	0	0	0	24
21:30	0	15	10	0	5	0	0	0	0	0	0	0	0	30
21:45	0	8	13	0	0	0	0	0	0	0	0	0	0	21
22:00	0	12	12	0	1	0	0	0	0	0	0	0	0	25
22:15	0	11	5	0	3	0	0	0	1	0	0	0	0	20
22:30	0	4	2	0	4	0	0	0	0	0	0	0	0	10
22:45	0	10	10	0	2	0	0	0	1	0	0	0	0	23
23:00	0	43	19	0	6	0	0	0	0	0	0	0	0	68
23:15	0	12	5	0	1	1	0	0	0	0	0	0	0	19
23:30	0	6	4	0	0	0	0	0	0	0	0	0	0	10
23:45	0	3	1	0	1	0	0	0	0	0	0	0	0	5
TOTAL	9	1,289	835	38	413	12	3	7	17	0	1	1	0	2,625

AM PEAK HOUR	8:00 AM
AM PEAK VOLUME	393

PM PEAK HOUR	2:30 PM
PM PEAK VOLUME	430

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	12	3,002	1,071	67	516	25	4	16	40	0	5	2	1	4,761
% OF TOTAL	0.3%	63.1%	22.5%	1.4%	10.8%	0.5%	0.1%	0.3%	0.8%	0.0%	0.1%	0.0%	0.0%	100.0%

TOTAL: ALL	192	6,565	1,539	101	699	79	17	24	84	4	7	6	1	9,318
% OF TOTAL	4.0%	137.9%	32.3%	2.1%	14.7%	1.7%	0.4%	0.5%	1.8%	0.1%	0.1%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Friday, March 10, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS3 Main St W of SR-58.

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	8	1	0	2	0	0	0	0	0	0	0	0	11
0:15	1	7	2	0	1	0	0	0	0	0	0	0	0	11
0:30	0	10	1	0	0	0	0	0	0	0	0	0	0	11
0:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
1:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
1:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7
1:30	0	11	0	0	0	0	0	0	0	0	0	0	0	11
1:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6
2:15	0	3	1	0	0	0	0	0	0	0	0	0	0	4
2:30	0	2	2	0	0	0	0	0	0	0	0	0	0	4
2:45	0	3	0	0	0	0	0	0	1	0	0	0	0	4
3:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
3:15	0	5	2	0	0	0	0	0	0	0	0	0	0	7
3:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
4:00	0	5	1	0	0	0	0	0	1	0	0	0	0	7
4:15	0	5	2	0	0	0	0	0	1	0	0	0	0	8
4:30	0	4	2	0	1	0	0	0	0	0	0	0	0	7
4:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8
5:00	0	7	0	1	1	0	0	0	1	0	0	0	0	10
5:15	0	3	1	0	1	1	0	0	0	1	0	0	0	7
5:30	0	9	3	0	3	1	0	0	1	0	0	0	0	17
5:45	1	14	4	1	2	0	0	0	0	0	0	0	0	22
6:00	1	15	1	1	0	0	0	0	1	0	0	0	0	19
6:15	2	36	3	1	1	0	0	0	1	0	0	0	0	44
6:30	4	45	7	3	1	2	0	0	0	0	1	0	0	63
6:45	3	12	6	0	0	1	0	0	1	0	0	0	0	23
7:00	3	32	3	0	3	2	0	0	1	0	0	0	0	44
7:15	3	35	3	2	0	0	0	0	3	0	0	0	0	46
7:30	0	36	3	1	2	0	0	0	1	0	0	0	0	43
7:45	1	25	3	0	3	3	0	0	1	0	0	0	0	36
8:00	2	36	3	1	2	1	0	0	1	0	0	1	0	47
8:15	2	37	6	1	3	3	1	0	1	0	0	0	0	54
8:30	5	55	8	1	0	1	1	1	0	1	0	0	0	73
8:45	1	50	5	0	1	0	0	1	0	0	0	0	0	58
9:00	0	52	6	2	1	1	0	0	2	0	0	0	0	64
9:15	5	39	5	0	5	2	0	1	0	1	0	0	0	58
9:30	4	39	9	0	2	1	0	0	2	0	0	0	0	57
9:45	1	38	11	0	3	1	1	0	2	0	0	0	0	57
10:00	3	34	8	0	1	1	0	0	1	0	0	0	0	48
10:15	1	42	10	0	2	0	1	0	2	0	0	1	0	59
10:30	1	38	8	0	1	0	0	0	1	0	0	0	0	49
10:45	2	44	9	0	2	0	0	0	0	0	0	0	0	57
11:00	3	48	7	0	6	2	1	0	0	0	0	1	0	68
11:15	6	41	11	2	3	2	0	0	0	1	0	0	0	66
11:30	3	61	3	0	7	2	0	1	1	0	0	0	0	78
11:45	5	49	12	0	2	1	0	0	0	0	0	0	0	69
TOTAL	63	1,077	176	17	63	28	5	4	27	4	1	3	0	1,468

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	281

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	4	55	7	0	1	1	0	0	2	0	0	0	0	70
12:15	6	53	10	0	3	1	0	0	1	0	0	0	0	74
12:30	2	52	9	0	7	1	0	0	1	0	0	0	0	72
12:45	5	42	4	2	4	2	1	0	2	0	0	0	0	62
13:00	6	57	6	0	1	2	1	0	0	0	0	0	0	73
13:15	1	57	4	0	3	2	1	0	0	0	0	0	0	68
13:30	3	67	5	0	5	0	3	1	1	0	0	0	0	85
13:45	3	42	11	1	7	0	0	0	0	0	0	0	0	64
14:00	3	59	2	0	7	1	0	0	0	0	0	0	0	72
14:15	7	69	11	2	2	3	0	0	0	0	0	0	0	94
14:30	1	88	6	0	9	0	0	0	2	0	0	0	0	106
14:45	3	96	14	1	1	1	0	0	0	0	0	0	0	116
15:00	0	108	13	0	4	0	0	1	1	0	0	0	0	127
15:15	6	100	5	1	3	0	0	0	0	0	0	1	0	116
15:30	4	97	9	1	5	2	0	0	0	0	0	0	0	118
15:45	3	69	13	0	6	0	0	0	2	0	0	0	0	93
16:00	5	72	12	1	4	1	0	0	0	0	0	0	0	95
16:15	3	104	6	2	2	1	0	0	0	0	0	0	0	118
16:30	0	83	9	0	4	1	1	0	0	0	0	0	0	98
16:45	8	62	8	0	3	1	0	1	0	0	0	0	0	83
17:00	4	85	9	0	1	0	0	0	0	0	0	0	0	99
17:15	6	80	14	1	4	1	0	0	0	0	0	0	0	106
17:30	4	58	12	0	5	0	0	0	0	0	0	0	0	79
17:45	6	80	13	0	5	0	0	0	0	0	0	0	0	104
18:00	3	46	9	1	5	1	0	0	1	0	0	0	0	66
18:15	3	51	10	2	2	2	0	0	1	0	1	0	0	72
18:30	0	43	4	0	0	0	1	0	0	0	0	0	0	48
18:45	2	40	5	1	2	0	0	0	1	0	0	0	0	51
19:00	1	44	7	0	1	0	0	0	0	0	0	0	0	53
19:15	2	36	2	1	0	1	0	0	0	0	0	0	0	42
19:30	0	31	2	0	2	0	0	0	0	0	0	0	0	35
19:45	1	31	3	0	1	0	0	0	0	0	0	0	0	36
20:00	0	41	1	0	1	0	0	0	0	0	0	0	0	43
20:15	1	34	4	0	1	0	0	0	1	0	0	0	0	41
20:30	4	27	3	0	1	0	0	1	0	0	0	0	0	36
20:45	0	32	6	0	1	0	0	0	0	0	0	0	0	39
21:00	1	34	1	0	1	0	0	0	0	0	0	0	0	37
21:15	1	23	2	0	1	0	0	0	0	0	0	0	0	27
21:30	0	30	2	0	1	0	0	0	0	0	0	0	0	33
21:45	1	27	2	0	1	0	0	0	0	0	0	0	0	31
22:00	0	30	2	0	2	0	0	0	0	0	0	0	0	34
22:15	0	25	3	0	0	0	0	0	0	0	0	0	0	28
22:30	1	45	5	0	0	0	0	0	0	0	0	0	0	51
22:45	0	23	3	0	1	1	0	0	1	0	0	0	0	29
23:00	1	20	2	0	0	0	0	0	0	0	0	0	0	23
23:15	0	18	2	0	0	0	0	0	0	0	0	0	0	20
23:30	1	8	0	0	0	0	0	0	0	0	0	0	0	9
23:45	1	12	0	0	0	0	0	0	0	0	0	0	0	13
TOTAL	117	2,486	292	17	120	26	8	4	17	0	1	1	0	3,089

PM PEAK HOUR	2:45 PM
PM PEAK VOLUME	477

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	180	3,563	468	34	183	54	13	8	44	4	2	4	0	4,557
% OF TOTAL	3.9%	78.2%	10.3%	0.7%	4.0%	1.2%	0.3%	0.2%	1.0%	0.1%	0.0%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Friday, March 10, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS3 Main St W of SR-58.

AM	COMBINED													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	17	2	0	2	0	0	0	0	0	0	0	0	21
0:15	1	12	2	0	1	0	0	0	0	0	0	0	0	16
0:30	0	15	2	0	0	0	0	0	0	0	0	0	0	17
0:45	0	11	3	0	1	0	0	0	1	0	0	0	0	16
1:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
1:15	1	9	1	0	1	0	0	0	0	0	1	0	0	13
1:30	0	17	1	0	0	0	0	0	0	0	0	0	0	18
1:45	0	12	0	0	0	0	0	0	0	0	0	0	0	12
2:00	0	8	0	0	1	0	0	0	0	0	0	0	0	9
2:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9
2:30	0	8	2	0	0	0	0	0	0	0	0	0	0	10
2:45	0	7	0	0	0	0	0	0	1	0	0	0	0	8
3:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
3:15	0	11	4	0	1	0	0	0	0	0	0	0	0	16
3:30	0	12	3	0	0	0	0	0	0	0	0	0	0	15
3:45	0	14	1	0	0	0	0	0	0	0	0	0	0	15
4:00	0	8	1	0	0	0	0	0	1	0	0	0	0	10
4:15	0	14	2	0	0	0	0	0	1	0	0	0	0	17
4:30	0	23	7	0	1	0	0	0	0	0	0	0	0	31
4:45	0	29	0	0	0	0	0	0	0	0	0	0	0	29
5:00	0	24	3	2	1	0	0	1	2	0	1	0	0	34
5:15	0	32	5	0	4	1	0	0	1	1	0	0	0	44
5:30	1	54	13	0	6	1	0	0	1	0	0	0	0	76
5:45	1	75	13	3	2	0	0	0	0	0	0	0	0	94
6:00	1	65	7	1	2	0	0	0	1	0	0	0	0	77
6:15	2	75	8	1	5	0	0	0	1	0	0	0	0	92
6:30	4	97	15	5	5	2	0	0	0	0	1	0	0	129
6:45	3	89	13	3	4	2	0	0	1	0	0	0	0	115
7:00	3	122	11	0	4	3	0	0	1	0	0	0	1	145
7:15	3	78	11	3	1	1	0	0	6	0	0	0	0	103
7:30	0	91	6	2	8	0	0	0	1	0	0	0	0	108
7:45	1	90	10	0	6	5	0	0	4	0	0	0	0	116
8:00	2	107	12	2	7	1	1	0	3	0	0	1	0	136
8:15	2	114	11	4	8	3	1	1	3	0	0	0	0	147
8:30	5	149	25	3	5	2	1	1	1	1	0	0	0	193
8:45	1	132	10	1	2	0	0	3	0	0	0	0	0	149
9:00	0	102	13	2	5	1	0	1	3	0	0	0	0	127
9:15	5	101	12	1	10	3	0	1	0	1	1	0	0	135
9:30	4	82	18	2	6	3	0	1	2	0	1	0	0	119
9:45	1	96	22	3	6	2	1	0	2	0	0	0	0	133
10:00	3	94	15	1	8	2	0	2	1	0	0	0	0	126
10:15	1	98	21	0	6	1	1	0	2	0	0	1	0	131
10:30	1	90	19	1	5	1	0	0	2	0	0	0	0	119
10:45	2	90	18	0	6	0	0	1	2	0	0	0	0	119
11:00	3	100	15	2	11	2	1	0	2	0	0	2	0	138
11:15	7	86	15	3	6	2	0	0	2	1	0	0	0	122
11:30	3	111	13	1	13	2	0	1	1	0	0	0	0	145
11:45	5	101	24	0	6	1	0	0	1	0	0	0	0	138
TOTAL	66	2,790	412	46	166	41	6	13	50	4	5	4	1	3,604

PM	COMBINED													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	4	110	13	0	3	1	0	0	2	0	0	0	0	133
12:15	8	98	15	1	7	4	0	0	2	0	0	0	0	135
12:30	3	110	19	2	17	1	0	0	2	0	0	0	0	154
12:45	5	96	13	2	8	2	1	0	2	0	0	0	0	129
13:00	6	123	17	0	10	2	1	1	0	0	0	0	0	160
13:15	1	110	11	0	8	2	1	0	1	0	0	0	0	134
13:30	3	116	17	2	17	0	3	1	2	0	0	0	0	161
13:45	3	97	22	3	20	0	0	0	2	0	0	0	0	147
14:00	3	109	13	0	14	2	0	1	2	0	0	0	0	144
14:15	8	122	21	4	10	5	0	0	2	0	0	0	0	172
14:30	2	150	28	4	25	2	1	1	2	0	0	0	0	215
14:45	3	125	59	4	16	1	1	0	0	0	0	0	0	209
15:00	0	154	73	0	29	0	1	1	2	0	0	0	0	260
15:15	6	134	40	3	25	0	0	1	0	0	1	1	0	211
15:30	5	121	54	3	13	4	0	0	0	0	0	0	0	200
15:45	3	108	46	0	22	0	0	0	2	0	0	0	0	181
16:00	5	108	35	2	19	1	0	1	2	0	0	0	0	173
16:15	3	132	30	4	9	1	0	0	0	0	0	1	0	180
16:30	0	123	42	3	14	2	1	0	0	0	0	0	0	185
16:45	8	89	31	0	11	1	0	2	1	0	0	0	0	143
17:00	5	108	42	1	10	0	0	0	0	0	0	0	0	166
17:15	6	102	37	5	16	1	0	0	0	0	0	0	0	167
17:30	4	69	37	3	32	0	0	0	0	0	0	0	0	145
17:45	8	90	45	1	39	0	0	0	0	0	0	0	0	183
18:00	3	51	36	1	27	1	0	0	1	0	0	0	0	120
18:15	3	67	40	2	15	2	0	0	2	0	1	0	0	132
18:30	0	60	19	1	8	0	1	0	0	0	0	0	0	89
18:45	2	57	28	1	11	0	0	0	1	0	0	0	0	100
19:00	1	55	18	0	10	0	0	0	0	0	0	0	0	84
19:15	2	49	16	2	9	1	0	0	0	0	0	0	0	79
19:30	0	43	15	1	3	0	0	0	0	0	0	0	0	62
19:45	1	45	14	0	8	0	0	0	0	0	0	0	0	68
20:00	0	57	11	0	7	0	0	0	0	0	0	0	0	75
20:15	1	49	20	0	5	0	0	1	1	0	0	0	0	77
20:30	4	43	13	0	2	0	0	1	0	0	0	0	0	63
20:45	0	55	14	0	1	0	0	0	0	0	0	0	0	70
21:00	1	47	5	0	2	0	0	0	0	0	0	0	0	55
21:15	1	31	16	0	3	0	0	0	0	0	0	0	0	51
21:30	0	45	12	0	6	0	0	0	0	0	0	0	0	63
21:45	1	35	15	0	1	0	0	0	0	0	0	0	0	52
22:00	0	42	14	0	3	0	0	0	0	0	0	0	0	59
22:15	0	36	8	0	3	0	0	0	1	0	0	0	0	48
22:30	1	49	7	0	4	0	0	0	0	0	0	0	0	61
22:45	0	33	13	0	3	1	0	0	2	0	0	0	0	52
23:00	1	63	21	0	6	0	0	0	0	0	0	0	0	91
23:15	0	30	7	0	1	1	0	0	0	0	0	0	0	39
23:30	1	14	4	0	0	0	0	0	0	0	0	0	0	19
23:45	1	15	1	0	1	0	0	0	0	0	0	0	0	18
TOTAL	126	3,775	1,127	55	533	38	11	11	34	0	2	2	0	5,714

AM PEAK HOUR	8:00 AM
AM PEAK VOLUME	625

PM PEAK HOUR	2:30 PM
PM PEAK VOLUME	895

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	192	6,565	1,539	101	699	79	17	24	84	4	7	6	1	9,318
% OF TOTAL	2.1%	70.5%	16.5%	1.1%	7.5%	0.8%	0.2%	0.3%	0.9%	0.0%	0.1%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS4 Main St E of SR-58.

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	8	0	0	1	0	0	0	0	0	0	0	0	9
0:15	0	9	0	0	1	0	0	0	1	0	0	0	0	11
0:30	1	5	0	0	0	0	0	0	0	0	0	0	0	6
0:45	0	10	1	0	0	1	0	0	2	0	0	0	0	14
1:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
1:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
1:30	0	2	0	0	0	0	0	0	3	0	0	0	0	5
1:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
2:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:30	0	0	0	0	0	0	0	1	0	0	0	0	0	1
2:45	0	6	1	0	0	1	0	0	0	0	0	0	0	8
3:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:30	0	3	0	0	0	0	0	0	2	0	0	0	0	5
3:45	0	9	0	0	0	0	0	0	0	0	0	0	0	9
4:00	0	3	2	0	0	3	0	0	1	0	0	0	0	9
4:15	0	6	2	0	0	3	0	0	0	0	0	0	0	11
4:30	0	5	1	0	0	3	0	0	0	0	0	0	0	9
4:45	0	16	2	0	0	1	0	0	0	0	0	0	0	19
5:00	1	16	1	1	0	1	0	0	1	0	1	0	0	22
4:30	0	10	2	0	1	1	0	0	1	0	0	0	0	15
4:45	1	30	2	0	0	0	0	0	0	0	0	1	0	34
5:00	2	31	1	2	0	0	0	0	1	0	0	0	0	37
5:15	0	17	4	0	0	1	0	0	1	0	0	0	0	23
5:30	0	15	5	0	2	0	0	0	1	0	0	0	0	23
5:45	2	27	7	2	1	2	0	0	0	0	0	0	0	41
6:00	1	46	6	2	1	2	0	0	0	0	0	0	0	58
6:15	0	38	5	0	2	2	0	0	0	0	0	0	0	47
6:30	0	18	7	1	3	0	0	2	1	0	0	0	0	32
6:45	1	52	5	1	2	1	0	0	0	0	0	0	0	62
7:00	0	41	10	1	3	1	0	0	1	0	0	0	0	57
7:15	0	34	6	0	1	0	0	0	0	0	0	0	0	41
7:30	0	54	7	0	0	1	0	0	1	0	0	0	0	63
7:45	1	85	5	4	3	0	0	0	0	0	0	0	0	98
8:00	1	70	6	0	2	0	0	1	2	0	0	0	0	82
8:15	0	35	3	0	1	0	0	0	0	0	0	0	0	39
8:30	0	46	4	0	0	0	0	1	0	0	0	0	0	51
8:45	1	39	12	2	3	1	0	0	1	0	1	0	0	60
9:00	0	49	6	0	2	1	0	0	0	0	1	0	0	59
9:15	0	29	6	0	4	0	0	0	0	0	0	0	0	39
9:30	0	40	9	0	5	0	0	0	0	0	0	0	0	54
9:45	1	44	6	0	2	0	0	0	1	0	0	0	0	54
10:00	1	34	1	0	0	0	0	0	2	0	0	1	0	39
10:15	0	26	9	0	3	0	0	0	2	0	0	0	0	40
10:30	1	34	8	0	1	2	1	0	1	0	0	0	0	48
10:45	0	30	6	1	3	2	0	0	2	0	0	0	0	44
11:00	0	41	13	0	2	0	0	0	1	0	0	0	0	57
TOTAL	15	1,141	172	17	49	30	1	5	29	0	3	2	0	1,464

AM PEAK HOUR	7:15 AM
AM PEAK VOLUME	284

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	40	7	0	1	2	0	0	2	0	0	1	0	54
12:15	0	59	8	0	1	1	0	2	1	0	0	0	0	72
12:30	1	45	5	1	2	2	0	0	0	1	0	0	0	57
12:45	1	45	8	0	4	0	0	0	3	0	1	1	0	63
13:00	1	51	3	0	2	1	0	0	2	0	0	0	0	60
13:15	0	75	10	0	0	0	0	0	2	0	0	0	0	87
13:30	1	72	10	0	3	1	0	1	3	0	0	0	0	91
13:45	0	48	6	1	1	0	0	0	4	0	0	0	0	60
14:00	1	50	4	0	2	0	1	0	2	0	0	0	0	60
14:15	1	41	9	1	1	1	0	1	3	0	0	1	0	59
14:30	0	50	5	1	1	3	0	0	4	1	0	0	0	65
14:45	1	42	5	0	4	0	0	0	2	0	0	0	0	54
15:00	3	53	3	1	2	1	0	0	4	0	0	1	0	68
15:15	0	43	9	1	0	2	0	1	3	0	0	0	0	59
15:30	0	50	10	2	0	1	0	0	2	0	0	0	0	65
15:45	0	51	6	1	3	1	0	0	4	0	0	0	0	66
16:00	1	45	9	0	1	0	0	0	4	0	0	0	0	60
16:15	2	50	6	0	3	0	0	0	1	0	0	0	0	62
16:30	1	56	8	1	1	1	1	0	4	0	0	1	0	74
16:45	0	46	4	1	0	0	0	0	1	0	0	0	0	52
17:00	0	45	7	0	2	0	0	0	1	0	0	0	1	56
17:15	1	43	7	0	2	0	0	0	2	0	0	0	0	55
17:30	0	45	6	1	1	0	0	0	1	0	0	0	0	54
17:45	0	45	6	0	1	1	0	0	0	0	0	0	0	53
18:00	2	36	2	1	0	0	0	0	1	0	0	0	0	42
18:15	0	33	5	1	1	0	0	0	0	0	0	0	0	40
18:30	0	26	4	1	0	0	0	1	0	0	0	0	0	32
18:45	0	34	1	0	1	0	0	0	0	0	0	0	0	36
19:00	0	24	5	0	0	0	0	0	2	0	0	0	1	32
19:15	0	16	2	1	0	0	0	0	0	0	0	1	0	20
19:30	1	15	2	2	1	0	0	0	4	0	0	0	0	25
19:45	0	25	4	1	0	0	0	0	0	0	0	0	0	30
20:00	0	17	1	0	0	0	0	0	1	0	0	0	1	20
20:15	0	16	2	0	0	0	0	0	0	0	0	0	0	18
20:30	1	19	1	0	0	0	0	0	1	0	0	0	0	22
20:45	0	15	0	0	0	0	0	0	2	0	0	0	0	17
21:00	0	11	2	0	0	0	0	0	1	0	0	0	0	14
21:15	0	19	2	0	0	0	0	1	0	0	0	0	0	22
21:30	0	14	1	0	0	0	0	0	1	0	0	0	0	16
21:45	0	17	0	0	0	0	0	1	0	0	0	0	0	18
22:00	0	7	1	0	0	0	0	0	2	0	0	0	0	10
22:15	0	13	0	0	0	0	0	0	1	0	0	0	0	14
22:30	0	8	0	0	0	0	0	0	1	0	0	0	0	9
22:45	0	14	1	0	0	0	0	0	1	0	0	0	0	16
23:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
23:15	0	5	2	0	0	0	0	0	1	0	0	0	0	8
23:30	0	4	0	0	0	0	0	0	1	1	0	0	0	6
23:45	0	4	1	0	0	0	0	0	1	0	0	0	0	6
TOTAL	20	1,591	200	19	41	18	2	8	77	3	1	6	3	1,989

PM PEAK HOUR	12:45 PM
PM PEAK VOLUME	301

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	35	2,732	372	36	90	48	3	13	106	3	4	8	3	3,453
% OF TOTAL	1.0%	79.1%	10.8%	1.0%	2.6%	1.4%	0.1%	0.4%	3.1%	0.1%	0.1%	0.2%	0.1%	100.0%

TOTAL: ALL	47	5,358	780	82	267	93	5	33	230	4	7	9	12	6,927
% OF TOTAL	1.4%	155.2%	22.6%	2.4%	7.7%	2.7%	0.1%	1.0%	6.7%	0.1%	0.2%	0.3%	0.3%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS4 Main St E of SR-58.

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
0:15	0	7	1	0	1	0	0	0	2	0	0	0	0	11
0:30	0	2	0	0	1	0	0	0	0	0	0	0	0	3
0:45	0	5	2	0	0	0	0	0	1	0	0	0	0	8
1:00	0	3	0	0	0	0	0	0	1	0	0	0	1	5
1:15	0	4	0	0	0	0	0	1	0	0	0	0	0	5
1:30	0	3	1	0	0	0	0	1	1	0	0	0	0	6
1:45	0	1	1	0	0	0	0	0	1	0	0	0	0	3
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:30	0	0	0	0	0	0	0	0	1	0	0	0	0	1
2:45	0	1	0	0	0	0	0	0	1	0	0	0	0	2
3:00	0	4	0	0	0	0	0	0	1	0	0	0	0	5
3:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
3:45	0	4	0	0	0	0	0	0	3	0	0	0	0	7
4:00	0	0	2	0	1	0	0	0	3	0	0	0	0	6
4:15	0	4	0	0	0	0	0	0	2	0	0	0	0	6
4:30	2	4	2	0	0	1	0	0	6	0	0	0	0	15
4:45	0	2	2	0	0	0	0	0	1	0	0	0	0	5
5:00	0	6	0	0	0	0	0	0	2	0	0	0	0	8
5:15	0	8	0	0	1	0	0	1	3	0	0	0	0	13
5:30	0	6	3	0	3	1	0	0	4	0	0	0	0	17
5:45	0	11	3	6	1	2	0	1	2	0	0	0	0	26
6:00	0	9	1	1	3	0	0	0	4	0	0	0	0	18
6:15	0	11	2	6	2	0	0	0	3	0	0	0	0	24
6:30	0	13	4	1	2	1	0	1	2	0	0	0	2	26
6:45	1	15	5	0	0	0	0	0	3	0	0	0	0	24
7:00	0	19	7	0	2	0	0	1	4	0	0	0	0	33
7:15	1	27	7	1	1	3	0	1	4	0	0	0	0	45
7:30	0	16	3	2	2	0	0	2	2	0	0	0	0	27
7:45	0	14	3	1	1	1	0	0	2	0	0	0	1	23
8:00	0	25	4	1	4	1	0	0	4	0	0	0	0	39
8:15	0	32	0	3	4	0	0	0	0	0	1	0	0	40
8:30	0	39	6	0	1	0	0	0	0	0	0	1	0	47
8:45	0	39	1	0	1	0	0	0	1	0	0	0	0	42
9:00	0	45	7	0	3	1	0	1	5	0	0	0	0	62
9:15	0	34	7	1	1	0	0	0	0	0	0	0	0	43
9:30	0	27	6	0	2	0	0	0	1	0	0	0	0	36
9:45	0	31	7	0	4	1	0	0	1	0	0	0	2	46
10:00	0	30	6	1	4	0	0	1	5	0	0	0	0	47
10:15	0	31	9	1	3	0	0	0	1	0	0	0	0	45
10:30	0	35	8	1	2	1	0	0	1	0	0	0	0	48
10:45	0	37	9	0	4	1	0	0	2	0	0	0	0	53
11:00	1	43	8	1	7	0	0	0	1	0	0	0	0	61
11:15	0	45	10	1	4	1	0	0	1	0	0	0	0	62
11:30	0	42	6	0	5	2	0	0	4	0	0	0	0	59
11:45	0	43	4	0	6	2	0	0	1	0	0	0	0	56
TOTAL	5	794	147	28	76	19	0	11	87	0	1	1	6	1,175

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	238

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	45	11	0	4	0	0	0	2	0	0	0	0	62
12:15	0	36	10	1	10	2	0	1	3	0	0	0	0	63
12:30	0	42	4	0	4	1	0	0	1	0	0	0	0	52
12:45	1	39	8	2	4	1	0	0	0	0	0	0	0	55
13:00	0	67	11	0	4	0	0	1	3	0	0	0	0	86
13:15	1	70	10	2	3	1	0	0	1	0	0	0	0	88
13:30	0	60	9	0	2	3	0	0	0	0	0	0	0	74
13:45	0	57	8	0	2	2	0	0	2	0	0	0	0	71
14:00	0	64	14	0	3	1	0	0	1	0	0	0	0	83
14:15	0	48	5	1	2	0	0	0	1	0	0	0	0	57
14:30	0	50	11	0	2	0	0	1	0	0	0	0	0	64
14:45	2	68	11	1	2	3	0	0	2	0	1	0	0	90
15:00	0	69	9	0	4	1	0	1	4	0	0	0	0	88
15:15	0	52	12	2	3	0	1	0	2	0	0	0	0	72
15:30	0	52	7	2	5	0	1	0	0	0	0	0	0	67
15:45	1	47	9	0	7	1	0	0	0	1	0	0	0	66
16:00	0	69	11	1	5	0	0	1	1	0	0	0	0	88
16:15	0	51	6	1	2	1	0	0	0	0	0	0	1	62
16:30	0	53	9	0	3	2	0	0	1	0	0	0	0	68
16:45	0	63	6	0	1	1	0	0	2	0	0	0	1	74
17:00	0	70	6	1	4	1	0	1	0	0	0	0	0	83
17:15	0	57	13	1	3	1	0	0	0	0	0	0	0	75
17:30	0	49	7	0	1	0	0	0	1	0	0	0	1	59
17:45	0	38	2	0	2	1	0	0	0	0	0	0	0	43
18:00	0	58	5	0	3	1	0	0	1	0	0	0	0	68
18:15	0	36	6	2	2	0	0	1	1	0	0	0	0	48
18:30	0	28	5	0	1	1	0	0	1	0	0	0	0	36
18:45	0	39	3	0	1	0	0	0	0	0	0	0	0	43
19:00	0	34	3	0	0	0	0	0	0	0	0	0	0	37
19:15	0	31	0	1	2	0	0	0	0	0	1	0	0	35
19:30	0	32	0	0	2	0	0	0	0	0	0	0	0	34
19:45	1	33	4	0	3	0	0	1	0	0	0	0	0	42
20:00	0	20	5	0	2	0	0	0	1	0	0	0	0	28
20:15	0	19	2	0	0	0	0	0	0	0	0	0	0	21
20:30	0	18	1	0	0	0	0	0	0	0	0	0	0	19
20:45	0	27	2	0	0	0	0	0	0	0	0	0	0	29
21:00	0	22	0	0	0	0	0	0	0	0	0	0	0	22
21:15	0	22	5	0	1	0	0	0	1	0	0	0	0	29
21:30	1	16	0	0	1	0	0	0	1	0	0	0	0	19
21:45	0	9	0	0	0	0	0	0	0	0	0	0	0	9
22:00	0	14	2	0	0	0	0	0	0	0	0	0	0	16
22:15	0	11	2	0	0	0	0	0	0	0	0	0	0	13
22:30	0	11	2	0	0	0	0	0	1	0	0	0	0	14
22:45	0	5	2	0	0	0	0	1	1	0	0	0	0	9
23:00	0	16	0	0	0	1	0	0	0	0	0	0	0	17
23:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5
23:30	0	3	1	0	0	0	0	0	1	0	0	0	0	5
23:45	0	8	1	0	1	0	0	0	1	0	0	0	0	11
TOTAL	7	1,832	261	18	101	26	2	9	37	1	2	0	3	2,299

PM PEAK HOUR	1:00 PM
PM PEAK VOLUME	319

TOTAL: AM+PM	12	2,626	408	46	177	45	2	20	124	1	3	1	9	3,474
% OF TOTAL	0.3%	75.6%	11.7%	1.3%	5.1%	1.3%	0.1%	0.6%	3.6%	0.0%	0.1%	0.0%	0.3%	100.0%

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS4 Main St E of SR-58.

AM	COMBINED													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	14	0	0	1	0	0	0	0	0	0	0	0	15
0:15	0	16	1	0	2	0	0	0	3	0	0	0	0	22
0:30	1	7	0	0	1	0	0	0	0	0	0	0	0	9
0:45	0	15	3	0	0	1	0	0	3	0	0	0	0	22
1:00	0	8	0	0	0	0	0	0	1	0	0	0	1	10
1:15	0	9	0	0	0	0	0	1	0	0	0	0	0	10
1:30	0	5	1	0	0	0	0	1	4	0	0	0	0	11
1:45	0	3	1	0	0	0	0	0	1	0	0	0	0	5
2:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
2:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:30	0	0	0	0	0	0	0	1	1	0	0	0	0	2
2:45	0	7	1	0	0	1	0	0	1	0	0	0	0	10
3:00	0	7	0	0	0	0	0	0	1	0	0	0	0	8
3:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
3:30	0	9	0	0	0	0	0	0	2	0	0	0	0	11
3:45	0	13	0	0	0	0	0	0	3	0	0	0	0	16
4:00	0	3	4	0	1	3	0	0	4	0	0	0	0	15
4:15	0	10	2	0	0	3	0	0	2	0	0	0	0	17
4:30	2	9	3	0	0	4	0	0	6	0	0	0	0	24
4:45	0	18	4	0	0	1	0	0	1	0	0	0	0	24
5:00	1	22	1	1	0	1	0	0	3	0	1	0	0	30
5:15	0	18	2	0	2	1	0	1	4	0	0	0	0	28
5:30	1	36	5	0	3	1	0	0	4	0	0	1	0	51
5:45	2	42	4	8	1	2	0	1	3	0	0	0	0	63
6:00	0	26	5	1	3	1	0	0	5	0	0	0	0	41
6:15	0	26	7	6	4	0	0	0	4	0	0	0	0	47
6:30	2	40	11	3	3	3	0	1	2	0	0	0	2	67
6:45	2	61	11	2	1	2	0	0	3	0	0	0	0	82
7:00	0	57	12	0	4	2	0	1	4	0	0	0	0	80
7:15	1	45	14	2	4	3	0	3	5	0	0	0	0	77
7:30	1	68	8	3	4	1	0	2	2	0	0	0	0	89
7:45	0	55	13	2	4	2	0	0	3	0	0	0	1	80
8:00	0	59	10	1	5	1	0	0	4	0	0	0	0	80
8:15	0	86	7	3	4	1	0	0	1	0	1	0	0	103
8:30	1	124	11	4	4	0	0	0	0	0	0	1	0	145
8:45	1	109	7	0	3	0	0	1	3	0	0	0	0	124
9:00	0	80	10	0	4	1	0	1	5	0	0	0	0	101
9:15	0	80	11	1	1	0	0	1	0	0	0	0	0	94
9:30	1	66	18	2	5	1	0	0	2	0	1	0	0	96
9:45	0	80	13	0	6	2	0	0	1	0	1	0	2	105
10:00	0	59	12	1	8	0	0	1	5	0	0	0	0	86
10:15	0	71	18	1	8	0	0	0	1	0	0	0	0	99
10:30	1	79	14	1	4	1	0	0	2	0	0	0	0	102
10:45	1	71	10	0	4	1	0	0	4	0	0	1	0	92
11:00	1	69	17	1	10	0	0	0	3	0	0	0	0	101
11:15	1	79	18	1	5	3	1	0	2	0	0	0	0	110
11:30	0	72	12	1	8	4	0	0	6	0	0	0	0	103
11:45	0	84	17	0	8	2	0	0	2	0	0	0	0	113
TOTAL	20	1,935	319	45	125	49	1	16	116	0	4	3	6	2,639

PM	COMBINED													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	85	18	0	5	2	0	0	4	0	0	1	0	116
12:15	0	95	18	1	11	3	0	3	4	0	0	0	0	135
12:30	1	87	9	1	6	3	0	0	1	1	0	0	0	109
12:45	2	84	16	2	8	1	0	0	3	0	1	1	0	118
13:00	1	118	14	0	6	1	0	1	5	0	0	0	0	146
13:15	1	145	20	2	3	1	0	0	3	0	0	0	0	175
13:30	1	132	19	0	5	4	0	1	3	0	0	0	0	165
13:45	0	105	14	1	3	2	0	0	6	0	0	0	0	131
14:00	1	114	18	0	5	1	1	0	3	0	0	0	0	143
14:15	1	89	14	2	3	1	0	1	4	0	0	1	0	116
14:30	0	100	16	1	3	3	0	1	4	1	0	0	0	129
14:45	3	110	16	1	6	3	0	0	4	0	1	0	0	144
15:00	3	122	12	1	6	2	0	1	8	0	0	1	0	156
15:15	0	95	21	3	3	2	1	1	5	0	0	0	0	131
15:30	0	102	17	4	5	1	1	0	2	0	0	0	0	132
15:45	1	98	15	1	10	2	0	0	4	1	0	0	0	132
16:00	1	114	20	1	6	0	0	1	5	0	0	0	0	148
16:15	2	101	12	1	5	1	0	0	1	0	0	0	1	124
16:30	1	109	17	1	4	3	1	0	5	0	0	1	0	142
16:45	0	109	10	1	1	1	0	0	3	0	0	0	1	126
17:00	0	115	13	1	6	1	0	1	1	0	0	0	1	139
17:15	1	100	20	1	5	1	0	0	2	0	0	0	0	130
17:30	0	94	13	1	2	0	0	0	2	0	0	0	1	113
17:45	0	83	8	0	3	2	0	0	0	0	0	0	0	96
18:00	2	94	7	1	3	1	0	0	2	0	0	0	0	110
18:15	0	69	11	3	3	0	0	1	1	0	0	0	0	88
18:30	0	54	9	1	1	1	0	1	1	0	0	0	0	68
18:45	0	73	4	0	2	0	0	0	0	0	0	0	0	79
19:00	0	58	8	0	0	0	0	0	2	0	0	0	1	69
19:15	0	47	2	2	2	0	0	0	0	0	1	1	0	55
19:30	1	47	2	2	3	0	0	0	4	0	0	0	0	59
19:45	1	58	8	1	3	0	0	1	0	0	0	0	0	72
20:00	0	37	6	0	2	0	0	0	2	0	0	0	1	48
20:15	0	35	4	0	0	0	0	0	0	0	0	0	0	39
20:30	1	37	2	0	0	0	0	0	1	0	0	0	0	41
20:45	0	42	2	0	0	0	0	0	2	0	0	0	0	46
21:00	0	33	2	0	0	0	0	0	1	0	0	0	0	36
21:15	0	41	7	0	1	0	0	1	1	0	0	0	0	51
21:30	1	30	1	0	1	0	0	0	2	0	0	0	0	35
21:45	0	26	0	0	0	0	0	1	0	0	0	0	0	27
22:00	0	21	3	0	0	0	0	0	2	0	0	0	0	26
22:15	0	24	2	0	0	0	0	0	1	0	0	0	0	27
22:30	0	19	2	0	0	0	0	0	2	0	0	0	0	23
22:45	0	19	3	0	0	0	0	1	2	0	0	0	0	25
23:00	0	25	0	0	0	1	0	0	1	0	0	0	0	27
23:15	0	9	3	0	0	0	0	0	1	0	0	0	0	13
23:30	0	7	1	0	0	0	0	0	2	1	0	0	0	11
23:45	0	12	2	0	1	0	0	0	2	0	0	0	0	17
TOTAL	27	3,423	461	37	142	44	4	17	114	4	3	6	6	4,288

AM PEAK HOUR	8:15 AM
AM PEAK VOLUME	473
PM PEAK HOUR	1:00 PM
PM PEAK VOLUME	617

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
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CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	47	5,358	780	82	267	93	5	33	230	4	7	9	12	6,927
% OF TOTAL	0.7%	77.3%	11.3%	1.2%	3.9%	1.3%	0.1%	0.5%	3.3%	0.1%	0.1%	0.1%	0.2%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS4 Main St E of SR-58.

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	1	8	0	0	0	0	0	0	0	0	0	0	0	9
0:15	0	7	0	0	0	0	0	0	3	0	0	0	0	10
0:30	0	4	1	0	0	0	0	0	1	0	0	0	0	6
0:45	0	3	0	0	0	0	0	0	2	0	0	0	0	5
1:00	0	2	0	0	0	0	0	0	3	0	0	0	0	5
1:15	0	3	0	0	0	0	0	0	1	0	0	0	0	4
1:30	0	5	1	0	1	0	0	0	1	0	0	0	0	8
1:45	0	5	0	0	0	1	0	0	0	0	0	0	0	6
2:00	1	1	0	0	0	0	0	1	1	0	0	0	0	4
2:15	0	1	0	0	0	0	0	0	1	0	0	0	0	2
2:30	0	6	0	0	0	0	0	1	1	0	0	0	0	8
2:45	0	2	0	0	0	0	0	0	1	0	0	0	0	3
3:00	0	2	0	0	0	0	0	1	0	0	0	0	0	3
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:45	0	7	1	0	0	0	0	0	2	0	0	0	0	10
4:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
4:15	0	7	1	0	0	0	0	1	1	0	0	0	0	10
4:30	0	9	1	0	0	0	0	0	1	0	0	0	0	11
4:45	0	9	3	0	0	1	0	0	1	0	0	0	0	14
5:00	0	9	3	1	2	0	0	0	0	0	0	0	0	15
5:15	0	12	5	0	1	0	0	0	0	0	0	0	0	18
5:30	2	21	3	0	0	0	0	0	0	0	0	0	0	26
5:45	0	39	1	0	0	1	0	0	0	0	0	0	0	41
6:00	0	12	5	2	1	1	0	0	3	0	0	0	0	24
6:15	0	16	6	0	2	0	0	0	0	0	0	0	0	24
6:30	0	28	8	2	2	2	0	0	0	0	0	0	0	42
6:45	0	35	2	2	1	2	0	0	0	0	0	0	0	42
7:00	0	46	6	0	4	1	0	0	0	0	0	0	0	57
7:15	1	17	4	1	2	0	0	0	2	0	0	0	1	28
7:30	0	33	4	1	5	0	0	1	0	1	0	0	0	45
7:45	1	63	4	0	1	0	1	1	2	0	0	0	0	73
8:00	1	37	6	0	0	1	0	0	1	0	0	0	0	46
8:15	0	62	13	0	0	1	0	0	2	0	0	0	0	78
8:30	1	81	9	3	2	3	0	0	2	0	0	0	0	101
8:45	2	48	3	0	0	0	0	0	1	0	0	0	0	54
9:00	0	45	4	0	0	1	0	0	0	0	0	0	1	51
9:15	1	31	2	0	1	3	0	1	2	0	0	0	0	41
9:30	0	37	3	1	3	0	0	0	2	0	0	0	0	46
9:45	0	44	10	0	0	1	0	0	4	0	0	0	0	59
10:00	0	37	4	0	0	1	0	1	2	0	0	0	0	45
10:15	0	43	9	0	1	0	0	0	1	0	0	0	0	54
10:30	1	39	7	0	4	0	0	0	0	0	0	0	0	51
10:45	1	45	8	0	4	0	0	1	1	1	0	0	0	61
11:00	1	39	8	1	1	1	0	0	0	1	0	0	0	52
11:15	0	38	5	0	1	1	1	0	2	0	0	0	0	48
11:30	0	46	12	1	1	1	0	0	1	0	0	0	0	62
11:45	0	32	9	1	3	0	0	0	0	0	0	0	0	45
TOTAL	14	1,122	172	16	43	23	2	9	48	3	0	0	2	1,454

AM PEAK HOUR	7:45 AM
AM PEAK VOLUME	298

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	2	29	5	0	4	1	0	0	3	0	0	0	0	44
12:15	0	41	6	0	0	0	0	1	5	0	0	0	0	53
12:30	1	42	6	0	1	2	0	0	0	0	0	0	1	53
12:45	0	39	8	0	1	0	0	1	1	0	0	0	0	50
13:00	0	33	10	0	1	0	0	0	1	0	0	0	0	45
13:15	0	44	2	0	2	2	0	1	2	0	0	0	0	53
13:30	2	45	9	1	1	0	0	0	3	0	0	0	1	62
13:45	1	35	5	0	0	1	0	0	1	0	0	0	0	43
14:00	1	31	2	0	3	0	0	0	5	0	0	0	1	43
14:15	1	41	8	0	3	0	0	0	4	1	0	0	0	58
14:30	1	38	5	1	1	0	0	0	4	0	0	0	0	50
14:45	0	60	6	0	2	1	0	0	3	0	0	0	0	72
15:00	3	55	8	0	0	0	0	0	3	0	0	0	2	71
15:15	2	91	13	1	2	0	0	0	3	0	0	0	0	112
15:30	1	61	4	0	1	1	0	0	7	0	0	0	2	77
15:45	0	55	7	0	2	2	0	0	3	0	0	0	0	69
16:00	1	46	7	0	1	2	0	1	2	0	0	0	0	60
16:15	0	37	8	0	0	3	0	0	2	0	0	0	0	50
16:30	2	38	7	2	1	1	0	0	4	0	0	0	1	56
16:45	0	45	7	0	3	1	0	0	3	0	0	0	0	59
17:00	1	42	3	0	0	0	0	0	1	0	0	0	1	48
17:15	0	48	4	1	0	0	0	0	3	0	0	0	0	56
17:30	1	61	4	1	0	2	0	0	2	0	0	0	0	71
17:45	2	43	8	0	0	0	0	0	2	0	0	0	0	55
18:00	1	39	1	1	2	0	0	0	1	0	0	0	0	45
18:15	1	45	4	1	0	0	0	0	0	0	0	0	1	52
18:30	0	34	0	1	0	0	0	0	3	0	0	0	0	38
18:45	0	30	3	1	0	0	0	2	1	0	0	0	1	38
19:00	1	26	2	0	0	0	0	0	1	0	0	0	0	30
19:15	0	27	3	1	1	0	0	1	0	0	0	0	0	33
19:30	0	31	5	1	1	0	0	0	0	0	0	0	1	39
19:45	1	20	1	1	0	0	0	0	2	0	1	0	0	26
20:00	0	14	2	0	0	0	0	0	1	0	0	0	1	18
20:15	0	17	2	0	0	0	0	1	4	0	0	0	0	24
20:30	0	16	2	0	0	1	0	0	3	0	0	0	0	22
20:45	0	18	0	0	1	1	0	0	1	0	0	0	0	21
21:00	0	16	3	0	0	0	0	0	3	0	0	0	0	22
21:15	0	23	1	0	0	0	0	0	2	0	0	1	0	27
21:30	0	15	1	0	0	0	0	0	3	0	0	0	0	19
21:45	0	13	1	0	0	0	0	0	2	0	0	0	0	16
22:00	0	16	1	0	0	0	0	0	1	0	0	0	0	18
22:15	0	8	1	0	0	0	0	0	2	0	0	0	0	11
22:30	0	14	0	0	0	0	0	0	2	0	0	0	0	16
22:45	0	13	1	0	0	0	0	0	0	0	0	0	1	15
23:00	0	13	0	0	0	0	0	0	3	0	0	0	0	16
23:15	0	10	0	0	0	0	0	0	2	0	0	0	0	12
23:30	0	7	1	0	0	0	0	0	0	0	0	0	0	8
23:45	0	8	0	0	0	0	0	0	3	0	0	0	0	11
TOTAL	26	1,573	187	14	34	21	0	8	107	1	1	1	14	1,987

PM PEAK HOUR	2:45 PM
PM PEAK VOLUME	332

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	40	2,695	359	30	77	44	2	17	155	4	1	1	16	3,441
% OF TOTAL	1.2%	78.3%	10.4%	0.9%	2.2%	1.3%	0.1%	0.5%	4.5%	0.1%	0.0%	0.0%	0.5%	100.0%

TOTAL: ALL	57	5,366	763	74	246	101	3	48	298	6	5	1	22	6,990
% OF TOTAL	1.7%	155.9%	22.2%	2.2%	7.1%	2.9%	0.1%	1.4%	8.7%	0.2%	0.1%	0.0%	0.6%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS4 Main St E of SR-58.

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	2	1	0	0	0	0	1	0	0	0	0	0	4
0:15	0	5	0	0	0	0	0	1	0	0	0	0	0	6
0:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
0:45	0	7	1	0	0	0	0	0	1	0	0	0	0	9
1:00	0	2	0	0	0	0	0	1	2	0	0	0	0	5
1:15	0	5	0	0	1	0	0	0	2	0	0	0	0	8
1:30	0	4	0	0	0	0	0	1	1	0	0	0	0	6
1:45	0	3	0	0	0	0	0	0	1	0	0	0	0	4
2:00	0	3	1	0	0	0	0	0	1	0	0	0	0	5
2:15	0	4	0	0	0	0	0	1	0	0	0	0	0	5
2:30	0	0	0	0	0	0	0	0	2	0	0	0	0	2
2:45	0	2	1	0	0	0	0	0	2	0	0	0	0	5
3:00	0	1	0	0	0	0	0	0	2	0	0	0	0	3
3:15	0	1	0	0	1	0	0	0	0	0	0	0	0	2
3:30	0	1	0	0	0	0	0	0	3	0	0	0	1	5
3:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
4:00	0	4	3	0	1	0	0	0	1	0	0	0	0	9
4:15	0	8	1	0	0	0	0	1	4	0	0	0	0	14
4:30	1	4	1	0	0	0	0	1	3	0	0	0	0	10
4:45	0	5	1	0	1	0	0	0	1	1	0	0	0	9
5:00	0	6	0	0	1	1	0	1	3	0	0	0	0	12
5:15	0	4	1	0	1	1	0	1	2	0	1	0	0	11
5:30	0	3	2	0	3	3	0	1	4	0	0	0	0	16
5:45	0	12	2	6	2	0	0	0	3	0	0	0	0	25
6:00	0	11	1	1	1	2	0	1	5	0	0	0	0	22
6:15	1	14	2	4	1	1	0	0	1	0	0	0	0	24
6:30	0	14	4	2	0	0	0	1	4	0	0	0	0	25
6:45	0	19	4	0	1	0	0	2	5	0	0	0	0	31
7:00	0	10	1	0	1	2	0	0	2	0	0	0	0	16
7:15	0	22	6	1	1	0	0	0	3	0	0	0	0	33
7:30	0	18	4	1	0	1	0	1	4	0	0	0	0	29
7:45	0	14	5	1	4	3	0	0	5	0	0	0	0	32
8:00	0	35	1	1	1	3	0	1	2	0	0	0	0	44
8:15	0	28	5	1	3	2	0	0	2	0	0	0	0	41
8:30	1	35	5	1	0	2	0	0	3	0	1	0	0	48
8:45	0	31	1	0	3	1	0	1	3	0	0	0	1	41
9:00	0	47	5	0	1	0	0	0	3	0	0	0	1	57
9:15	0	25	6	1	1	1	0	0	3	0	0	0	0	37
9:30	0	39	9	0	3	1	0	0	1	1	0	0	0	54
9:45	0	28	4	0	3	1	0	0	3	0	0	0	0	39
10:00	0	50	4	1	4	0	0	0	2	0	0	0	0	61
10:15	0	31	2	1	3	3	0	0	1	0	0	0	0	41
10:30	1	43	6	0	2	1	0	0	0	0	0	0	0	53
10:45	0	40	11	1	5	1	0	0	0	0	0	0	0	58
11:00	0	38	4	0	4	0	0	0	1	0	0	0	1	48
11:15	1	44	12	2	4	0	0	0	3	0	0	0	0	66
11:30	0	44	9	1	2	1	0	1	1	0	0	0	0	59
11:45	0	38	9	0	7	1	0	0	1	0	0	0	0	56
TOTAL	5	814	135	26	66	32	0	18	96	2	2	0	4	1,200

AM PEAK HOUR	10:45 AM
AM PEAK VOLUME	231

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	46	1	0	4	1	0	0	0	0	0	0	0	53
12:15	0	38	11	1	2	2	0	1	1	0	1	0	0	57
12:30	1	36	11	0	3	2	0	2	0	0	0	0	0	55
12:45	0	37	17	0	2	1	0	0	1	0	0	0	0	58
13:00	1	28	10	1	1	1	1	1	0	0	0	0	0	44
13:15	0	39	9	0	2	0	0	2	1	0	0	0	0	53
13:30	0	33	10	1	9	1	0	0	0	0	0	0	0	54
13:45	0	37	6	0	4	1	0	1	2	0	0	0	0	51
14:00	0	34	11	0	5	1	0	0	2	0	0	0	0	53
14:15	0	40	6	1	4	0	0	0	3	0	0	0	1	55
14:30	2	65	8	0	5	2	0	1	1	0	0	0	0	84
14:45	0	74	8	1	6	1	0	0	3	0	0	0	0	93
15:00	0	69	10	0	9	0	0	0	1	0	0	0	0	89
15:15	1	55	11	1	3	1	0	0	2	0	0	0	0	74
15:30	1	69	9	2	4	0	0	0	2	0	1	0	0	88
15:45	0	55	3	1	3	0	0	0	3	0	0	0	0	65
16:00	0	73	6	0	3	0	0	0	0	0	0	0	0	82
16:15	0	78	9	1	5	1	0	0	0	0	0	0	0	94
16:30	0	71	12	1	2	0	0	0	0	0	0	0	1	87
16:45	1	59	11	0	4	0	0	0	0	0	0	0	0	75
17:00	1	62	11	2	3	0	0	0	0	0	0	0	0	79
17:15	1	68	13	1	2	0	0	0	2	0	0	0	0	87
17:30	0	69	6	0	3	0	0	0	0	0	0	0	0	78
17:45	0	57	6	0	0	0	0	0	1	0	0	0	0	64
18:00	0	57	7	0	2	1	0	0	1	0	0	0	0	68
18:15	1	47	3	3	0	0	0	0	3	0	0	0	0	57
18:30	1	30	3	0	0	0	0	0	2	0	0	0	0	36
18:45	0	28	4	0	2	1	0	0	0	0	0	0	0	35
19:00	0	41	6	0	1	0	0	0	0	0	0	0	0	48
19:15	0	33	4	1	1	0	0	1	1	0	0	0	0	41
19:30	0	29	1	0	3	1	0	0	0	0	0	0	0	34
19:45	0	34	4	0	0	0	0	0	0	0	0	0	0	38
20:00	0	27	4	0	1	0	0	0	0	0	0	0	0	32
20:15	0	20	2	0	2	2	0	1	0	0	0	0	0	27
20:30	0	32	1	0	0	1	0	0	1	0	0	0	0	35
20:45	0	18	0	0	0	1	0	1	2	0	0	0	0	22
21:00	0	23	0	0	0	1	0	0	0	0	0	0	0	24
21:15	0	15	1	0	1	0	0	1	0	0	0	0	0	18
21:30	0	19	0	0	0	0	0	0	1	0	0	0	0	20
21:45	0	20	3	0	0	1	0	0	1	0	0	0	0	25
22:00	0	14	0	0	1	0	0	0	1	0	0	0	0	16
22:15	0	9	3	0	0	0	0	0	1	0	0	0	0	13
22:30	0	16	2	0	0	0	0	0	1	0	0	0	0	19
22:45	0	10	1	0	1	0	0	0	2	0	0	0	0	14
23:00	0	13	3	0	0	0	0	1	1	0	0	0	0	18
23:15	0	9	1	0	0	0	0	0	1	0	0	0	0	11
23:30	0	13	1	0	0	1	0	0	1	0	0	0	0	16
23:45	0	8	0	0	0	0	0	0	2	0	0	0	0	10
TOTAL	12	1,857	269	18	103	25	1	13	47	0	2	0	2	2,349

PM PEAK HOUR	2:45 PM
PM PEAK VOLUME	344

TOTAL: AM+PM	17	2,671	404	44	169	57	1	31	143	2	4	0	6	3,549
% OF TOTAL	0.5%	75.3%	11.4%	1.2%	4.8%	1.6%	0.0%	0.9%	4.0%	0.1%	0.1%	0.0%	0.2%	100.0%

CLASS 1	Class 1 — Motorcycles
CLASS 2	Passenger Cars
CLASS 3	2 Axles, 4-Tire Single Units
CLASS 4	Buses
CLASS 5	2 Axles, 6-Tire Single Units
CLASS 6	3 Axles, Single Unit
CLASS 7	4 or More Axles, Single Unit
CLASS 8	3 to 4 Axles, Single Trailer
CLASS 9	5 Axles, Single Trailer
CLASS 10	6 or More Axles, Single Trailer
CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 12	6 Axles, Multi-Trailers
CLASS 13	7 or More Axles, Multi-Trailers

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS4 Main St E of SR-58.

AM	COMBINED													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	1	10	1	0	0	0	0	1	0	0	0	0	0	13
0:15	0	12	0	0	0	0	0	1	3	0	0	0	0	16
0:30	0	9	1	0	0	0	0	0	1	0	0	0	0	11
0:45	0	10	1	0	0	0	0	0	3	0	0	0	0	14
1:00	0	4	0	0	0	0	0	1	5	0	0	0	0	10
1:15	0	8	0	0	1	0	0	0	3	0	0	0	0	12
1:30	0	9	1	0	1	0	0	1	2	0	0	0	0	14
1:45	0	8	0	0	0	1	0	0	1	0	0	0	0	10
2:00	1	4	1	0	0	0	0	1	2	0	0	0	0	9
2:15	0	5	0	0	0	0	0	1	1	0	0	0	0	7
2:30	0	6	0	0	0	0	0	1	3	0	0	0	0	10
2:45	0	4	1	0	0	0	0	0	3	0	0	0	0	8
3:00	0	3	0	0	0	0	0	1	2	0	0	0	0	6
3:15	0	1	0	0	1	0	0	0	0	0	0	0	0	2
3:30	0	2	0	0	0	0	0	0	3	0	0	0	1	6
3:45	0	12	1	0	0	0	0	0	2	0	0	0	0	15
4:00	0	9	4	0	1	0	0	0	1	0	0	0	0	15
4:15	0	15	2	0	0	0	0	2	5	0	0	0	0	24
4:30	1	13	2	0	0	0	0	1	4	0	0	0	0	21
4:45	0	14	4	0	1	1	0	0	2	1	0	0	0	23
5:00	0	15	3	1	3	1	0	1	3	0	0	0	0	27
5:15	0	16	6	0	2	1	0	1	2	0	1	0	0	29
5:30	2	24	5	0	3	3	0	1	4	0	0	0	0	42
5:45	0	51	3	6	2	1	0	0	3	0	0	0	0	66
6:00	0	23	6	3	2	3	0	1	8	0	0	0	0	46
6:15	1	30	8	4	3	1	0	0	1	0	0	0	0	48
6:30	0	42	12	4	2	2	0	1	4	0	0	0	0	67
6:45	0	54	6	2	2	2	0	2	5	0	0	0	0	73
7:00	0	56	7	0	5	3	0	0	2	0	0	0	0	73
7:15	1	39	10	2	3	0	0	0	5	0	0	0	1	61
7:30	0	51	8	2	5	1	0	2	4	1	0	0	0	74
7:45	1	77	9	1	5	3	1	1	7	0	0	0	0	105
8:00	1	72	7	1	1	4	0	1	3	0	0	0	0	90
8:15	0	90	18	1	3	3	0	0	4	0	0	0	0	119
8:30	2	116	14	4	2	5	0	0	5	0	1	0	0	149
8:45	2	79	4	0	3	1	0	1	4	0	0	0	1	95
9:00	0	92	9	0	1	1	0	0	3	0	0	0	2	108
9:15	1	56	8	1	2	4	0	1	5	0	0	0	0	78
9:30	0	76	12	1	6	1	0	0	3	1	0	0	0	100
9:45	0	72	14	0	3	2	0	0	7	0	0	0	0	98
10:00	0	87	8	1	4	1	0	1	4	0	0	0	0	106
10:15	0	74	11	1	4	3	0	0	2	0	0	0	0	95
10:30	2	82	13	0	6	1	0	0	0	0	0	0	0	104
10:45	1	85	19	1	9	1	0	1	1	1	0	0	0	119
11:00	1	77	12	1	5	1	0	0	1	1	0	0	1	100
11:15	1	82	17	2	5	1	1	0	5	0	0	0	0	114
11:30	0	90	21	2	3	2	0	1	2	0	0	0	0	121
11:45	0	70	18	1	10	1	0	0	1	0	0	0	0	101
TOTAL	19	1,936	307	42	109	55	2	27	144	5	2	0	6	2,654

AM PEAK HOUR	8:15 AM
AM PEAK VOLUME	471

PM	COMBINED													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	3	75	6	0	8	2	0	0	3	0	0	0	0	97
12:15	0	79	17	1	2	2	0	2	6	0	1	0	0	110
12:30	2	78	17	0	4	4	0	2	0	0	0	0	1	108
12:45	0	76	25	0	3	1	0	1	2	0	0	0	0	108
13:00	1	61	20	1	2	1	1	1	1	0	0	0	0	89
13:15	0	83	11	0	4	2	0	3	3	0	0	0	0	106
13:30	2	78	19	2	10	1	0	0	3	0	0	0	1	116
13:45	1	72	11	0	4	2	0	1	3	0	0	0	0	94
14:00	1	65	13	0	8	1	0	0	7	0	0	0	1	96
14:15	1	81	14	1	7	0	0	0	7	1	0	0	1	113
14:30	3	103	13	1	6	2	0	1	5	0	0	0	0	134
14:45	0	134	14	1	8	2	0	0	6	0	0	0	0	165
15:00	3	124	18	0	9	0	0	0	4	0	0	0	2	160
15:15	3	146	24	2	5	1	0	0	5	0	0	0	0	186
15:30	2	130	13	2	5	1	0	0	9	0	1	0	2	165
15:45	0	110	10	1	5	2	0	0	6	0	0	0	0	134
16:00	1	119	13	0	4	2	0	1	2	0	0	0	0	142
16:15	0	115	17	1	5	4	0	0	2	0	0	0	0	144
16:30	2	109	19	3	3	1	0	0	4	0	0	0	2	143
16:45	1	104	18	0	7	1	0	0	3	0	0	0	0	134
17:00	2	104	14	2	3	0	0	0	1	0	0	0	1	127
17:15	1	116	17	2	2	0	0	0	5	0	0	0	0	143
17:30	1	130	10	1	3	2	0	0	2	0	0	0	0	149
17:45	2	100	14	0	0	0	0	0	3	0	0	0	0	119
18:00	1	96	8	1	4	1	0	0	2	0	0	0	0	113
18:15	2	92	7	4	0	0	0	0	3	0	0	0	1	109
18:30	1	64	3	1	0	0	0	0	5	0	0	0	0	74
18:45	0	58	7	1	2	1	0	2	1	0	0	0	1	73
19:00	1	67	8	0	1	0	0	0	1	0	0	0	0	78
19:15	0	60	7	2	2	0	0	2	1	0	0	0	0	74
19:30	0	60	6	1	4	1	0	0	0	0	0	0	1	73
19:45	1	54	5	1	0	0	0	0	2	0	1	0	0	64
20:00	0	41	6	0	1	0	0	0	1	0	0	0	1	50
20:15	0	37	4	0	2	2	0	2	4	0	0	0	0	51
20:30	0	48	3	0	0	2	0	0	4	0	0	0	0	57
20:45	0	36	0	0	1	2	0	1	3	0	0	0	0	43
21:00	0	39	3	0	0	1	0	0	3	0	0	0	0	46
21:15	0	38	2	0	1	0	0	1	2	0	0	1	0	45
21:30	0	34	1	0	0	0	0	0	4	0	0	0	0	39
21:45	0	33	4	0	0	1	0	0	3	0	0	0	0	41
22:00	0	30	1	0	1	0	0	0	2	0	0	0	0	34
22:15	0	17	4	0	0	0	0	0	3	0	0	0	0	24
22:30	0	30	2	0	0	0	0	0	3	0	0	0	0	35
22:45	0	23	2	0	1	0	0	0	2	0	0	0	1	29
23:00	0	26	3	0	0	0	0	1	4	0	0	0	0	34
23:15	0	19	1	0	0	0	0	0	3	0	0	0	0	23
23:30	0	20	2	0	0	1	0	0	1	0	0	0	0	24
23:45	0	16	0	0	0	0	0	0	5	0	0	0	0	21
TOTAL	38	3,430	456	32	137	46	1	21	154	1	3	1	16	4,336

PM PEAK HOUR	2:45 PM
PM PEAK VOLUME	676

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	57	5,366	763	74	246	101	3	48	298	6	5	1	22	6,990
% OF TOTAL	0.8%	76.8%	10.9%	1.1%	3.5%	1.4%	0.0%	0.7%	4.3%	0.1%	0.1%	0.0%	0.3%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS12 Barstow Rd btw Mountain View & Virginia Way.

AM	NORTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
0:15	0	9	0	0	0	0	0	0	0	0	0	0	0	9
0:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
0:45	0	3	0	0	0	0	0	0	1	0	0	0	0	4
1:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
1:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
1:30	0	2	0	0	0	0	0	1	0	0	0	0	0	3
1:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5
2:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
2:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
3:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
3:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
4:00	0	7	0	0	1	0	0	0	0	0	0	0	0	8
4:15	0	10	1	0	0	0	0	0	0	0	0	0	0	11
4:30	0	6	0	0	0	0	0	1	0	0	0	0	0	7
4:45	0	12	5	0	0	0	0	0	0	0	0	0	0	17
5:00	0	16	1	0	0	0	0	0	0	0	0	0	0	17
4:30	0	15	0	1	1	0	0	0	1	0	0	0	0	18
4:45	0	19	2	1	2	0	0	0	0	0	0	0	0	24
5:00	0	19	3	3	5	0	0	0	0	0	0	0	0	30
5:15	0	16	5	2	2	0	0	0	1	0	0	0	0	26
5:30	0	28	7	0	2	0	0	0	0	0	0	0	0	37
5:45	0	43	6	0	7	0	0	0	0	0	0	0	0	56
6:00	0	79	6	4	12	0	0	0	0	0	0	0	0	101
6:15	0	122	17	0	5	0	0	0	0	0	0	0	0	144
6:30	0	61	7	1	4	0	0	1	0	0	0	0	0	74
6:45	0	62	10	0	2	0	0	0	0	0	0	0	0	74
7:00	0	102	10	2	5	0	0	1	1	0	0	0	0	121
7:15	0	65	5	0	10	0	0	0	0	0	0	0	0	80
7:30	0	76	11	0	6	0	0	1	0	0	0	0	0	94
7:45	1	98	9	4	5	0	0	0	0	0	0	0	0	117
8:00	0	101	7	1	5	1	0	0	0	0	0	0	0	115
8:15	0	73	11	1	10	0	0	0	0	0	0	0	0	95
8:30	0	53	13	0	10	0	0	0	0	0	0	0	0	76
8:45	0	67	9	1	2	1	0	0	0	0	0	0	0	80
9:00	1	52	10	1	11	1	0	0	0	0	0	0	0	76
9:15	0	75	13	0	10	0	0	0	2	0	0	0	0	100
9:30	0	70	6	0	10	0	0	0	0	0	0	1	0	87
9:45	0	73	12	0	6	0	0	0	0	0	0	0	0	91
10:00	1	62	14	1	8	1	0	1	0	0	0	0	0	88
10:15	0	65	12	0	9	0	0	0	0	0	0	0	0	86
10:30	0	72	11	0	5	0	0	0	0	0	0	0	0	88
10:45	1	72	9	2	8	0	0	0	0	0	0	0	0	92
11:00	0	58	6	2	5	0	0	1	1	0	0	0	0	73
TOTAL	4	1,816	240	27	169	4	0	7	7	0	0	1	0	2,275

AM PEAK HOUR	7:30 AM
AM PEAK VOLUME	421

PM	NORTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	69	7	1	9	0	0	0	0	0	0	0	0	86
12:15	1	115	11	0	13	0	0	0	0	0	0	0	0	140
12:30	0	104	12	6	11	0	0	0	0	0	0	0	0	133
12:45	1	101	13	2	4	0	0	0	0	0	0	0	0	121
13:00	0	72	8	1	7	0	0	0	0	0	0	0	1	89
13:15	0	94	18	0	14	0	0	0	0	0	0	0	0	126
13:30	0	80	6	3	11	0	0	0	0	0	0	0	0	100
13:45	0	88	9	1	11	1	1	0	0	0	0	0	0	111
14:00	0	75	9	1	7	0	0	0	1	0	0	0	0	93
14:15	0	72	11	0	5	0	0	0	0	0	0	0	0	88
14:30	0	97	13	2	13	0	0	0	0	0	0	0	0	125
14:45	0	75	10	2	10	0	0	0	0	0	0	0	0	97
15:00	1	78	16	0	5	0	0	0	0	0	0	0	0	100
15:15	0	65	10	0	4	0	0	0	0	0	0	0	0	79
15:30	1	89	8	0	12	0	0	0	0	0	0	0	0	110
15:45	1	85	11	2	10	0	0	1	0	0	0	0	0	110
16:00	0	73	10	0	13	0	0	1	0	0	0	0	0	97
16:15	1	78	6	0	9	1	0	0	0	0	0	0	0	95
16:30	0	64	7	0	8	0	0	0	0	0	0	0	0	79
16:45	0	80	7	2	6	0	0	0	0	0	0	0	0	95
17:00	0	67	2	2	2	0	0	0	0	0	0	0	0	73
17:15	0	66	7	0	4	0	0	0	0	0	0	0	0	77
17:30	0	67	8	2	7	0	0	0	0	0	0	0	0	84
17:45	0	90	14	0	6	0	0	0	0	0	0	0	0	110
18:00	0	63	2	1	1	0	0	0	0	0	0	0	0	67
18:15	0	61	6	1	3	0	0	0	0	0	0	0	0	71
18:30	0	44	2	0	3	0	0	0	0	0	0	0	0	49
18:45	0	60	8	1	5	0	0	0	0	0	0	0	0	74
19:00	0	44	4	0	6	0	0	0	0	0	0	0	0	54
19:15	0	45	5	0	1	0	0	0	0	0	0	0	0	51
19:30	0	46	6	0	2	0	0	0	0	0	0	0	0	54
19:45	0	33	7	1	4	0	0	0	0	0	0	0	0	45
20:00	0	36	2	0	0	0	0	0	0	0	0	0	0	38
20:15	0	34	2	0	5	0	0	1	0	0	0	0	0	42
20:30	0	38	0	1	2	0	0	0	0	0	0	0	0	41
20:45	0	27	1	0	2	0	0	0	0	0	0	0	0	30
21:00	0	23	2	0	0	0	0	0	0	0	0	0	0	25
21:15	0	22	4	0	1	0	0	0	0	0	0	0	0	27
21:30	0	18	2	0	1	0	0	0	0	0	0	0	0	21
21:45	0	20	1	0	2	0	0	0	0	0	0	0	0	23
22:00	0	17	0	0	0	0	0	0	0	0	0	0	0	17
22:15	0	18	4	0	0	0	0	0	0	0	0	0	0	22
22:30	0	14	0	0	0	0	0	0	0	0	0	0	0	14
22:45	0	8	1	0	0	0	0	0	1	0	0	0	0	10
23:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
23:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7
23:30	0	12	1	0	0	0	0	0	0	0	0	0	0	13
23:45	0	9	1	0	0	0	0	0	0	0	0	0	0	10
TOTAL	6	2,651	297	32	239	2	1	3	2	0	0	0	1	3,234

PM PEAK HOUR	12:15 PM
PM PEAK VOLUME	483

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	10	4,467	537	59	408	6	1	10	9	0	0	1	1	5,509
% OF TOTAL	0.2%	81.1%	9.7%	1.1%	7.4%	0.1%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	100.0%

TOTAL: ALL	16	9,033	1,044	115	689	37	3	23	16	0	1	4	2	10,983
% OF TOTAL	0.3%	164.0%	19.0%	2.1%	12.5%	0.7%	0.1%	0.4%	0.3%	0.0%	0.0%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS12 Barstow Rd btw Mountain View & Virginia Way.

AM	SOUTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
0:15	0	11	0	0	0	0	0	0	0	0	0	0	0	11
0:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
0:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
1:00	0	4	0	0	0	0	0	0	1	0	0	0	0	5
1:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
1:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
1:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:15	0	1	0	0	0	0	0	0	1	0	0	0	0	2
2:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:00	0	4	0	0	1	0	0	0	0	0	0	0	0	5
3:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7
3:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:45	0	6	0	0	1	0	0	0	0	0	0	0	0	7
4:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
4:15	0	1	0	0	3	0	0	0	0	0	0	0	0	4
4:30	0	10	0	0	0	0	0	0	0	0	0	0	0	10
4:45	0	12	2	0	0	0	0	0	0	0	0	0	0	14
5:00	0	13	0	1	0	0	0	0	0	0	0	0	0	14
5:15	0	14	6	1	2	0	0	0	0	0	0	0	0	23
5:30	0	14	4	0	2	0	0	0	0	0	0	0	0	20
5:45	0	20	1	3	1	0	0	0	1	0	0	0	0	26
6:00	0	19	3	2	3	0	0	0	0	0	0	0	0	27
6:15	0	18	0	2	3	0	0	0	0	0	0	0	0	23
6:30	0	25	5	1	1	0	0	0	1	0	0	0	0	33
6:45	0	45	7	5	2	0	0	0	0	0	0	1	0	60
7:00	0	68	8	3	3	0	0	0	0	0	0	0	0	82
7:15	0	52	8	0	1	0	0	0	1	0	0	0	0	62
7:30	0	28	5	1	3	1	0	1	0	0	0	0	0	39
7:45	0	55	3	0	5	0	0	0	0	0	0	0	0	63
8:00	0	56	2	2	3	0	0	0	0	0	0	0	0	63
8:15	0	46	9	2	6	1	0	0	0	0	0	0	0	64
8:30	0	79	3	0	6	0	1	1	0	0	0	0	0	90
8:45	0	88	6	0	4	0	0	0	0	0	0	0	0	98
9:00	0	75	9	1	4	0	0	1	0	0	0	0	0	90
9:15	0	60	11	1	4	0	0	0	0	0	0	0	0	76
9:30	0	48	8	0	8	0	0	0	0	0	0	0	0	64
9:45	0	80	7	1	4	1	0	0	0	0	0	0	0	93
10:00	0	75	5	2	4	0	1	0	0	0	0	0	0	87
10:15	0	61	10	0	4	0	0	0	1	0	0	0	0	76
10:30	0	60	11	0	6	0	0	0	0	0	0	0	0	77
10:45	0	79	13	0	2	1	0	0	0	0	0	0	0	95
11:00	1	80	13	1	3	0	0	0	0	0	0	0	0	98
11:15	1	65	13	0	4	0	0	1	0	0	0	0	0	84
11:30	0	83	11	0	9	1	0	0	0	0	0	0	0	104
11:45	0	89	6	2	10	0	0	0	0	0	0	0	0	107
TOTAL	2	1,594	189	31	112	5	2	4	6	0	0	1	0	1,946

AM PEAK HOUR	11:00 AM
AM PEAK VOLUME	393

PM	SOUTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	106	8	4	5	2	0	0	0	0	0	0	0	125
12:15	0	88	6	0	6	0	0	2	0	0	1	0	0	103
12:30	0	105	13	0	6	0	0	0	0	0	0	0	0	124
12:45	0	167	13	1	5	2	0	0	0	0	0	0	0	188
13:00	0	69	12	1	5	0	0	2	0	0	0	0	0	89
13:15	0	63	7	0	7	1	0	0	0	0	0	0	0	78
13:30	1	99	15	0	3	0	0	1	0	0	0	0	0	119
13:45	1	87	5	0	4	1	0	0	0	0	0	0	0	98
14:00	0	97	15	1	8	1	0	0	0	0	0	0	0	122
14:15	0	96	11	1	6	0	0	0	0	0	0	0	0	114
14:30	0	92	13	2	4	2	0	0	0	0	0	0	0	113
14:45	0	78	13	0	9	0	0	0	0	0	0	0	0	100
15:00	0	98	13	2	6	0	0	0	0	0	0	0	0	119
15:15	0	92	10	1	3	1	0	1	0	0	0	0	0	108
15:30	0	87	17	0	7	1	0	0	0	0	0	0	0	112
15:45	0	85	7	0	7	3	0	0	0	0	0	0	0	102
16:00	1	117	9	1	2	0	0	0	0	0	0	0	0	130
16:15	0	86	11	0	6	2	0	0	0	0	0	0	0	105
16:30	0	123	8	0	8	1	0	1	0	0	0	0	0	141
16:45	0	72	8	0	5	1	0	0	0	0	0	0	0	86
17:00	0	115	5	1	5	2	0	0	0	0	0	0	0	128
17:15	0	91	12	1	8	2	0	0	0	0	0	0	0	114
17:30	0	71	10	0	4	0	0	0	0	0	0	1	0	86
17:45	1	81	7	0	1	0	0	0	0	0	0	1	0	91
18:00	0	81	6	3	2	0	0	0	0	0	0	0	0	92
18:15	0	60	3	2	3	1	0	1	0	0	0	0	0	70
18:30	0	52	3	0	3	2	0	0	0	0	0	0	1	61
18:45	0	59	3	0	3	1	0	0	0	0	0	0	0	66
19:00	0	45	4	1	0	0	0	0	0	0	0	0	0	50
19:15	0	45	1	0	7	0	0	0	0	0	0	0	0	53
19:30	0	59	13	0	2	0	0	0	0	0	0	0	0	74
19:45	0	52	10	3	3	0	0	1	0	0	0	0	0	69
20:00	0	31	4	0	3	0	0	0	0	0	0	0	0	38
20:15	0	17	4	0	0	0	0	0	0	0	0	0	0	21
20:30	0	29	1	0	3	0	0	0	0	0	0	0	0	33
20:45	0	26	1	0	2	0	0	0	0	0	0	0	0	29
21:00	0	27	4	0	1	0	0	0	0	0	0	0	0	32
21:15	0	13	2	0	2	0	0	0	0	0	0	0	0	17
21:30	0	25	1	0	1	0	0	0	0	0	0	0	0	27
21:45	0	14	0	0	0	0	0	0	0	0	0	0	0	14
22:00	0	15	0	0	1	0	0	0	0	0	0	0	0	16
22:15	0	9	1	0	2	0	0	0	0	0	0	0	0	12
22:30	0	12	4	0	0	0	0	0	0	0	0	0	0	16
22:45	0	11	1	0	0	0	0	0	1	0	0	0	0	13
23:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
23:15	0	4	2	0	0	0	0	0	0	0	0	0	0	6
23:30	0	8	1	0	1	0	0	0	0	0	0	0	0	10
23:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	4	2,972	318	25	169	26	0	9	1	0	1	2	1	3,528

PM PEAK HOUR	12:00 PM
PM PEAK VOLUME	540

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	6	4,566	507	56	281	31	2	13	7	0	1	3	1	5,474
% OF TOTAL	0.1%	83.4%	9.3%	1.0%	5.1%	0.6%	0.0%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS12 Barstow Rd btw Mountain View & Virginia Way.

AM	COMBINED													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
0:15	0	20	0	0	0	0	0	0	0	0	0	0	0	20
0:30	0	9	0	0	0	0	0	0	0	0	0	0	0	9
0:45	0	5	0	0	0	0	0	0	1	0	0	0	0	6
1:00	0	7	0	0	0	0	0	0	1	0	0	0	0	8
1:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7
1:30	0	6	0	0	0	0	0	1	0	0	0	0	0	7
1:45	0	10	0	0	0	0	0	0	0	0	0	0	0	10
2:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
2:15	0	5	0	0	1	0	0	0	1	0	0	0	0	7
2:30	0	11	0	0	0	0	0	0	0	0	0	0	0	11
2:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
3:00	0	5	2	0	1	0	0	0	0	0	0	0	0	8
3:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8
3:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7
3:45	0	12	0	0	1	0	0	0	0	0	0	0	0	13
4:00	0	14	0	0	1	0	0	0	0	0	0	0	0	15
4:15	0	11	1	0	3	0	0	0	0	0	0	0	0	15
4:30	0	16	0	0	0	0	0	1	0	0	0	0	0	17
4:45	0	24	7	0	0	0	0	0	0	0	0	0	0	31
5:00	0	29	1	1	0	0	0	0	0	0	0	0	0	31
5:15	0	29	6	2	3	0	0	0	1	0	0	0	0	41
5:30	0	33	6	1	4	0	0	0	0	0	0	0	0	44
5:45	0	39	4	6	6	0	0	0	1	0	0	0	0	56
6:00	0	35	8	4	5	0	0	0	1	0	0	0	0	53
6:15	0	46	7	2	5	0	0	0	0	0	0	0	0	60
6:30	0	68	11	1	8	0	0	0	1	0	0	0	0	89
6:45	0	124	13	9	14	0	0	0	0	0	0	1	0	161
7:00	0	190	25	3	8	0	0	0	0	0	0	0	0	226
7:15	0	113	15	1	5	0	0	1	1	0	0	0	0	136
7:30	0	90	15	1	5	1	0	1	0	0	0	0	0	113
7:45	0	157	13	2	10	0	0	1	1	0	0	0	0	184
8:00	0	121	7	2	13	0	0	0	0	0	0	0	0	143
8:15	0	122	20	2	12	1	0	1	0	0	0	0	0	158
8:30	1	177	12	4	11	0	1	1	0	0	0	0	0	207
8:45	0	189	13	1	9	1	0	0	0	0	0	0	0	213
9:00	0	148	20	2	14	0	0	1	0	0	0	0	0	185
9:15	0	113	24	1	14	0	0	0	0	0	0	0	0	152
9:30	0	115	17	1	10	1	0	0	0	0	0	0	0	144
9:45	1	132	17	2	15	2	0	0	0	0	0	0	0	169
10:00	0	150	18	2	14	0	1	0	2	0	0	0	0	187
10:15	0	131	16	0	14	0	0	0	1	0	0	1	0	163
10:30	0	133	23	0	12	0	0	0	0	0	0	0	0	168
10:45	1	141	27	1	10	2	0	1	0	0	0	0	0	183
11:00	1	145	25	1	12	0	0	0	0	0	0	0	0	184
11:15	1	137	24	0	9	0	0	1	0	0	0	0	0	172
11:30	1	155	20	2	17	1	0	0	0	0	0	0	0	196
11:45	0	147	12	4	15	0	0	1	1	0	0	0	0	180
TOTAL	6	3,410	429	58	281	9	2	11	13	0	0	2	0	4,221

AM PEAK HOUR	8:15 AM
AM PEAK VOLUME	763

PM	COMBINED													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	175	15	5	14	2	0	0	0	0	0	0	0	211
12:15	1	203	17	0	19	0	0	2	0	0	1	0	0	243
12:30	0	209	25	6	17	0	0	0	0	0	0	0	0	257
12:45	1	268	26	3	9	2	0	0	0	0	0	0	0	309
13:00	0	141	20	2	12	0	0	2	0	0	0	0	1	178
13:15	0	157	25	0	21	1	0	0	0	0	0	0	0	204
13:30	1	179	21	3	14	0	0	1	0	0	0	0	0	219
13:45	1	175	14	1	15	2	1	0	0	0	0	0	0	209
14:00	0	172	24	2	15	1	0	0	1	0	0	0	0	215
14:15	0	168	22	1	11	0	0	0	0	0	0	0	0	202
14:30	0	189	26	4	17	2	0	0	0	0	0	0	0	238
14:45	0	153	23	2	19	0	0	0	0	0	0	0	0	197
15:00	1	176	29	2	11	0	0	0	0	0	0	0	0	219
15:15	0	157	20	1	7	1	0	1	0	0	0	0	0	187
15:30	1	176	25	0	19	1	0	0	0	0	0	0	0	222
15:45	1	170	18	2	17	3	0	1	0	0	0	0	0	212
16:00	1	190	19	1	15	0	0	1	0	0	0	0	0	227
16:15	1	164	17	0	15	3	0	0	0	0	0	0	0	200
16:30	0	187	15	0	16	1	0	1	0	0	0	0	0	220
16:45	0	152	15	2	11	1	0	0	0	0	0	0	0	181
17:00	0	182	7	3	7	2	0	0	0	0	0	0	0	201
17:15	0	157	19	1	12	2	0	0	0	0	0	0	0	191
17:30	0	138	18	2	11	0	0	0	0	0	0	1	0	170
17:45	1	171	21	0	7	0	0	0	0	0	0	1	0	201
18:00	0	144	8	4	3	0	0	0	0	0	0	0	0	159
18:15	0	121	9	3	6	1	0	1	0	0	0	0	0	141
18:30	0	96	5	0	6	2	0	0	0	0	0	0	1	110
18:45	0	119	11	1	8	1	0	0	0	0	0	0	0	140
19:00	0	89	8	1	6	0	0	0	0	0	0	0	0	104
19:15	0	90	6	0	8	0	0	0	0	0	0	0	0	104
19:30	0	105	19	0	4	0	0	0	0	0	0	0	0	128
19:45	0	85	17	4	7	0	0	1	0	0	0	0	0	114
20:00	0	67	6	0	3	0	0	0	0	0	0	0	0	76
20:15	0	51	6	0	5	0	0	1	0	0	0	0	0	63
20:30	0	67	1	1	5	0	0	0	0	0	0	0	0	74
20:45	0	53	2	0	4	0	0	0	0	0	0	0	0	59
21:00	0	50	6	0	1	0	0	0	0	0	0	0	0	57
21:15	0	35	6	0	3	0	0	0	0	0	0	0	0	44
21:30	0	43	3	0	2	0	0	0	0	0	0	0	0	48
21:45	0	34	1	0	2	0	0	0	0	0	0	0	0	37
22:00	0	32	0	0	1	0	0	0	0	0	0	0	0	33
22:15	0	27	5	0	2	0	0	0	0	0	0	0	0	34
22:30	0	26	4	0	0	0	0	0	0	0	0	0	0	30
22:45	0	19	2	0	0	0	0	0	2	0	0	0	0	23
23:00	0	20	3	0	0	0	0	0	0	0	0	0	0	23
23:15	0	10	3	0	0	0	0	0	0	0	0	0	0	13
23:30	0	20	2	0	1	0	0	0	0	0	0	0	0	23
23:45	0	11	1	0	0	0	0	0	0	0	0	0	0	12
TOTAL	10	5,623	615	57	408	28	1	12	3	0	1	2	2	6,762

PM PEAK HOUR	12:00 PM
PM PEAK VOLUME	1,020

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
TOTAL: AM+PM	16	9,033	1,044	115	689	37	3	23	16	0	1	4	2	10,983
% OF TOTAL	0.1%	82.2%	9.5%	1.0%	6.3%	0.3%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS12 Barstow Rd btw Mountain View & Virginia Way.

AM	NORTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
0:15	0	5	1	0	0	0	0	0	0	0	0	0	0	6
0:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
0:45	0	6	0	0	1	0	0	0	0	0	0	0	0	7
1:00	0	4	0	0	0	0	0	1	0	0	0	0	0	5
1:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
1:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
1:45	0	3	0	0	0	0	0	1	0	0	0	0	0	4
2:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
3:15	0	1	0	0	1	0	0	0	0	0	0	0	0	2
3:30	0	4	0	0	2	0	0	1	0	0	0	0	0	7
3:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
4:00	0	8	0	0	2	0	0	0	0	0	0	0	0	10
4:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
4:30	0	3	1	0	1	0	0	0	0	0	0	0	0	5
4:45	0	8	2	0	1	0	0	0	0	0	0	0	0	11
5:00	0	12	2	0	1	0	0	0	0	0	0	0	0	15
5:15	0	18	1	0	3	0	0	0	0	0	0	0	0	22
5:30	0	15	2	0	3	0	0	0	0	0	0	0	0	20
5:45	0	23	2	3	6	0	0	0	1	0	0	0	0	35
6:00	0	18	2	2	0	0	0	0	0	0	0	0	0	22
6:15	0	31	8	0	2	0	0	0	0	0	0	0	0	41
6:30	0	46	4	0	9	0	0	0	0	0	0	0	0	59
6:45	1	89	12	4	11	0	0	0	0	0	0	0	0	117
7:00	0	111	11	0	7	0	0	0	0	0	0	0	0	129
7:15	0	63	10	2	8	0	0	0	0	0	0	0	0	83
7:30	0	60	12	2	3	0	0	0	0	0	0	0	0	77
7:45	0	79	13	2	4	0	0	0	0	0	0	0	0	98
8:00	0	66	13	0	7	0	0	0	0	0	0	0	0	86
8:15	0	85	13	0	5	0	0	0	0	0	0	0	0	103
8:30	0	101	11	5	8	0	0	0	0	0	0	0	0	125
8:45	0	92	7	1	7	0	0	1	0	0	0	0	0	108
9:00	0	66	11	0	7	1	0	0	0	0	0	0	0	85
9:15	0	53	8	0	3	0	0	0	1	0	0	0	0	65
9:30	0	52	9	2	8	0	0	0	0	0	0	0	0	71
9:45	0	61	9	1	5	0	0	0	0	0	0	0	0	76
10:00	0	70	8	1	7	0	0	0	0	0	0	0	0	86
10:15	0	58	10	0	9	0	0	0	0	0	0	0	0	77
10:30	1	54	3	2	6	0	0	0	0	0	0	0	0	66
10:45	0	65	7	2	6	0	0	0	0	0	0	0	0	80
11:00	0	75	4	0	4	0	0	0	0	0	0	0	0	83
11:15	0	71	9	0	7	0	0	0	1	0	0	0	0	88
11:30	1	69	10	1	9	0	1	0	0	0	0	0	0	91
11:45	0	73	6	1	9	0	0	0	0	0	0	0	0	89
TOTAL	3	1,758	224	31	173	1	1	4	3	0	0	0	0	2,198

AM PEAK HOUR	8:00 AM
AM PEAK VOLUME	422

PM	NORTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	2	82	15	1	8	0	0	1	0	0	0	0	0	109
12:15	1	76	17	0	4	0	0	0	0	0	0	0	0	98
12:30	0	75	11	0	7	0	0	0	0	0	0	0	0	93
12:45	0	82	10	1	4	0	0	0	1	0	0	0	0	98
13:00	2	77	9	1	11	0	0	1	0	0	0	0	0	101
13:15	1	70	12	2	6	0	0	0	0	0	0	0	0	91
13:30	0	69	14	0	19	0	0	1	0	0	0	0	0	103
13:45	2	73	15	1	16	0	0	0	1	0	0	0	0	108
14:00	0	76	17	2	18	0	0	1	0	0	0	0	0	114
14:15	0	103	22	2	16	0	0	1	0	0	0	0	0	144
14:30	0	104	16	5	15	0	0	0	0	0	0	0	0	140
14:45	2	80	12	1	7	1	0	0	1	0	0	0	0	104
15:00	2	89	9	1	13	1	0	1	0	0	0	0	0	116
15:15	0	89	21	1	5	0	0	0	0	0	0	0	0	116
15:30	0	79	15	0	15	0	0	0	0	0	0	0	0	109
15:45	0	81	8	2	8	0	0	0	0	0	0	0	0	99
16:00	1	96	9	0	11	0	0	0	0	0	0	0	0	117
16:15	0	67	22	2	9	0	0	0	0	0	0	0	0	100
16:30	0	90	11	0	6	1	0	1	0	0	0	0	0	109
16:45	0	62	7	2	9	0	0	0	0	0	0	0	0	80
17:00	0	78	10	2	6	0	0	0	0	0	0	0	0	96
17:15	0	70	5	0	11	0	0	0	0	0	0	0	0	86
17:30	0	65	10	0	6	0	0	0	0	0	0	0	0	81
17:45	0	75	3	2	9	1	0	0	0	0	0	0	0	90
18:00	0	50	11	1	9	0	0	0	0	0	0	0	0	71
18:15	1	54	9	0	6	0	0	0	0	0	0	0	0	70
18:30	0	50	8	0	4	0	0	0	0	0	0	0	0	62
18:45	1	65	7	0	5	0	0	0	1	0	0	0	0	79
19:00	0	44	9	0	3	0	0	0	0	0	0	0	0	56
19:15	1	33	4	1	4	0	0	0	0	0	0	0	0	43
19:30	0	31	3	0	4	0	0	0	0	0	0	0	0	38
19:45	2	30	4	1	4	0	0	0	0	0	0	0	0	41
20:00	0	37	6	1	6	0	0	0	0	0	0	0	0	50
20:15	0	30	5	0	3	0	0	0	0	0	0	0	0	38
20:30	0	26	1	0	3	0	0	0	0	0	0	0	0	30
20:45	0	33	3	0	1	0	0	0	0	0	0	0	0	37
21:00	0	29	2	0	3	0	0	0	0	0	0	0	0	34
21:15	1	21	2	0	1	0	0	0	0	0	0	0	0	25
21:30	0	23	1	0	2	0	0	0	0	0	0	0	0	26
21:45	0	15	5	0	1	0	0	0	1	0	0	0	0	22
22:00	0	14	0	0	1	0	0	0	0	0	0	0	0	15
22:15	0	12	1	0	0	0	0	0	0	0	0	0	0	13
22:30	0	18	2	0	1	0	0	0	0	0	0	0	0	21
22:45	0	12	3	0	1	0	0	0	0	0	0	0	0	16
23:00	0	13	1	0	0	0	0	0	0	0	0	0	0	14
23:15	0	10	0	0	0	0	0	0	0	0	0	0	0	10
23:30	0	12	2	0	3	0	0	1	0	0	0	0	0	18
23:45	0	9	0	0	0	0	0	0	0	0	0	0	0	9
TOTAL	19	2,579	389	32	304	4	0	8	5	0	0	0	0	3,340

PM PEAK HOUR	1:45 PM
PM PEAK VOLUME	506

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	22	4,337	613	63	477	5	1	12	8	0	0	0	0	5,538
% OF TOTAL	0.4%	78.3%	11.1%	1.1%	8.6%	0.1%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

TOTAL: ALL	32	8,890	1,120	120	815	36	8	23	16	0	1	1	0	11,062
% OF TOTAL	0.6%	160.5%	20.2%	2.2%	14.7%	0.7%	0.1%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS12 Barstow Rd btw Mountain View & Virginia Way.

AM	SOUTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	6	2	0	1	0	0	0	0	0	0	0	0	9
0:15	0	3	1	0	0	0	0	0	0	0	0	0	0	4
0:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
0:45	0	4	1	0	1	0	0	0	0	0	0	0	0	6
1:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
1:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:15	0	5	0	0	0	0	0	0	1	0	0	0	0	6
2:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
3:45	0	1	0	0	1	0	0	0	0	0	0	0	0	2
4:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
4:15	0	2	0	0	2	0	0	0	0	0	0	0	0	4
4:30	0	7	0	0	1	0	0	0	0	0	0	0	0	8
4:45	0	10	2	1	0	0	0	0	0	0	0	0	0	13
5:00	0	18	0	2	1	0	0	0	0	0	0	0	0	21
5:15	0	9	3	2	0	0	0	0	0	0	0	0	0	14
5:30	0	14	3	0	2	0	0	0	0	0	0	0	0	19
5:45	0	25	4	1	0	1	0	0	0	0	0	0	0	31
6:00	0	17	3	1	5	0	0	0	1	0	0	0	0	27
6:15	0	15	5	1	1	0	0	0	0	0	0	0	0	22
6:30	0	23	2	2	2	0	0	0	1	0	0	0	0	30
6:45	0	52	6	5	3	0	0	0	0	0	0	0	0	66
7:00	0	70	14	2	6	0	0	1	0	0	0	0	0	93
7:15	0	39	6	0	2	0	0	1	0	0	0	0	0	48
7:30	0	26	2	1	1	0	0	0	0	0	0	0	0	30
7:45	0	39	3	0	5	1	0	0	0	0	0	0	0	48
8:00	0	62	7	2	6	0	0	0	0	0	0	0	0	77
8:15	0	46	8	0	5	1	0	0	0	0	0	0	0	60
8:30	0	65	7	0	6	0	0	0	0	0	0	1	0	79
8:45	0	71	6	1	11	1	0	0	0	0	0	0	0	90
9:00	0	78	7	1	8	0	1	0	0	0	0	0	0	95
9:15	0	50	8	0	6	1	0	1	0	0	0	0	0	66
9:30	1	70	7	0	4	1	0	0	1	0	0	0	0	84
9:45	0	77	6	0	8	1	0	1	0	0	0	0	0	93
10:00	0	64	13	2	10	2	0	0	0	0	0	0	0	91
10:15	0	67	12	0	8	0	1	0	0	0	0	0	0	88
10:30	0	63	7	0	2	1	0	0	0	0	0	0	0	73
10:45	0	78	6	1	4	1	0	0	0	0	0	0	0	90
11:00	0	71	7	0	9	0	0	0	0	0	0	0	0	87
11:15	0	59	8	0	7	1	0	1	0	0	0	0	0	76
11:30	0	68	7	1	9	1	0	1	0	0	0	0	0	87
11:45	1	87	11	0	3	1	0	0	0	0	0	0	0	103
TOTAL	2	1,503	186	26	141	14	2	6	4	0	0	1	0	1,885

AM PEAK HOUR	9:30 AM
AM PEAK VOLUME	356

PM	SOUTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	85	8	1	5	1	2	0	0	0	0	0	0	102
12:15	0	67	8	0	9	0	0	0	0	0	0	0	0	84
12:30	1	63	5	1	8	2	0	1	0	0	0	0	0	81
12:45	0	70	10	0	2	0	0	0	0	0	0	0	0	82
13:00	0	92	12	2	8	1	0	0	0	0	0	0	0	115
13:15	0	61	13	1	3	0	0	1	1	0	0	0	0	80
13:30	2	77	9	0	8	0	0	1	1	0	0	0	0	98
13:45	1	84	17	1	12	0	0	0	0	0	0	0	0	115
14:00	0	78	4	8	9	0	0	1	0	0	0	0	0	100
14:15	0	84	8	0	6	1	0	0	0	0	0	0	0	99
14:30	0	140	12	0	9	4	0	0	0	0	0	0	0	165
14:45	0	88	7	3	4	1	1	0	0	0	0	0	0	104
15:00	0	97	9	0	7	1	1	0	0	0	0	0	0	115
15:15	0	100	7	0	5	1	1	0	0	0	0	0	0	114
15:30	1	105	7	0	8	0	0	0	1	0	0	0	0	122
15:45	0	86	11	1	10	0	0	0	0	0	0	0	0	108
16:00	1	137	11	1	2	1	0	0	0	0	0	0	0	153
16:15	0	109	14	2	6	0	0	0	0	0	0	0	0	131
16:30	0	148	18	0	6	2	0	0	0	0	0	0	0	174
16:45	0	108	15	1	5	1	0	0	0	0	0	0	0	130
17:00	0	131	9	1	8	0	0	0	0	0	0	0	0	149
17:15	0	109	11	2	5	0	0	0	0	0	0	0	0	127
17:30	1	74	11	0	3	0	0	0	0	0	1	0	0	90
17:45	0	104	13	1	5	0	0	0	0	0	0	0	0	123
18:00	0	85	5	1	7	0	0	0	0	0	0	0	0	98
18:15	0	53	4	2	4	0	0	0	0	0	0	0	0	63
18:30	0	53	6	0	1	0	0	0	0	0	0	0	0	60
18:45	0	59	6	0	3	0	0	0	0	0	0	0	0	68
19:00	0	44	1	0	3	0	0	0	0	0	0	0	0	48
19:15	0	45	5	0	5	0	0	0	0	0	0	0	0	55
19:30	0	50	5	0	4	0	0	0	0	0	0	0	0	59
19:45	1	41	4	2	2	0	0	0	0	0	0	0	0	50
20:00	0	48	7	0	2	1	0	0	0	0	0	0	0	58
20:15	0	32	4	0	1	0	0	1	0	0	0	0	0	38
20:30	0	30	6	0	4	0	0	0	0	0	0	0	0	40
20:45	0	33	5	0	0	0	0	0	0	0	0	0	0	38
21:00	0	26	2	0	0	0	0	0	0	0	0	0	0	28
21:15	0	20	1	0	1	0	0	0	0	0	0	0	0	22
21:30	0	17	2	0	2	0	0	0	0	0	0	0	0	21
21:45	0	17	4	0	2	0	0	0	0	0	0	0	0	23
22:00	0	14	0	0	0	0	0	0	1	0	0	0	0	15
22:15	0	11	1	0	1	0	0	0	0	0	0	0	0	13
22:30	0	21	1	0	0	0	0	0	0	0	0	0	0	22
22:45	0	16	1	0	1	0	0	0	0	0	0	0	0	18
23:00	0	12	1	0	0	0	0	0	0	0	0	0	0	13
23:15	0	14	1	0	0	0	0	0	0	0	0	0	0	15
23:30	0	7	0	0	1	0	0	0	0	0	0	0	0	8
23:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
TOTAL	8	3,050	321	31	197	17	5	5	4	0	1	0	0	3,639

PM PEAK HOUR	4:00 PM
PM PEAK VOLUME	588

TOTAL: AM+PM	10	4,553	507	57	338	31	7	11	8	0	1	1	0	5,524
% OF TOTAL	0.2%	82.4%	9.2%	1.0%	6.1%	0.6%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

CLASS 1	Class 1 — Motorcycles
CLASS 2	Passenger Cars
CLASS 3	2 Axles, 4-Tire Single Units
CLASS 4	Buses
CLASS 5	2 Axles, 6-Tire Single Units
CLASS 6	3 Axles, Single Unit
CLASS 7	4 or More Axles, Single Unit
CLASS 8	3 to 4 Axles, Single Trailer
CLASS 9	5 Axles, Single Trailer
CLASS 10	6 or More Axles, Single Trailer
CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 12	6 Axles, Multi-Trailers
CLASS 13	7 or More Axles, Multi-Trailers

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3888

CITY: Barstow
LOCATION: CLASS12 Barstow Rd btw Mountain View & Virginia Way.

AM	COMBINED													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	12	4	0	1	0	0	0	0	0	0	0	0	17
0:15	0	8	2	0	0	0	0	0	0	0	0	0	0	10
0:30	0	8	1	0	0	0	0	0	0	0	0	0	0	9
0:45	0	10	1	0	2	0	0	0	0	0	0	0	0	13
1:00	0	6	0	0	1	0	0	1	0	0	0	0	0	8
1:15	0	9	1	0	0	0	0	0	0	0	0	0	0	10
1:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
1:45	0	5	0	0	0	0	0	1	0	0	0	0	0	6
2:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
2:15	0	8	0	0	0	0	0	0	1	0	0	0	0	9
2:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
2:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8
3:00	0	4	0	0	1	0	0	0	0	0	0	0	0	5
3:15	0	3	0	0	1	0	0	0	0	0	0	0	0	4
3:30	0	10	0	0	2	0	0	1	0	0	0	0	0	13
3:45	0	5	0	0	1	0	0	0	0	0	0	0	0	6
4:00	0	15	1	0	2	0	0	0	0	0	0	0	0	18
4:15	0	6	0	0	2	0	0	0	0	0	0	0	0	8
4:30	0	10	1	0	2	0	0	0	0	0	0	0	0	13
4:45	0	18	4	1	1	0	0	0	0	0	0	0	0	24
5:00	0	30	2	2	2	0	0	0	0	0	0	0	0	36
5:15	0	27	4	2	3	0	0	0	0	0	0	0	0	36
5:30	0	29	5	0	5	0	0	0	0	0	0	0	0	39
5:45	0	48	6	4	6	1	0	0	1	0	0	0	0	66
6:00	0	35	5	3	5	0	0	0	1	0	0	0	0	49
6:15	0	46	13	1	3	0	0	0	0	0	0	0	0	63
6:30	0	69	6	2	11	0	0	0	1	0	0	0	0	89
6:45	1	141	18	9	14	0	0	0	0	0	0	0	0	183
7:00	0	181	25	2	13	0	0	1	0	0	0	0	0	222
7:15	0	102	16	2	10	0	0	1	0	0	0	0	0	131
7:30	0	86	14	3	4	0	0	0	0	0	0	0	0	107
7:45	0	118	16	2	9	1	0	0	0	0	0	0	0	146
8:00	0	128	20	2	13	0	0	0	0	0	0	0	0	163
8:15	0	131	21	0	10	1	0	0	0	0	0	0	0	163
8:30	0	166	18	5	14	0	0	0	0	0	0	1	0	204
8:45	0	163	13	2	18	1	0	1	0	0	0	0	0	198
9:00	0	144	18	1	15	1	1	0	0	0	0	0	0	180
9:15	0	103	16	0	9	1	0	1	1	0	0	0	0	131
9:30	1	122	16	2	12	1	0	0	1	0	0	0	0	155
9:45	0	138	15	1	13	1	0	1	0	0	0	0	0	169
10:00	0	134	21	3	17	2	0	0	0	0	0	0	0	177
10:15	0	125	22	0	17	0	1	0	0	0	0	0	0	165
10:30	1	117	10	2	8	1	0	0	0	0	0	0	0	139
10:45	0	143	13	3	10	1	0	0	0	0	0	0	0	170
11:00	0	146	11	0	13	0	0	0	0	0	0	0	0	170
11:15	0	130	17	0	14	1	0	1	1	0	0	0	0	164
11:30	1	137	17	2	18	1	1	1	0	0	0	0	0	178
11:45	1	160	17	1	12	1	0	0	0	0	0	0	0	192
TOTAL	5	3,261	410	57	314	15	3	10	7	0	0	1	0	4,083

AM PEAK HOUR	8:15 AM
AM PEAK VOLUME	745

PM	COMBINED													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	2	167	23	2	13	1	2	1	0	0	0	0	0	211
12:15	1	143	25	0	13	0	0	0	0	0	0	0	0	182
12:30	1	138	16	1	15	2	0	1	0	0	0	0	0	174
12:45	0	152	20	1	6	0	0	0	1	0	0	0	0	180
13:00	2	169	21	3	19	1	0	1	0	0	0	0	0	216
13:15	1	131	25	3	9	0	0	1	1	0	0	0	0	171
13:30	2	146	23	0	27	0	0	2	1	0	0	0	0	201
13:45	3	157	32	2	28	0	0	0	1	0	0	0	0	223
14:00	0	154	21	10	27	0	0	2	0	0	0	0	0	214
14:15	0	187	30	2	22	1	0	1	0	0	0	0	0	243
14:30	0	244	28	5	24	4	0	0	0	0	0	0	0	305
14:45	2	168	19	4	11	2	1	0	1	0	0	0	0	208
15:00	2	186	18	1	20	2	1	1	0	0	0	0	0	231
15:15	0	189	28	1	10	1	1	0	0	0	0	0	0	230
15:30	1	184	22	0	23	0	0	0	1	0	0	0	0	231
15:45	0	167	19	3	18	0	0	0	0	0	0	0	0	207
16:00	2	233	20	1	13	1	0	0	0	0	0	0	0	270
16:15	0	176	36	4	15	0	0	0	0	0	0	0	0	231
16:30	0	238	29	0	12	3	0	1	0	0	0	0	0	283
16:45	0	170	22	3	14	1	0	0	0	0	0	0	0	210
17:00	0	209	19	3	14	0	0	0	0	0	0	0	0	245
17:15	0	179	16	2	16	0	0	0	0	0	0	0	0	213
17:30	1	139	21	0	9	0	0	0	0	0	1	0	0	171
17:45	0	179	16	3	14	1	0	0	0	0	0	0	0	213
18:00	0	135	16	2	16	0	0	0	0	0	0	0	0	169
18:15	1	107	13	2	10	0	0	0	0	0	0	0	0	133
18:30	0	103	14	0	5	0	0	0	0	0	0	0	0	122
18:45	1	124	13	0	8	0	0	0	1	0	0	0	0	147
19:00	0	88	10	0	6	0	0	0	0	0	0	0	0	104
19:15	1	78	9	1	9	0	0	0	0	0	0	0	0	98
19:30	0	81	8	0	8	0	0	0	0	0	0	0	0	97
19:45	3	71	8	3	6	0	0	0	0	0	0	0	0	91
20:00	0	85	13	1	8	1	0	0	0	0	0	0	0	108
20:15	0	62	9	0	4	0	0	1	0	0	0	0	0	76
20:30	0	56	7	0	7	0	0	0	0	0	0	0	0	70
20:45	0	66	8	0	1	0	0	0	0	0	0	0	0	75
21:00	0	55	4	0	3	0	0	0	0	0	0	0	0	62
21:15	1	41	3	0	2	0	0	0	0	0	0	0	0	47
21:30	0	40	3	0	4	0	0	0	0	0	0	0	0	47
21:45	0	32	9	0	3	0	0	0	1	0	0	0	0	45
22:00	0	28	0	0	1	0	0	0	1	0	0	0	0	30
22:15	0	23	2	0	1	0	0	0	0	0	0	0	0	26
22:30	0	39	3	0	1	0	0	0	0	0	0	0	0	43
22:45	0	28	4	0	2	0	0	0	0	0	0	0	0	34
23:00	0	25	2	0	0	0	0	0	0	0	0	0	0	27
23:15	0	24	1	0	0	0	0	0	0	0	0	0	0	25
23:30	0	19	2	0	4	0	0	1	0	0	0	0	0	26
23:45	0	14	0	0	0	0	0	0	0	0	0	0	0	14
TOTAL	27	5,629	710	63	501	21	5	13	9	0	1	0	0	6,979

PM PEAK HOUR	4:00 PM
PM PEAK VOLUME	994

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	32	8,890	1,120	120	815	36	8	23	16	0	1	1	0	11,062
% OF TOTAL	0.3%	80.4%	10.1%	1.1%	7.4%	0.3%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%

Field Data Services of Arizona, Inc./Veracity Traffic Group – May 2025

Intersection 2

FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP

PROJECT: 25-1314-007

DATE: 5/22/2025

LOCATION: Main St east of Country Club Dr

EASTBOUND

TIME	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	TOTAL
00:00 AM	0	18	0	0	0	0	0	0	0	0	0	0	0	18
01:00	0	13	1	0	0	0	0	0	0	0	0	0	0	14
02:00	1	4	0	0	0	0	0	0	1	0	0	0	0	6
03:00	0	17	0	0	0	0	0	0	1	0	0	0	0	18
04:00	0	41	1	0	0	0	0	0	1	0	0	0	0	43
05:00	0	116	2	3	1	0	2	0	0	0	1	0	0	125
06:00	0	136	1	0	4	1	1	0	4	0	0	0	0	147
07:00	3	147	0	2	3	1	1	0	1	0	0	0	0	158
08:00	0	109	0	1	3	1	1	0	4	0	0	0	0	119
09:00	0	99	2	2	2	1	0	0	1	0	1	0	0	108
10:00	1	110	1	0	2	0	0	1	1	0	1	0	0	117
11:00	0	98	1	0	1	0	0	0	0	0	0	0	0	100
12:00 PM	0	58	0	1	1	0	0	2	1	0	0	0	0	63
13:00	0	77	0	1	0	1	0	0	0	0	1	0	0	80
14:00	0	69	0	2	0	0	0	0	1	0	0	0	0	72
15:00	0	87	0	3	1	1	0	0	1	0	0	0	0	93
16:00	1	117	4	2	2	0	0	0	7	0	0	0	0	133
17:00	4	102	0	1	0	0	0	0	0	0	1	0	0	108
18:00	1	91	0	2	1	0	0	1	1	0	0	0	0	97
19:00	0	68	0	1	1	0	0	0	0	0	0	0	0	70
20:00	1	53	0	1	0	0	0	0	1	0	0	0	0	56
21:00	1	33	1	0	0	0	0	0	1	0	0	0	0	36
22:00	0	23	0	0	0	0	0	0	0	0	0	0	0	23
23:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
TOTAL	**13**	**1697**	**14**	**22**	**22**	**6**	**5**	**4**	**27**		**5**			**1815**
% OF TOTAL	1%	93%	1%	1%	1%	0%	0%	0%	1%		0%			100%
% AM	0%	50%	0%	0%	1%	0%	0%	0%	1%		0%			54%
AM PEAK HOUR	07:00	07:00	05:00	05:00	06:00	06:00	05:00	10:00	06:00		05:00			07:00
VOLUME	3	147	2	3	4	1	2	1	4		1			158
% PM	0%	43%	0%	1%	0%	0%		0%	1%		0%			46%
PM PEAK HOUR	17:00	16:00	16:00	15:00	16:00	13:00		12:00	16:00		13:00			16:00
VOLUME	4	117	4	3	2	1		2	7		1			133

SUMMARY	CLASS TYPE	TOTAL	PERCENT OF TOTAL VEHICLES			PERCENT OF CLASS		
	TOTAL VEHICLES	**1815**	**TOTAL%**	**AM%**	**PM%**	**TOTAL%**	**AM%**	**PM%**
	CLASS #1	13	0.7%	0.3%	0.4%	100.0%	38.5%	61.5%
	CLASS #2	1697	93.5%	50.0%	43.5%	100.0%	53.5%	46.5%
	CLASS #3	14	0.8%	0.5%	0.3%	100.0%	64.3%	35.7%
	CLASS #4 THRU #13	91	5.0%	2.8%	2.2%	100.0%	56.0%	44.0%
	% of Commerical Traffic	**47**	**2.6%**	**(Classes 6-13)**				
	% of Single Unit Trucks	**42**	**2.3%**	**(Classes 6-10)**				
	% of Multi-Unit Trucks	**5**	**0.3%**	**(Classes 11-13)**				

1: MOTORCYCLES - 2 AXLES **5: SINGLE UNIT - 2 AXLES & 6 TIRES** **9: DOUBLE UNIT - 5 AXLES** **13: MULTI UNIT - >6 AXLES**
2: PASSENGER CARS - 2 AXLES **6: SINGLE UNIT TRUCK - 3 AXLES** **10: DOUBLE UNIT - >5 AXLES**
3: PICKUP TRUCKS & VANS - 2 AXLE **7: SINGLE UNIT - 4 AXLES** **11: MULTI UNIT - 6 AXLES**
4: BUSES **8: DOUBLE UNIT - <5 AXLES** **12: MULTI UNIT - <6 AXLES**

FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP

PROJECT: 25-1314-007

DATE: 5/22/2025

LOCATION: Main St east of Country Club Dr

WESTBOUND

TIME	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	TOTAL
00:00 AM	0	20	1	0	0	0	0	0	0	0	0	0	0	21
01:00	0	14	0	0	0	0	0	0	1	0	0	0	0	15
02:00	1	7	0	0	0	0	0	0	0	0	0	0	0	8
03:00	1	9	0	0	0	0	0	0	0	0	0	0	0	10
04:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
05:00	1	29	1	1	1	1	0	0	1	0	0	0	0	35
06:00	0	47	1	4	0	1	0	0	1	0	0	0	0	54
07:00	2	57	2	1	5	2	0	0	1	0	0	0	0	70
08:00	9	60	1	0	2	1	0	0	4	0	1	0	0	78
09:00	0	62	3	1	1	1	0	0	3	0	0	0	0	71
10:00	0	58	2	0	0	1	1	1	1	0	0	0	0	64
11:00	0	71	1	1	0	0	1	0	0	0	0	0	0	74
12:00 PM	1	77	1	0	0	1	0	1	0	0	0	0	0	81
13:00	0	85	1	1	0	0	1	0	0	0	0	0	0	88
14:00	1	97	0	0	0	0	0	0	0	0	0	0	0	98
15:00	1	142	2	3	2	1	1	0	2	0	1	0	0	155
16:00	1	194	4	0	1	1	0	0	1	0	4	0	0	206
17:00	3	165	3	2	2	1	0	1	1	0	0	0	0	178
18:00	0	116	1	2	1	0	0	0	1	0	0	0	0	121
19:00	1	100	1	1	0	0	0	0	0	0	0	0	0	103
20:00	0	83	3	0	0	0	0	0	1	0	0	0	0	87
21:00	0	64	0	0	1	0	0	0	0	0	0	0	0	65
22:00	1	38	0	0	0	0	0	0	0	0	0	0	0	39
23:00	0	27	0	0	0	0	0	0	0	0	0	0	0	27
TOTAL	**23**	**1628**	**28**	**17**	**16**	**11**	**4**	**3**	**18**		**6**			**1754**
% OF TOTAL	1%	93%	2%	1%	1%	1%	0%	0%	1%		0%			100%
% AM	1%	25%	1%	0%	1%	0%	0%	0%	1%		0%			29%
AM PEAK HOUR	08:00	11:00	09:00	06:00	07:00	07:00	10:00	10:00	08:00		08:00			08:00
VOLUME	9	71	3	4	5	2	1	1	4		1			78
% PM	1%	68%	1%	1%	0%	0%	0%	0%	0%		0%			71%
PM PEAK HOUR	17:00	16:00	16:00	15:00	15:00	12:00	13:00	12:00	15:00		16:00			16:00
VOLUME	3	194	4	3	2	1	1	1	2		4			206

SUMMARY	CLASS TYPE	TOTAL	PERCENT OF TOTAL VEHICLES			PERCENT OF CLASS		
	TOTAL VEHICLES	**1754**	**TOTAL%**	**AM%**	**PM%**	**TOTAL%**	**AM%**	**PM%**
	CLASS #1	23	1.3%	0.8%	0.5%	100.0%	60.9%	39.1%
	CLASS #2	1628	92.8%	25.1%	67.7%	100.0%	27.0%	73.0%
	CLASS #3	28	1.6%	0.7%	0.9%	100.0%	42.9%	57.1%
	CLASS #4 THRU #13	75	4.3%	2.3%	2.0%	100.0%	53.3%	46.7%
	% of Commerical Traffic	**42**	**2.4% (Classes 6-13)**					
	% of Single Unit Trucks	**36**	**2.1% (Classes 6-10)**					
	% of Multi-Unit Trucks	**6**	**0.3% (Classes 11-13)**					

1: MOTORCYCLES - 2 AXLES
2: PASSENGER CARS - 2 AXLES
3: PICKUP TRUCKS & VANS - 2 AXLE
4: BUSES
5: SINGLE UNIT - 2 AXLES & 6 TIRES
6: SINGLE UNIT TRUCK - 3 AXLES
7: SINGLE UNIT - 4 AXLES
8: DOUBLE UNIT - <5 AXLES
9: DOUBLE UNIT - 5 AXLES
10: DOUBLE UNIT - >5 AXLES
11: MULTI UNIT - 6 AXLES
12: MULTI UNIT - <6 AXLES
13: MULTI UNIT - >6 AXLES

FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP

PROJECT: 25-1314-007

DATE: 5/22/2025 LOCATION: Main St east of Country Club Dr

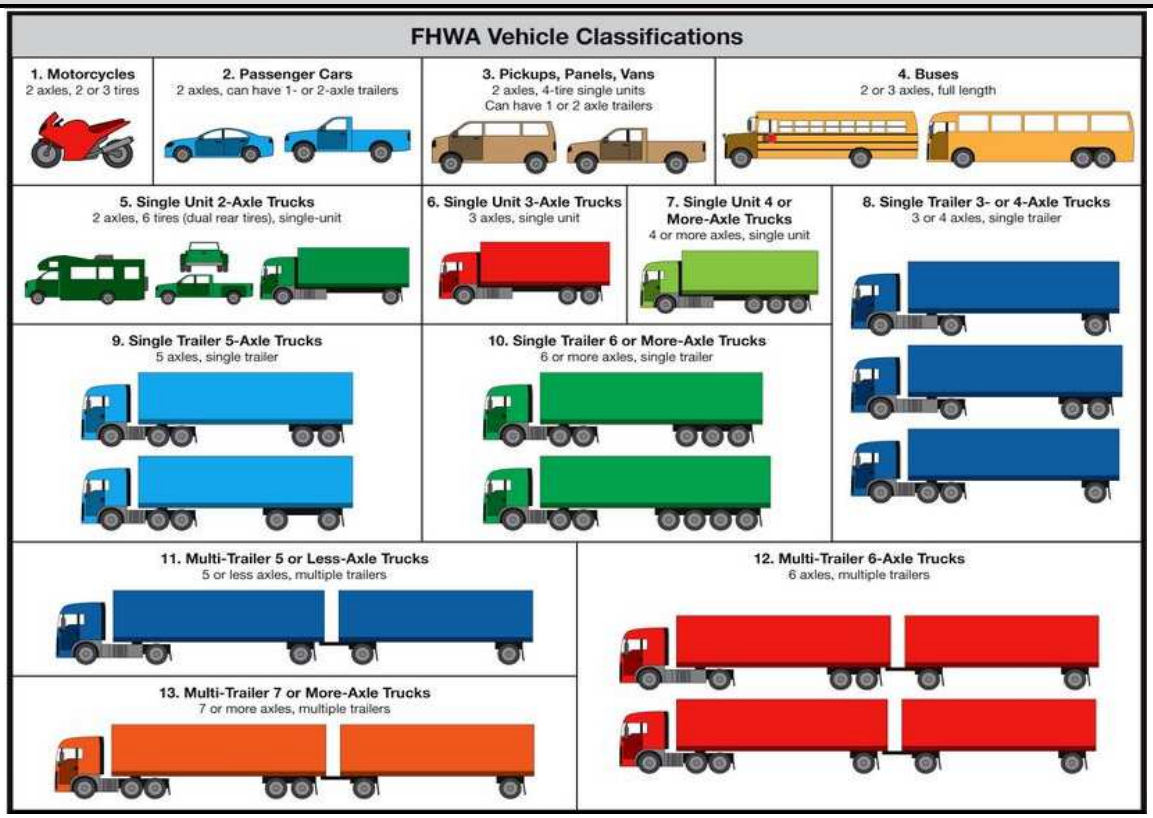
NORTHBOUND/SOUTHBOUND

TIME	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	TOTAL
00:00 AM	0	38	1	0	0	0	0	0	0	0	0	0	0	39
01:00	0	27	1	0	0	0	0	0	1	0	0	0	0	29
02:00	2	11	0	0	0	0	0	0	1	0	0	0	0	14
03:00	1	26	0	0	0	0	0	0	1	0	0	0	0	28
04:00	0	47	1	0	0	0	0	0	1	0	0	0	0	49
05:00	1	145	3	4	2	1	2	0	1	0	1	0	0	160
06:00	0	183	2	4	4	2	1	0	5	0	0	0	0	201
07:00	5	204	2	3	8	3	1	0	2	0	0	0	0	228
08:00	9	169	1	1	5	2	1	0	8	0	1	0	0	197
09:00	0	161	5	3	3	2	0	0	4	0	1	0	0	179
10:00	1	168	3	0	2	1	1	2	2	0	1	0	0	181
11:00	0	169	2	1	1	0	1	0	0	0	0	0	0	174
12:00 PM	1	135	1	1	1	1	0	3	1	0	0	0	0	144
13:00	0	162	1	2	0	1	1	0	0	0	1	0	0	168
14:00	1	166	0	2	0	0	0	0	1	0	0	0	0	170
15:00	1	229	2	6	3	2	1	0	3	0	1	0	0	248
16:00	2	311	8	2	3	1	0	0	8	0	4	0	0	339
17:00	7	267	3	3	2	1	0	1	1	0	1	0	0	286
18:00	1	207	1	4	2	0	0	1	2	0	0	0	0	218
19:00	1	168	1	2	1	0	0	0	0	0	0	0	0	173
20:00	1	136	3	1	0	0	0	0	2	0	0	0	0	143
21:00	1	97	1	0	1	0	0	0	1	0	0	0	0	101
22:00	1	61	0	0	0	0	0	0	0	0	0	0	0	62
23:00	0	38	0	0	0	0	0	0	0	0	0	0	0	38
TOTAL	**36**	**3325**	**42**	**39**	**38**	**17**	**9**	**7**	**45**		**11**			**3569**
% OF TOTAL	1%	93%	1%	1%	1%	0%	0%	0%	1%		0%			100%
% AM	1%	38%	1%	0%	1%	0%	0%	0%	1%		0%			41%
AM PEAK HOUR	08:00	07:00	09:00	05:00	07:00	07:00	05:00	10:00	08:00		05:00			07:00
VOLUME	9	204	5	4	8	3	2	2	8		1			228
% PM	0%	55%	1%	1%	0%	0%	0%	0%	1%		0%			59%
PM PEAK HOUR	17:00	16:00	16:00	15:00	15:00	15:00	13:00	12:00	16:00		16:00			16:00
VOLUME	7	311	8	6	3	2	1	3	8		4			339

SUMMARY	CLASS TYPE	TOTAL	PERCENT OF TOTAL VEHICLES			PERCENT OF CLASS		
	TOTAL VEHICLES	**3569**	**TOTAL%**	**AM%**	**PM%**	**TOTAL%**	**AM%**	**PM%**
	CLASS #1	36	1.0%	0.5%	0.5%	100.0%	52.8%	47.2%
	CLASS #2	3325	93.2%	37.8%	55.4%	100.0%	40.5%	59.5%
	CLASS #3	42	1.2%	0.6%	0.6%	100.0%	50.0%	50.0%
	CLASS #4 THRU #13	166	4.7%	2.5%	2.1%	100.0%	54.8%	45.2%
	% of Commerical Traffic	**89**	**2.5% (Classes 6-13)**					
	% of Single Unit Trucks	**78**	**2.2% (Classes 6-10)**					
	% of Multi-Unit Trucks	**11**	**0.3% (Classes 11-13)**					

1: MOTORCYCLES - 2 AXLES **5: SINGLE UNIT - 2 AXLES & 6 TIRES** **9: DOUBLE UNIT - 5 AXLES** **13: MULTI UNIT - >6 AXLES**
2: PASSENGER CARS - 2 AXLES **6: SINGLE UNIT TRUCK - 3 AXLES** **10: DOUBLE UNIT - >5 AXLES**
3: PICKUP TRUCKS & VANS - 2 AXLE **7: SINGLE UNIT - 4 AXLES** **11: MULTI UNIT - 6 AXLES**
4: BUSES **8: DOUBLE UNIT - <5 AXLES** **12: MULTI UNIT - <6 AXLES**

FHWA Vehicle Classifications



FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP

Project #: 25-1314-007 | 0 | GPS INFORMATION

Date: 5/22/2025 | Location: Main St east of Country Club Dr | 0

EASTBOUND | 0

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
00:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6
00:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
00:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
01:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:15	1	1	0	0	0	0	0	0	0	0	0	0	0	2
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	1	0	0	0	0	0	0	1	0	0	0	0	2
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:30	0	2	0	0	0	0	0	0	1	0	0	0	0	3
03:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	5	0	0	0	0	0	0	1	0	0	0	0	6
04:15	0	10	0	0	0	0	0	0	0	0	0	0	0	10
04:30	0	10	0	0	0	0	0	0	0	0	0	0	0	10
04:45	0	16	1	0	0	0	0	0	0	0	0	0	0	17
05:00	0	18	0	1	0	0	0	0	0	0	1	0	0	20
05:15	0	32	1	0	1	0	0	0	0	0	0	0	0	34
05:30	0	26	0	0	0	0	1	0	0	0	0	0	0	27
05:45	0	40	1	2	0	0	1	0	0	0	0	0	0	44
06:00	0	30	1	0	2	0	0	0	1	0	0	0	0	34
06:15	0	27	0	0	0	1	0	0	0	0	0	0	0	28
06:30	0	39	0	0	0	0	1	0	1	0	0	0	0	41
06:45	0	40	0	0	2	0	0	0	2	0	0	0	0	44
07:00	1	33	0	0	0	1	0	0	0	0	0	0	0	35
07:15	0	37	0	2	1	0	0	0	1	0	0	0	0	41
07:30	1	35	0	0	2	0	0	0	0	0	0	0	0	38
07:45	1	42	0	0	0	0	1	0	0	0	0	0	0	44
08:00	0	24	0	0	0	1	1	0	1	0	0	0	0	27
08:15	0	25	0	0	0	0	0	0	3	0	0	0	0	28
08:30	0	29	0	0	2	0	0	0	0	0	0	0	0	31
08:45	0	31	0	1	1	0	0	0	0	0	0	0	0	33
09:00	0	29	0	1	0	0	0	0	0	0	0	0	0	30
09:15	0	25	0	1	0	1	0	0	0	0	0	0	0	27
09:30	0	21	1	0	0	0	0	0	1	0	1	0	0	24
09:45	0	24	1	0	2	0	0	0	0	0	0	0	0	27
10:00	0	29	0	0	0	0	0	0	1	0	0	0	0	30
10:15	0	34	0	0	1	0	0	1	0	0	1	0	0	37
10:30	1	19	1	0	0	0	0	0	0	0	0	0	0	21
10:45	0	28	0	0	1	0	0	0	0	0	0	0	0	29
11:00	0	29	0	0	0	0	0	0	0	0	0	0	0	29
11:15	0	19	0	0	0	0	0	0	0	0	0	0	0	19
11:30	0	27	1	0	1	0	0	0	0	0	0	0	0	29
11:45	0	23	0	0	0	0	0	0	0	0	0	0	0	23
12:00	0	18	0	1	1	0	0	1	0	0	0	0	0	21
12:15	0	12	0	0	0	0	0	0	1	0	0	0	0	13
12:30	0	16	0	0	0	0	0	0	0	0	0	0	0	16
12:45	0	12	0	0	0	0	0	1	0	0	0	0	0	13
13:00	0	21	0	0	0	0	0	0	0	0	1	0	0	22
13:15	0	20	0	0	0	0	0	0	0	0	0	0	0	20
13:30	0	21	0	0	0	1	0	0	0	0	0	0	0	22
13:45	0	15	0	1	0	0	0	0	0	0	0	0	0	16
14:00	0	20	0	0	0	0	0	0	1	0	0	0	0	21
14:15	0	19	0	0	0	0	0	0	0	0	0	0	0	19
14:30	0	16	0	0	0	0	0	0	0	0	0	0	0	16
14:45	0	14	0	2	0	0	0	0	0	0	0	0	0	16
15:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
15:15	0	21	0	1	0	1	0	0	0	0	0	0	0	23
15:30	0	25	0	2	0	0	0	0	1	0	0	0	0	28
15:45	0	28	0	0	1	0	0	0	0	0	0	0	0	29
16:00	0	17	1	0	0	0	0	0	3	0	0	0	0	21
16:15	0	30	0	0	1	0	0	0	0	0	0	0	0	31
16:30	1	38	1	1	1	0	0	0	3	0	0	0	0	45
16:45	0	32	2	1	0	0	0	0	1	0	0	0	0	36
17:00	2	22	0	1	0	0	0	0	0	0	0	0	0	25
17:15	2	19	0	0	0	0	0	0	0	0	0	0	0	21
17:30	0	30	0	0	0	0	0	0	0	0	0	0	0	30
17:45	0	31	0	0	0	0	0	0	0	0	1	0	0	32
18:00	0	29	0	0	0	0	0	0	0	0	0	0	0	29
18:15	1	22	0	1	1	0	0	0	1	0	0	0	0	26
18:30	0	22	0	0	0	0	0	0	0	0	0	0	0	22
18:45	0	18	0	1	0	0	0	1	0	0	0	0	0	20
19:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
19:15	0	20	0	1	1	0	0	0	0	0	0	0	0	22
19:30	0	20	0	0	0	0	0	0	0	0	0	0	0	20
19:45	0	17	0	0	0	0	0	0	0	0	0	0	0	17
20:00	0	19	0	0	0	0	0	0	0	0	0	0	0	19
20:15	0	14	0	1	0	0	0	0	0	0	0	0	0	15
20:30	1	10	0	0	0	0	0	0	1	0	0	0	0	12
20:45	0	10	0	0	0	0	0	0	0	0	0	0	0	10
21:00	1	7	1	0	0	0	0	0	0	0	0	0	0	9
21:15	0	10	0	0	0	0	0	0	0	0	0	0	0	10
21:30	0	11	0	0	0	0	0	0	0	0	0	0	0	11
21:45	0	5	0	0	0	0	0	0	1	0	0	0	0	6
22:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
22:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6
22:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
22:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
23:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
23:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**13**	**1697**	**14**	**22**	**22**	**6**	**5**	**4**	**27**	**0**	**5**	**0**	**0**	**1815**

FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP

Project #: 25-1314-007 | 0 | GPS INFORMATION

Date: 5/22/2025 | Location: Main St east of Country Club Dr | 0

WESTBOUND | 0

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
00:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7
00:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
00:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	3	0	0	0	0	0	0	1	0	0	0	0	4
01:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:45	1	3	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:15	1	6	0	0	0	0	0	0	0	0	0	0	0	7
03:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	7	0	0	1	1	0	0	0	0	0	0	0	9
05:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
05:30	0	8	1	1	0	0	0	0	1	0	0	0	0	11
05:45	1	9	0	0	0	0	0	0	0	0	0	0	0	10
06:00	0	13	0	1	0	1	0	0	0	0	0	0	0	15
06:15	0	13	1	3	0	0	0	0	1	0	0	0	0	18
06:30	0	14	0	0	0	0	0	0	0	0	0	0	0	14
06:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7
07:00	0	13	0	0	2	0	0	0	0	0	0	0	0	15
07:15	0	12	0	0	2	0	0	0	0	0	0	0	0	14
07:30	2	13	1	0	1	0	0	0	0	0	0	0	0	17
07:45	0	19	1	1	0	2	0	0	1	0	0	0	0	24
08:00	8	13	1	0	0	0	0	0	2	0	0	0	0	24
08:15	1	18	0	0	0	1	0	0	1	0	0	0	0	21
08:30	0	15	0	0	1	0	0	0	0	0	1	0	0	17
08:45	0	14	0	0	1	0	0	0	1	0	0	0	0	16
09:00	0	17	2	0	0	0	0	0	1	0	0	0	0	20
09:15	0	10	1	0	0	1	0	0	0	0	0	0	0	12
09:30	0	23	0	1	0	0	0	0	1	0	0	0	0	25
09:45	0	12	0	0	1	0	0	0	1	0	0	0	0	14
10:00	0	22	1	0	0	0	0	0	1	0	0	0	0	24
10:15	0	13	0	0	0	1	1	1	0	0	0	0	0	16
10:30	0	12	1	0	0	0	0	0	0	0	0	0	0	13
10:45	0	11	0	0	0	0	0	0	0	0	0	0	0	11
11:00	0	14	0	1	0	0	0	0	0	0	0	0	0	15
11:15	0	16	0	0	0	0	0	0	0	0	0	0	0	16
11:30	0	20	1	0	0	0	1	0	0	0	0	0	0	22
11:45	0	21	0	0	0	0	0	0	0	0	0	0	0	21
12:00	0	25	0	0	0	0	0	0	0	0	0	0	0	25
12:15	0	21	0	0	0	0	0	1	0	0	0	0	0	22
12:30	0	16	1	0	0	1	0	0	0	0	0	0	0	18
12:45	1	15	0	0	0	0	0	0	0	0	0	0	0	16
13:00	0	19	0	1	0	0	0	0	0	0	0	0	0	20
13:15	0	20	0	0	0	0	1	0	0	0	0	0	0	21
13:30	0	19	1	0	0	0	0	0	0	0	0	0	0	20
13:45	0	27	0	0	0	0	0	0	0	0	0	0	0	27
14:00	0	22	0	0	0	0	0	0	0	0	0	0	0	22
14:15	0	24	0	0	0	0	0	0	0	0	0	0	0	24
14:30	0	22	0	0	0	0	0	0	0	0	0	0	0	22
14:45	1	29	0	0	0	0	0	0	0	0	0	0	0	30
15:00	0	28	0	0	0	0	1	0	0	0	0	0	0	29
15:15	0	35	1	0	0	0	0	0	0	0	0	0	0	36
15:30	1	41	0	1	1	1	0	0	1	0	0	0	0	46
15:45	0	38	1	2	1	0	0	0	1	0	1	0	0	44
16:00	1	40	1	0	0	0	0	0	0	0	0	0	0	42
16:15	0	44	0	0	1	1	0	0	0	0	0	0	0	46
16:30	0	55	0	0	0	0	0	0	1	0	1	0	0	57
16:45	0	55	3	0	0	0	0	0	0	0	3	0	0	61
17:00	1	46	1	0	1	1	0	0	0	0	0	0	0	50
17:15	0	58	1	1	0	0	0	0	1	0	0	0	0	61
17:30	2	38	1	1	1	0	0	1	0	0	0	0	0	44
17:45	0	23	0	0	0	0	0	0	0	0	0	0	0	23
18:00	0	27	0	0	0	0	0	0	0	0	0	0	0	27
18:15	0	31	0	1	1	0	0	0	1	0	0	0	0	34
18:30	0	25	0	1	0	0	0	0	0	0	0	0	0	26
18:45	0	33	1	0	0	0	0	0	0	0	0	0	0	34
19:00	1	35	1	0	0	0	0	0	0	0	0	0	0	37
19:15	0	17	0	0	0	0	0	0	0	0	0	0	0	17
19:30	0	29	0	1	0	0	0	0	0	0	0	0	0	30
19:45	0	19	0	0	0	0	0	0	0	0	0	0	0	19
20:00	0	25	1	0	0	0	0	0	0	0	0	0	0	26
20:15	0	19	0	0	0	0	0	0	0	0	0	0	0	19
20:30	0	18	1	0	0	0	0	0	1	0	0	0	0	20
20:45	0	21	1	0	0	0	0	0	0	0	0	0	0	22
21:00	0	20	0	0	0	0	0	0	0	0	0	0	0	20
21:15	0	12	0	0	0	0	0	0	0	0	0	0	0	12
21:30	0	18	0	0	1	0	0	0	0	0	0	0	0	19
21:45	0	14	0	0	0	0	0	0	0	0	0	0	0	14
22:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14
22:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8
22:30	1	7	0	0	0	0	0	0	0	0	0	0	0	8
22:45	0	9	0	0	0	0	0	0	0	0	0	0	0	9
23:00	0	16	0	0	0	0	0	0	0	0	0	0	0	16
23:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**23**	**1628**	**28**	**17**	**16**	**11**	**4**	**3**	**18**	**0**	**6**	**0**	**0**	**1754**

FIELD DATA SERVICES OF ARIZONA INC./VERACIT
31894 WHITETAIL LN
TEMECULA, CA 92592
520.316.6745 PHONE
866.686.7612 FAX

INPUT INFORMATION	
JOB #:	25-1314-007
DATE:	5/22/2025
MAIN-HEADER INFORMATION:	FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP
SUB-HEADER:	
LOCATION INFORMATION:	Main St east of Country Club Dr
GPS-N:	34.86340
GPS-W:	-117.13015

	PC		HV	
	EB	WB	EB	WB
12:00:00 AM	18	21	0	0
1:00:00 AM	14	14	0	1
2:00:00 AM	5	8	1	0
3:00:00 AM	17	10	1	0
4:00:00 AM	42	6	1	0
5:00:00 AM	118	31	7	4
6:00:00 AM	137	48	10	6
7:00:00 AM	150	61	8	9
8:00:00 AM	109	70	10	8
9:00:00 AM	101	65	7	6
10:00:00 AM	112	60	5	4
11:00:00 AM	99	72	1	2
12:00:00 PM	58	79	5	2
1:00:00 PM	77	86	3	2
2:00:00 PM	69	98	3	0
3:00:00 PM	87	145	6	10
4:00:00 PM	122	199	11	7
5:00:00 PM	106	171	2	7
6:00:00 PM	92	117	5	4
7:00:00 PM	68	102	2	1
8:00:00 PM	54	86	2	1
9:00:00 PM	35	64	1	1
10:00:00 PM	23	39	0	0
11:00:00 PM	11	27	0	0

Field Data Services of Arizona, Inc./Veracity Traffic Group – May 2025

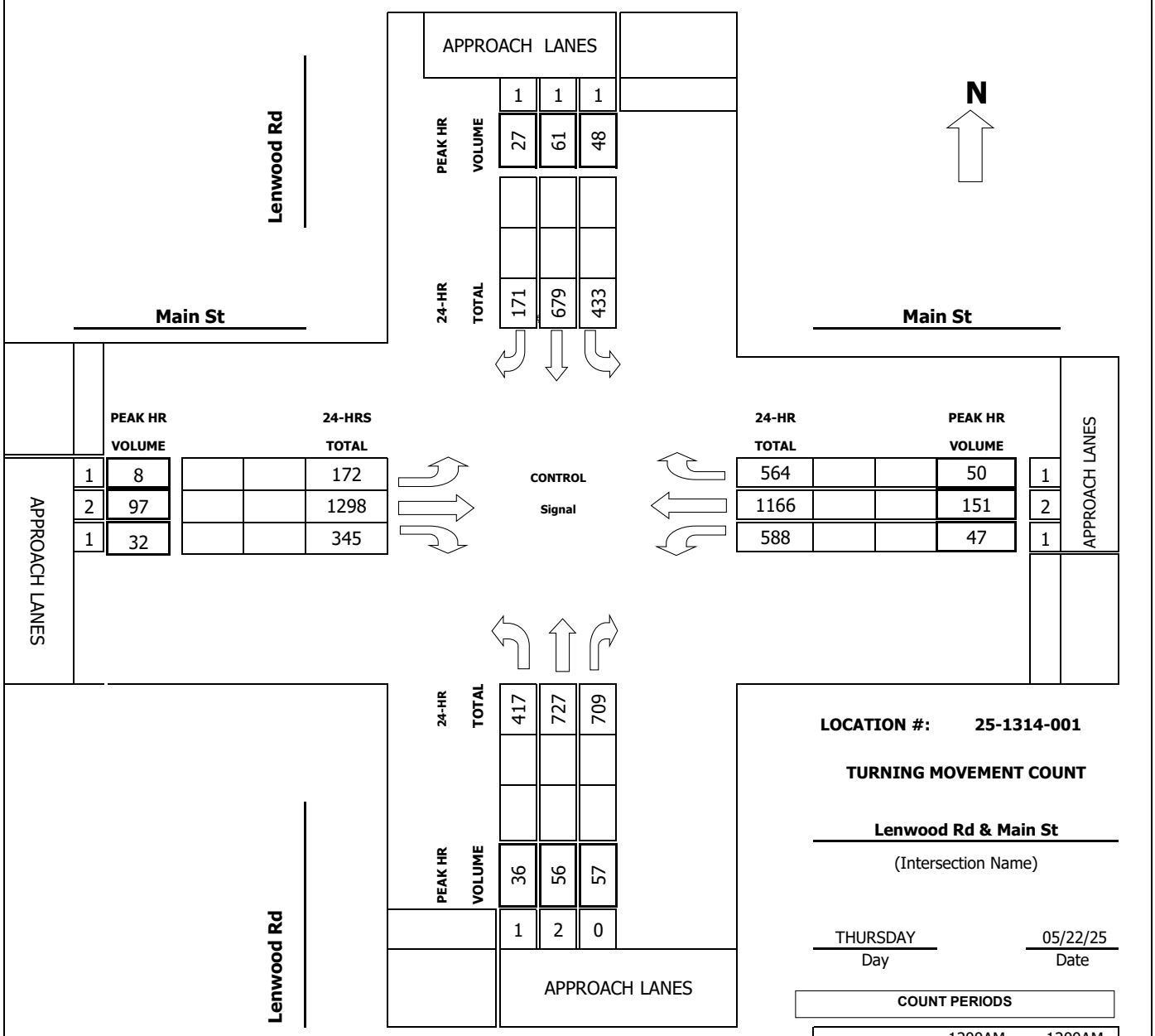
Intersection 3

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 25-1314-001

TMC SUMMARY OF Lenwood Rd & Main St



LOCATION #: 25-1314-001

TURNING MOVEMENT COUNT

Lenwood Rd & Main St
(Intersection Name)

THURSDAY (Day) 05/22/25 (Date)

COUNT PERIODS

1200AM	-	1200AM
	-	
	-	

PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Lenwood Rd | DATE: 05/22/25 | LOCATION: Barstow

E-W STREET: Main St | DAY: THURSDAY | PROJECT# 25-1314-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	1	1	1	2	1	1	2	1	
12:00 AM	3	3	4	1	1	2	1	2	0	5	3	3	28
12:15 AM	1	8	3	0	1	1	1	3	2	2	5	1	28
12:30 AM	1	1	2	0	2	2	0	4	0	1	1	3	17
12:45 AM	1	5	1	0	0	0	0	4	1	1	1	0	14
1:00 AM	0	1	1	1	4	0	0	3	0	2	4	2	18
1:15 AM	1	2	2	0	2	1	1	1	1	0	1	1	13
1:30 AM	2	3	1	1	0	0	1	2	0	2	1	2	15
1:45 AM	2	3	2	1	1	1	1	4	0	2	2	2	21
2:00 AM	1	3	1	0	1	0	0	1	1	1	0	1	10
2:15 AM	2	1	1	0	1	0	0	1	1	2	0	1	10
2:30 AM	1	2	0	2	2	0	0	0	0	0	0	1	8
2:45 AM	2	0	1	1	0	1	0	1	1	1	1	1	10
3:00 AM	0	3	0	1	1	1	0	3	1	1	1	1	13
3:15 AM	2	3	0	0	2	1	2	2	0	2	4	1	19
3:30 AM	1	0	3	1	1	0	0	2	1	0	0	1	10
3:45 AM	0	0	0	0	5	0	1	4	2	0	0	1	13
4:00 AM	0	1	1	0	2	0	1	3	2	1	1	0	12
4:15 AM	0	2	0	0	1	0	1	6	3	3	1	0	17
4:30 AM	0	2	3	0	4	0	3	6	1	3	2	2	26
4:45 AM	0	5	3	2	2	0	3	11	3	4	2	1	36
5:00 AM	3	5	1	0	4	1	5	11	4	6	5	1	46
5:15 AM	1	4	3	2	8	0	10	22	2	3	4	2	61
5:30 AM	2	13	8	2	8	0	4	20	3	4	9	3	76
5:45 AM	4	14	4	1	7	1	5	32	7	5	5	8	93
6:00 AM	4	7	1	0	8	2	9	21	4	1	9	0	66
6:15 AM	4	5	3	4	14	1	5	19	4	3	13	4	79
6:30 AM	5	5	7	0	9	3	5	32	4	5	6	5	86
6:45 AM	1	5	7	2	11	2	8	31	5	5	4	9	90
7:00 AM	2	7	4	3	5	3	8	23	4	4	10	1	74
7:15 AM	5	8	5	6	9	0	3	32	6	5	9	6	94
7:30 AM	3	8	8	9	5	3	2	31	5	6	11	4	95
7:45 AM	4	11	6	5	14	2	6	33	5	19	18	3	126
8:00 AM	2	12	8	4	13	3	0	23	4	9	19	6	103
8:15 AM	7	7	11	4	15	2	2	21	5	8	12	4	98
8:30 AM	5	6	8	9	3	1	2	24	5	6	11	5	85
8:45 AM	2	11	3	9	11	1	2	25	6	6	13	8	97
9:00 AM	2	13	8	4	11	2	4	21	5	11	16	6	103
9:15 AM	3	8	12	4	10	0	1	20	6	10	9	3	86
9:30 AM	6	9	4	8	11	2	1	19	4	9	17	8	98
9:45 AM	3	15	3	8	11	1	0	22	5	6	10	6	90
10:00 AM	3	8	8	1	4	3	2	20	8	10	18	6	91
10:15 AM	2	6	7	9	9	4	3	29	5	12	10	5	101
10:30 AM	2	4	4	1	7	2	1	14	6	5	9	3	58
10:45 AM	3	5	5	2	7	1	2	20	7	8	7	5	72
11:00 AM	6	9	8	1	5	0	1	20	8	11	9	8	86
11:15 AM	4	5	6	1	9	1	0	14	5	11	11	6	73
11:30 AM	7	9	7	1	14	4	0	20	9	7	11	10	99
11:45 AM	5	12	5	3	10	2	1	16	6	4	14	6	84
12:00 PM	8	11	9	3	7	1	2	14	5	8	16	3	87
12:15 PM	5	8	11	5	5	0	1	10	2	11	17	2	77
12:30 PM	3	4	11	2	9	1	0	11	5	11	14	5	76
12:45 PM	4	8	7	8	5	3	0	10	3	15	9	8	80
1:00 PM	6	5	4	5	9	2	0	15	7	8	12	5	78
1:15 PM	9	9	8	7	6	2	1	15	4	5	10	7	83
1:30 PM	5	8	13	5	4	0	0	16	6	9	15	5	86
1:45 PM	8	3	8	10	3	1	0	14	2	6	18	9	82
2:00 PM	4	2	5	6	6	2	0	20	1	3	16	6	71
2:15 PM	7	5	10	3	8	1	0	16	3	2	16	3	74
2:30 PM	10	10	11	2	6	0	1	13	2	5	12	11	83
2:45 PM	12	6	10	5	7	1	2	13	1	8	17	10	92
3:00 PM	8	8	8	3	11	3	1	10	2	7	18	7	86
3:15 PM	12	15	13	8	17	2	2	16	5	10	22	20	142
3:30 PM	7	9	13	8	18	5	2	20	6	15	34	11	148
3:45 PM	3	12	16	10	12	7	1	22	6	5	34	11	139
4:00 PM	2	12	16	19	11	5	1	12	8	8	35	10	139
4:15 PM	8	16	17	13	21	2	2	23	6	18	36	9	171
4:30 PM	12	17	14	9	12	9	2	31	12	5	36	19	178
4:45 PM	9	9	8	14	14	10	3	26	7	14	42	12	168
5:00 PM	7	14	18	12	14	6	1	17	7	10	37	10	153
5:15 PM	8	12	13	9	15	9	3	10	8	14	44	15	160
5:30 PM	14	7	22	9	10	7	5	21	4	10	23	11	143
5:45 PM	4	15	16	9	16	2	2	20	10	10	17	9	130
6:00 PM	4	10	9	10	6	2	3	22	4	9	21	11	111
6:15 PM	8	15	13	9	14	0	0	19	7	8	26	9	128
6:30 PM	8	16	12	9	14	4	1	17	4	6	14	9	114
6:45 PM	12	8	8	1	9	5	2	13	5	13	17	12	105
7:00 PM	11	15	21	8	5	7	1	9	1	10	19	13	120
7:15 PM	5	12	9	10	9	0	2	17	3	9	12	4	92
7:30 PM	7	14	16	6	10	1	4	11	5	6	22	6	108
7:45 PM	9	11	9	8	8	1	3	9	5	6	9	10	88
8:00 PM	6	12	23	6	13	0	3	11	5	6	20	7	112
8:15 PM	6	11	7	5	7	0	0	14	1	5	13	14	83
8:30 PM	3	9	7	8	5	2	2	7	3	8	15	12	81
8:45 PM	3	10	14	4	9	1	1	8	1	6	18	14	89
9:00 PM	8	8	16	6	5	0	1	8	0	15	12	7	86
9:15 PM	6	14	16	6	5	0	1	7	2	5	6	5	73
9:30 PM	5	8	13	8	8	1	2	8	1	3	13	8	78
9:45 PM	4	7	11	7	6	1	0	4	2	3	9	11	65
10:00 PM	4	10	9	2	1	4	1	3	1	5	6	11	57
10:15 PM	3	8	4	7	3	0	1	4	1	3	5	2	41
10:30 PM	4	5	1	4	3	0	0	3	1	5	4	4	34
10:45 PM	2	10	7	5	3	0	2	4	2	1	7	2	45
11:00 PM	4	6	5	1	2	2	0	1	2	2	10	3	38
11:15 PM	0	2	3	3	3	2	1	4	0	2	2	5	27
11:30 PM	0	2	2	2	0	0	1	2	0	3	7	1	20
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	417	727	709	433	679	171	172	1298	345	588	1166	564	7269
Approach %	22.50	39.23	38.26	33.75	52.92	13.33	9.48	71.52	19.01	25.37	50.30	24.33	
App/Depart	1853	/	1463	1283	/	1612	1815	/	2440	2318	/	1754	

Peak Hr Begins at: 415 PM

PEAK													
Volumes	36	56	57	48	61	27	8	97	32	47	151	50	670
Approach %	24.16	37.58	38.26	35.29	44.85	19.85	5.84	70.80	23.36	18.95	60.89	20.16	
PEAK HR. FACTOR:	0.866			0.895			0.761			0.912			0.941

CONTROL: Signal
COMMENT 1:
GPS: 34.872526, -117.118056

HOURS:

	FROM:		TO:	
AM	1200	AM	1200	AM
NOON				
PM				

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: Lenwood Rd DATE: 05/22/25 LOCATION: Barstow

E-W STREET: Main St DAY: THURSDAY PROJECT# 25-1314-001

AM PEAK HOUR

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	1	1	1	2	1	1	2	1	
7:00 AM	2	7	4	3	5	3	8	23	4	4	10	1	74
7:15 AM	5	8	5	6	9	0	3	32	6	5	9	6	94
7:30 AM	3	8	8	9	5	3	2	31	5	6	11	4	95
7:45 AM	4	11	6	5	14	2	6	33	5	19	18	3	126
8:00 AM	2	12	8	4	13	3	0	23	4	9	19	6	103
8:15 AM	7	7	11	4	15	2	2	21	5	8	12	4	98
8:30 AM	5	6	8	9	3	1	2	24	5	6	11	5	85
8:45 AM	2	11	3	9	11	1	2	25	6	6	13	8	97
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
12:00 PM													
12:15 PM													
12:30 PM													
12:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	30	70	53	49	75	15	25	212	40	63	103	37	772
Approach %	19.61	45.75	34.64	35.25	53.96	10.79	9.03	76.53	14.44	31.03	50.74	18.23	
App/Depart	153	/	132	139	/	178	277	/	314	203	/	148	
AM Peak Hour:			730 AM										
PEAK													
Volumes	16	38	33	22	47	10	10	108	19	42	60	17	422
Approach %	18.39	43.68	37.93	27.85	59.49	12.66	7.30	78.83	13.87	35.29	50.42	14.29	
PEAK HR. FACTOR:		**0.870**			**0.940**			**0.778**			**0.744**		**0.837**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: Lenwood Rd DATE: 05/22/25 LOCATION: Barstow

E-W STREET: Main St DAY: THURSDAY PROJECT# 25-1314-001

PM PEAK HOUR

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	1	1	1	2	1	1	2	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	2	12	16	19	11	5	1	12	8	8	35	10	139
4:15 PM	8	16	17	13	21	2	2	23	6	18	36	9	171
4:30 PM	12	17	14	9	12	9	2	31	12	5	36	19	178
4:45 PM	9	9	8	14	14	10	3	26	7	14	42	12	168
5:00 PM	7	14	18	12	14	6	1	17	7	10	37	10	153
5:15 PM	8	12	13	9	15	9	3	10	8	14	44	15	160
5:30 PM	14	7	22	9	10	7	5	21	4	10	23	11	143
5:45 PM	4	15	16	9	16	2	2	20	10	10	17	9	130
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	64	102	124	94	113	50	19	160	62	89	270	95	1242
Approach %	22.07	35.17	42.76	36.58	43.97	19.46	7.88	66.39	25.73	19.60	59.47	20.93	
App/Depart	290	/	216	257	/	264	241	/	378	454	/	384	
PM Peak Hour:			415 PM										
PEAK													
Volumes	36	56	57	48	61	27	8	97	32	47	151	50	670
Approach %	24.16	37.58	38.26	35.29	44.85	19.85	5.84	70.80	23.36	18.95	60.89	20.16	
PEAK HR. FACTOR:		**0.866**			**0.895**			**0.761**			**0.912**		**0.941**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Lenwood Rd
E-W STREET: Main St

Date: 05/22/25
Day: THURSDAY

City: Barstow
Project #: 25-1314-001

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	1	0	0	1	1	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0
TOTAL	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-001

Location: Lenwood Rd north of Main St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	7		4					12:00	16		11				
00:15	10		2					12:15	11		10				
00:30	4		4					12:30	9		12				
00:45	5	26	0	10			36	12:45	16	52	16	49			101
01:00	3		5					13:00	10		16				
01:15	4		3					13:15	17		15				
01:30	6		1					13:30	13		9				
01:45	6	19	3	12			31	13:45	12	52	14	54			106
02:00	4		1					14:00	8		14				
02:15	2		1					14:15	8		12				
02:30	3		4					14:30	22		8				
02:45	1	10	2	8			18	14:45	18	56	13	47			103
03:00	4		3					15:00	16		17				
03:15	6		3					15:15	37		27				
03:30	1		2					15:30	22		31				
03:45	2	13	5	13			26	15:45	24	99	29	104			203
04:00	2		2					16:00	23		35				
04:15	3		1					16:15	27		36				
04:30	7		4					16:30	38		30				
04:45	9	21	4	11			32	16:45	24	112	38	139			251
05:00	11		5					17:00	25		32				
05:15	16		10					17:15	30		33				
05:30	20		10					17:30	23		26				
05:45	27	74	9	34			108	17:45	26	104	27	118			222
06:00	16		10					18:00	24		18				
06:15	14		19					18:15	24		23				
06:30	15		12					18:30	26		27				
06:45	22	67	15	56			123	18:45	22	96	15	83			179
07:00	16		11					19:00	29		20				
07:15	17		15					19:15	18		19				
07:30	14		17					19:30	24		17				
07:45	20	67	21	64			131	19:45	24	95	17	73			168
08:00	18		20					20:00	22		19				
08:15	13		21					20:15	25		12				
08:30	13		13					20:30	23		15				
08:45	21	65	21	75			140	20:45	25	95	14	60			155
09:00	23		17					21:00	16		11				
09:15	12		14					21:15	20		11				
09:30	18		21					21:30	18		17				
09:45	21	74	20	72			146	21:45	18	72	14	53			125
10:00	16		8					22:00	22		7				
10:15	14		22					22:15	11		10				
10:30	8		10					22:30	9		7				
10:45	12	50	10	50			100	22:45	14	56	8	32			88
11:00	18		6					23:00	9		5				
11:15	11		11					23:15	8		8				
11:30	19		19					23:30	4		2				
11:45	19	67	15	51			118	23:45	0	21	0	15			36
Total Vol.		553		456			**1009**			910		827			**1737**

GPS: 34.872526, -117.118056

Daily Totals

NB	SB	EB	WB	**Combined**
1463	1283			**2746**

	AM			**PM**		
Split %	54.8%	45.2%	**36.7%**	52.4%	47.6%	**63.3%**
Peak Hour	05:15	07:30	**08:45**	16:30	16:00	**16:00**
Volume	79	79	**147**	117	139	**251**
P.H.F.	0.73	0.94	**0.88**	0.77	0.91	**0.92**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-001

Location: Lenwood Rd south of Main St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	10		6					12:00	28		20				
00:15	12		5					12:15	24		18				
00:30	4		3					12:30	18		25				
00:45	7	33	2	16			49	12:45	19	89	23	86			175
01:00	2		6					13:00	15		24				
01:15	5		3					13:15	26		15				
01:30	6		2					13:30	26		19				
01:45	7	20	3	14			34	13:45	19	86	11	69			155
02:00	5		3					14:00	11		10				
02:15	4		4					14:15	22		13				
02:30	3		2					14:30	31		13				
02:45	3	15	2	11			26	14:45	28	92	16	52			144
03:00	3		3					15:00	24		20				
03:15	5		4					15:15	40		32				
03:30	4		2					15:30	29		39				
03:45	0	12	7	16			28	15:45	31	124	23	114			238
04:00	2		5					16:00	30		27				
04:15	2		7					16:15	41		45				
04:30	5		8					16:30	43		29				
04:45	8	17	9	29			46	16:45	26	140	35	136			276
05:00	9		14					17:00	39		31				
05:15	8		13					17:15	33		37				
05:30	23		15					17:30	43		24				
05:45	22	62	19	61			123	17:45	35	150	36	128			278
06:00	12		13					18:00	23		19				
06:15	12		21					18:15	36		29				
06:30	17		18					18:30	36		24				
06:45	13	54	21	73			127	18:45	28	123	27	99			222
07:00	13		13					19:00	47		16				
07:15	18		20					19:15	26		21				
07:30	19		16					19:30	37		21				
07:45	21	71	38	87			158	19:45	29	139	19	77			216
08:00	22		26					20:00	41		24				
08:15	25		28					20:15	24		13				
08:30	19		14					20:30	19		16				
08:45	16	82	23	91			173	20:45	27	111	16	69			180
09:00	23		27					21:00	32		20				
09:15	23		26					21:15	36		12				
09:30	19		24					21:30	26		12				
09:45	21	86	22	99			185	21:45	22	116	11	55			171
10:00	19		22					22:00	23		7				
10:15	15		26					22:15	15		7				
10:30	10		18					22:30	10		9				
10:45	13	57	22	88			145	22:45	19	67	6	29			96
11:00	23		24					23:00	15		6				
11:15	15		25					23:15	5		5				
11:30	23		30					23:30	4		3				
11:45	22	83	20	99			182	23:45	0	24	0	14			38
Total Vol.		592		684			**1276**			1261		928			**2189**

GPS: 34.872526, -117.118056

Daily Totals

NB	SB	EB	WB	Combined
1853	1612			**3465**

	AM			PM		
Split %	46.4%	53.6%	**36.8%**	57.6%	42.4%	**63.2%**
Peak Hour	11:30	07:30	**07:30**	17:00	16:15	**16:15**
Volume	97	108	**195**	150	140	**289**
P.H.F.	0.87	0.71	**0.83**	0.87	0.78	**0.84**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-001

Location: Main St east of Lenwood Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			7		11			12:00			26		27		
00:15			6		8			12:15			26		30		
00:30			6		5			12:30			24		30		
00:45			5	24	2	26	50	12:45			25	101	32	119	220
01:00			5		8			13:00			24		25		
01:15			3		2			13:15			30		22		
01:30			4		5			13:30			34		29		
01:45			7	19	6	21	40	13:45			32	120	33	109	229
02:00			2		2			14:00			31		25		
02:15			2		3			14:15			29		21		
02:30			2		1			14:30			26		28		
02:45			3	9	3	9	18	14:45			28	114	35	109	223
03:00			4		3			15:00			21		32		
03:15			2		7			15:15			37		52		
03:30			6		1			15:30			41		60		
03:45			4	16	1	12	28	15:45			48	147	50	194	341
04:00			4		2			16:00			47		53		
04:15			6		4			16:15			53		63		
04:30			9		7			16:30			54		60		
04:45			16	35	7	20	55	16:45			48	202	68	244	446
05:00			12		12			17:00			47		57		
05:15			27		9			17:15			32		73		
05:30			30		16			17:30			52		44		
05:45			37	106	18	55	161	17:45			45	176	36	210	386
06:00			22		10			18:00			41		41		
06:15			26		20			18:15			41		43		
06:30			39		16			18:30			38		29		
06:45			40	127	18	64	191	18:45			22	142	42	155	297
07:00			30		15			19:00			38		42		
07:15			43		20			19:15			36		25		
07:30			48		21			19:30			33		34		
07:45			44	165	40	96	261	19:45			26	133	25	126	259
08:00			35		34			20:00			40		33		
08:15			36		24			20:15			26		32		
08:30			41		22			20:30			22		35		
08:45			37	149	27	107	256	20:45			26	114	38	138	252
09:00			33		33			21:00			30		34		
09:15			36		22			21:15			29		16		
09:30			31		34			21:30			29		24		
09:45			33	133	22	111	244	21:45			22	110	23	97	207
10:00			29		34			22:00			14		22		
10:15			45		27			22:15			15		10		
10:30			19		17			22:30			8		13		
10:45			27	120	20	98	218	22:45			16	53	10	55	108
11:00			29		28			23:00			7		15		
11:15			21		28			23:15			10		9		
11:30			28		28			23:30			6		11		
11:45			24	102	24	108	210	23:45			0	23	0	35	58
Total Vol.				1005		727	**1732**					1435		1591	**3026**

GPS: 34.872526, -117.118056

	NB	SB	EB	WB	**Combined**
Daily Totals			2440	2318	**4758**

	AM			PM		
Split %	58.0%	42.0%	**36.4%**	47.4%	52.6%	**63.6%**
Peak Hour	07:15	07:45	**07:15**	15:45	16:30	**16:15**
Volume	170	120	**285**	202	258	**450**
P.H.F.	0.89	0.75	**0.85**	0.94	0.88	**0.97**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-001

Location: Main St west of Lenwood Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		8			12:00			21		25		
00:15			6		7			12:15			13		22		
00:30			4		4			12:30			16		18		
00:45			5	18	2	21	39	12:45			13	63	16	81	144
01:00			3		4			13:00			22		20		
01:15			3		3			13:15			20		21		
01:30			3		3			13:30			22		20		
01:45			5	14	5	15	29	13:45			16	80	27	88	168
02:00			2		1			14:00			21		22		
02:15			2		2			14:15			19		24		
02:30			0		1			14:30			16		22		
02:45			2	6	4	8	14	14:45			16	72	30	98	170
03:00			4		2			15:00			13		29		
03:15			4		7			15:15			23		36		
03:30			3		1			15:30			28		46		
03:45			7	18	0	10	28	15:45			29	93	44	155	248
04:00			6		1			16:00			21		42		
04:15			10		1			16:15			31		46		
04:30			10		2			16:30			45		57		
04:45			17	43	2	6	49	16:45			36	133	61	206	339
05:00			20		9			17:00			25		50		
05:15			34		5			17:15			21		61		
05:30			27		11			17:30			30		44		
05:45			44	125	10	35	160	17:45			32	108	23	178	286
06:00			34		15			18:00			29		27		
06:15			28		18			18:15			26		34		
06:30			41		14			18:30			22		26		
06:45			44	147	7	54	201	18:45			20	97	34	121	218
07:00			35		15			19:00			11		37		
07:15			41		14			19:15			22		17		
07:30			38		17			19:30			20		30		
07:45			44	158	24	70	228	19:45			17	70	19	103	173
08:00			27		24			20:00			19		26		
08:15			28		21			20:15			15		19		
08:30			31		17			20:30			12		20		
08:45			33	119	16	78	197	20:45			10	56	22	87	143
09:00			30		20			21:00			9		20		
09:15			27		12			21:15			10		12		
09:30			24		25			21:30			11		19		
09:45			27	108	14	71	179	21:45			6	36	14	65	101
10:00			30		24			22:00			5		14		
10:15			37		16			22:15			6		8		
10:30			21		13			22:30			4		8		
10:45			29	117	11	64	181	22:45			8	23	9	39	62
11:00			29		15			23:00			3		16		
11:15			19		16			23:15			5		4		
11:30			29		22			23:30			3		7		
11:45			23	100	21	74	174	23:45			0	11	0	27	38
Total Vol.				973		506	**1479**					842		1248	**2090**

GPS: 34.872526, -117.118056

			Daily Totals		
	NB	SB	EB	WB	**Combined**
			1815	1754	**3569**

	AM			**PM**		
Split %	65.8%	34.2%	**41.4%**	40.3%	59.7%	**58.6%**
Peak Hour	06:30	11:30	**07:15**	16:15	16:30	**16:30**
Volume	161	90	**229**	137	229	**356**
P.H.F.	0.91	0.90	**0.84**	0.76	0.94	**0.87**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-001

Location: Lenwood Rd & Main St

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
00:00	10		4		3		11			12:00	28		11		21		27		
00:15	12		2		6		8			12:15	24		10		13		30		
00:30	4		4		4		5			12:30	18		12		16		30		
00:45	7	33	0	10	5	18	2	26	87	12:45	19	89	16	49	13	63	32	119	320
01:00	2		5		3		8			13:00	15		16		22		25		
01:15	5		3		3		2			13:15	26		15		20		22		
01:30	6		1		3		5			13:30	26		9		22		29		
01:45	7	20	3	12	5	14	6	21	67	13:45	19	86	14	54	16	80	33	109	329
02:00	5		1		2		2			14:00	11		14		21		25		
02:15	4		1		2		3			14:15	22		12		19		21		
02:30	3		4		0		1			14:30	31		8		16		28		
02:45	3	15	2	8	2	6	3	9	38	14:45	28	92	13	47	16	72	35	109	320
03:00	3		3		4		3			15:00	24		17		13		32		
03:15	5		3		4		7			15:15	40		27		23		52		
03:30	4		2		3		1			15:30	29		31		28		60		
03:45	0	12	5	13	7	18	1	12	55	15:45	31	124	29	104	29	93	50	194	515
04:00	2		2		6		2			16:00	30		35		21		53		
04:15	2		1		10		4			16:15	41		36		31		63		
04:30	5		4		10		7			16:30	43		30		45		60		
04:45	8	17	4	11	17	43	7	20	91	16:45	26	140	38	139	36	133	68	244	656
05:00	9		5		20		12			17:00	39		32		25		57		
05:15	8		10		34		9			17:15	33		33		21		73		
05:30	23		10		27		16			17:30	43		26		30		44		
05:45	22	62	9	34	44	125	18	55	276	17:45	35	150	27	118	32	108	36	210	586
06:00	12		10		34		10			18:00	23		18		29		41		
06:15	12		19		28		20			18:15	36		23		26		43		
06:30	17		12		41		16			18:30	36		27		22		29		
06:45	13	54	15	56	44	147	18	64	321	18:45	28	123	15	83	20	97	42	155	458
07:00	13		11		35		15			19:00	47		20		11		42		
07:15	18		15		41		20			19:15	26		19		22		25		
07:30	19		17		38		21			19:30	37		17		20		34		
07:45	21	71	21	64	44	158	40	96	389	19:45	29	139	17	73	17	70	25	126	408
08:00	22		20		27		34			20:00	41		19		19		33		
08:15	25		21		28		24			20:15	24		12		15		32		
08:30	19		13		31		22			20:30	19		15		12		35		
08:45	16	82	21	75	33	119	27	107	383	20:45	27	111	14	60	10	56	38	138	365
09:00	23		17		30		33			21:00	32		11		9		34		
09:15	23		14		27		22			21:15	36		11		10		16		
09:30	19		21		24		34			21:30	26		17		11		24		
09:45	21	86	20	72	27	108	22	111	377	21:45	22	116	14	53	6	36	23	97	302
10:00	19		8		30		34			22:00	23		7		5		22		
10:15	15		22		37		27			22:15	15		10		6		10		
10:30	10		10		21		17			22:30	10		7		4		13		
10:45	13	57	10	50	29	117	20	98	322	22:45	19	67	8	32	8	23	10	55	177
11:00	23		6		29		28			23:00	15		5		3		15		
11:15	15		11		19		28			23:15	5		8		5		9		
11:30	23		19		29		28			23:30	4		2		3		11		
11:45	22	83	15	51	23	100	24	108	342	23:45	0	24	0	15	0	11	0	35	85
Total Vol.		592		456		973		727	**2748**			1261		827		842		1591	**4521**

GPS: 34.872526, -117.118056

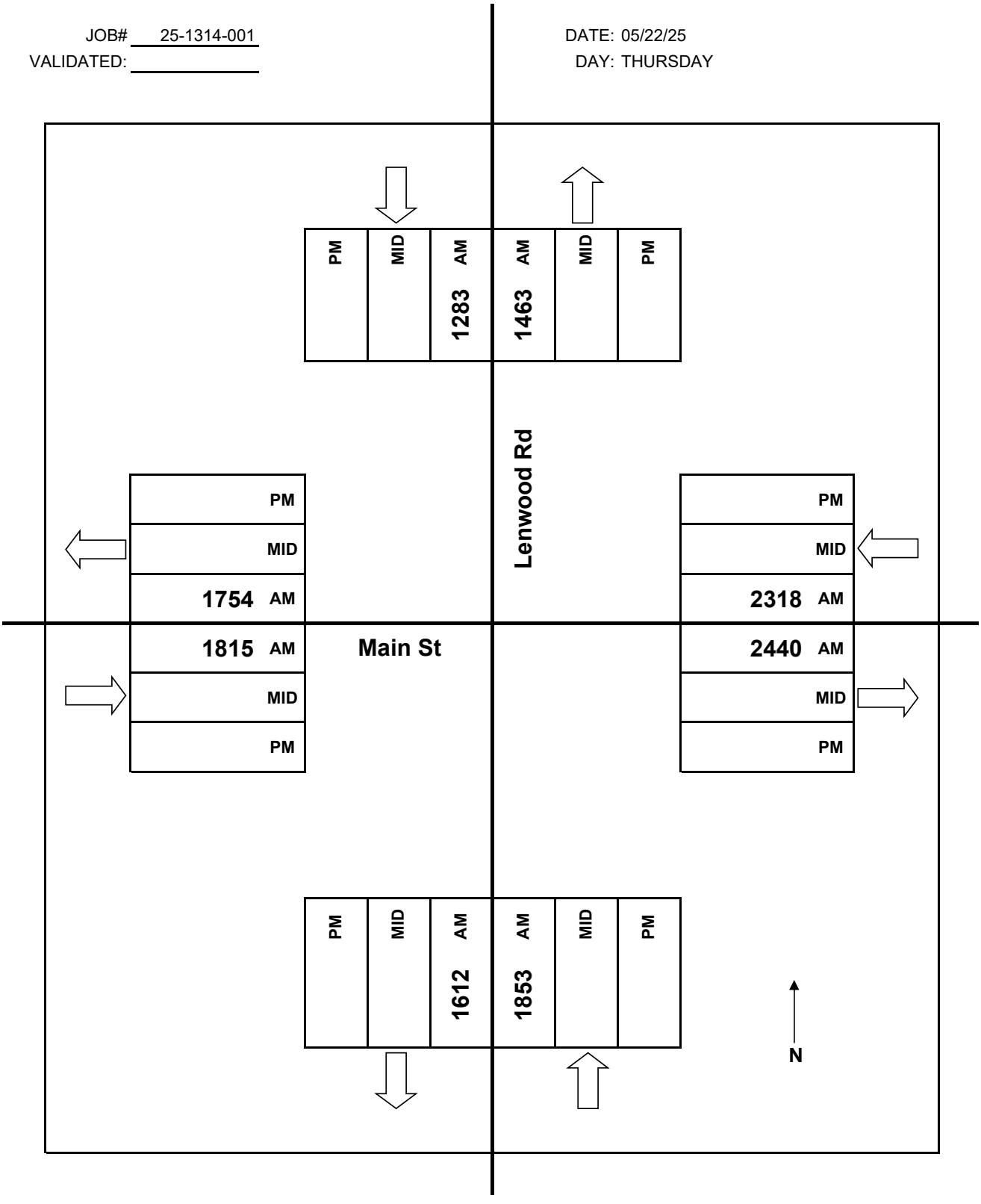
Daily Totals

NB	SB	EB	WB	Combined
1853	1283	1815	2318	**7269**

	AM					PM				
Split %	21.5%	16.6%	35.4%	26.5%	**37.8%**	27.9%	18.3%	18.6%	35.2%	**62.2%**
Peak Hour	11:30	07:30	06:30	07:45	**07:30**	17:00	16:00	16:15	16:30	**16:15**
Volume	97	79	161	120	**422**	150	139	137	258	**670**
P.H.F.	0.87	0.94	0.91	0.75	**0.84**	0.87	0.91	0.76	0.88	**0.94**

JOB# 25-1314-001
VALIDATED: _____

DATE: 05/22/25
DAY: THURSDAY



Field Data Services of Arizona, Inc./Veracity Traffic Group – May 2025

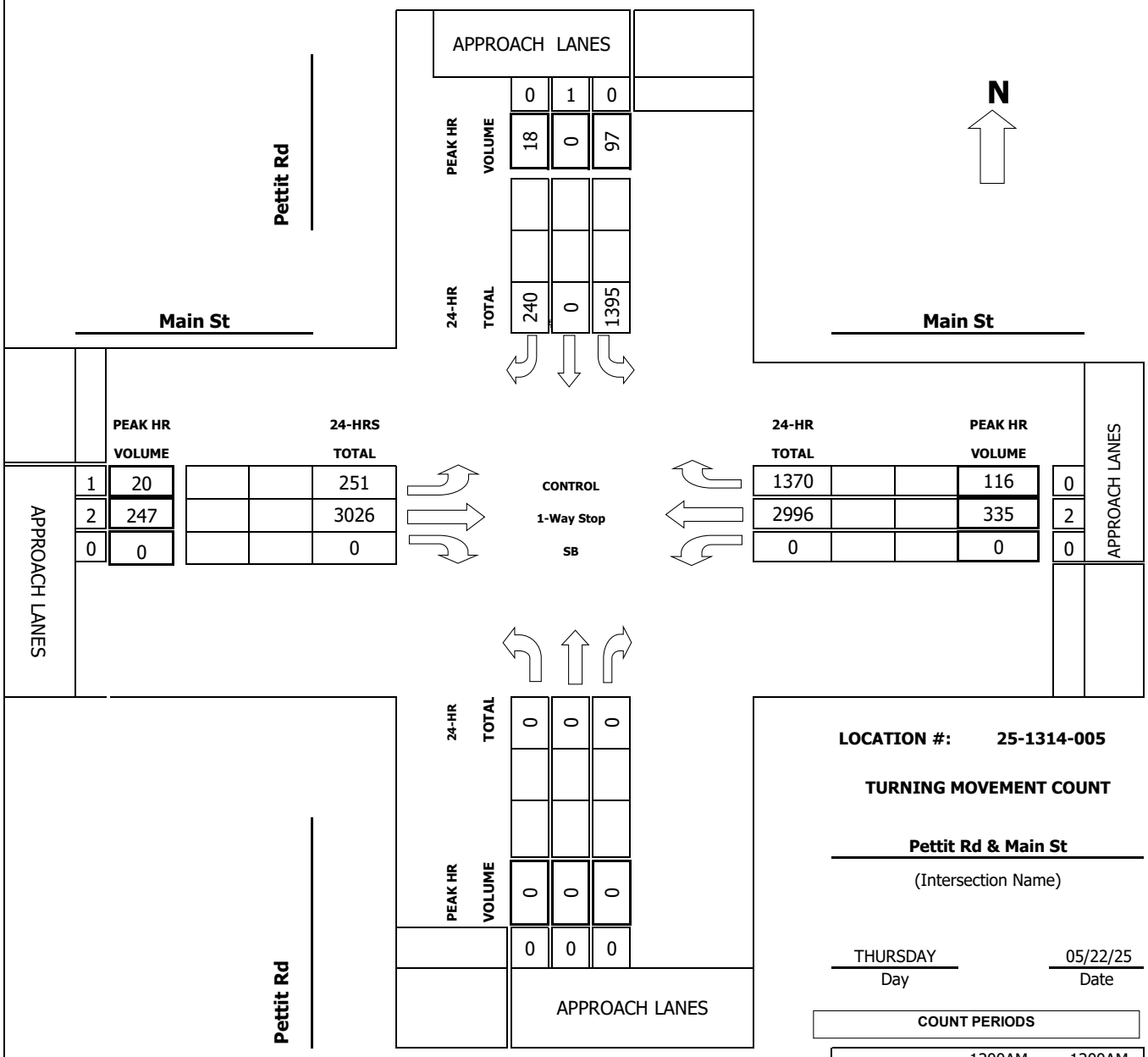
Intersection 14

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 25-1314-005

TMC SUMMARY OF Pettit Rd & Main St



LOCATION #: 25-1314-005

TURNING MOVEMENT COUNT

Pettit Rd & Main St
(Intersection Name)

THURSDAY
Day

05/22/25
Date

COUNT PERIODS

1200AM	-	1200AM
	-	
	-	

PEAK HOUR 430 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Pettit Rd
E-W STREET: Main St

DATE: 05/22/25
DAY: THURSDAY

LOCATION: Barstow
PROJECT# 25-1314-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	1	2	0	0	2	0	
12:00 AM	0	0	0	3	0	0	1	12	0	0	17	5	38
12:15 AM	0	0	0	4	0	1	0	12	0	0	8	5	30
12:30 AM	0	0	0	3	0	0	0	7	0	0	11	6	27
12:45 AM	0	0	0	4	0	0	1	5	0	0	4	3	17
1:00 AM	0	0	0	0	0	0	0	5	0	0	7	4	16
1:15 AM	0	0	0	1	0	0	0	5	0	0	5	3	14
1:30 AM	0	0	0	4	0	0	0	5	0	0	3	7	19
1:45 AM	0	0	0	1	0	1	0	4	0	0	2	2	10
2:00 AM	0	0	0	4	0	0	0	2	0	0	5	1	12
2:15 AM	0	0	0	0	0	0	1	4	0	0	3	1	9
2:30 AM	0	0	0	2	0	2	0	6	0	0	4	0	14
2:45 AM	0	0	0	2	0	1	1	4	0	0	2	1	11
3:00 AM	0	0	0	3	0	0	0	3	0	0	2	1	9
3:15 AM	0	0	0	0	0	1	0	4	0	0	7	0	12
3:30 AM	0	0	0	3	0	0	0	3	0	0	1	1	8
3:45 AM	0	0	0	4	0	0	3	5	0	0	0	3	15
4:00 AM	0	0	0	2	0	0	0	6	0	0	6	4	18
4:15 AM	0	0	0	5	0	0	2	8	0	0	3	2	20
4:30 AM	0	0	0	9	0	0	1	11	0	0	6	3	30
4:45 AM	0	0	0	10	0	0	3	20	0	0	6	2	41
5:00 AM	0	0	0	15	0	0	1	12	0	0	8	6	42
5:15 AM	0	0	0	11	0	0	0	30	0	0	12	4	57
5:30 AM	0	0	0	10	0	1	2	37	0	0	20	9	79
5:45 AM	0	0	0	25	0	2	0	53	0	0	16	5	101
6:00 AM	0	0	0	14	0	3	1	37	0	0	17	15	87
6:15 AM	0	0	0	15	0	4	6	41	0	0	15	16	97
6:30 AM	0	0	0	23	0	1	15	33	0	0	15	29	116
6:45 AM	0	0	0	30	0	2	5	58	0	0	11	36	142
7:00 AM	0	0	0	58	0	8	0	37	0	0	17	9	129
7:15 AM	0	0	0	18	0	2	1	58	0	0	23	14	116
7:30 AM	0	0	0	27	0	4	2	55	0	0	25	11	124
7:45 AM	0	0	0	17	0	7	3	68	0	0	25	15	135
8:00 AM	0	0	0	11	0	1	2	43	0	0	40	14	111
8:15 AM	0	0	0	13	0	6	1	51	0	0	32	17	120
8:30 AM	0	0	0	24	0	0	6	51	0	0	30	31	142
8:45 AM	0	0	0	26	0	3	2	54	0	0	36	9	130
9:00 AM	0	0	0	20	0	3	2	33	0	0	29	6	93
9:15 AM	0	0	0	12	0	5	2	44	0	0	22	4	89
9:30 AM	0	0	0	18	0	0	3	44	0	0	31	12	108
9:45 AM	0	0	0	17	0	2	1	52	0	0	38	18	128
10:00 AM	0	0	0	25	0	3	1	48	0	0	38	22	137
10:15 AM	0	0	0	27	0	2	5	49	0	0	35	13	131
10:30 AM	0	0	0	22	0	1	2	44	0	0	33	14	116
10:45 AM	0	0	0	20	0	1	1	43	0	0	36	21	122
11:00 AM	0	0	0	21	0	2	4	41	0	0	30	20	118
11:15 AM	0	0	0	14	0	1	1	45	0	0	32	13	106
11:30 AM	0	0	0	18	0	4	2	43	0	0	41	16	124
11:45 AM	0	0	0	16	0	1	5	41	0	0	43	16	122
12:00 PM	0	0	0	16	0	2	2	52	0	0	45	18	135
12:15 PM	0	0	0	13	0	5	1	32	0	0	50	14	115
12:30 PM	0	0	0	11	0	2	3	30	0	0	41	10	97
12:45 PM	0	0	0	10	0	3	2	39	0	0	43	11	108
1:00 PM	0	0	0	14	0	6	1	43	0	0	45	14	123
1:15 PM	0	0	0	18	0	2	1	41	0	0	50	13	125
1:30 PM	0	0	0	16	0	5	4	24	0	0	54	16	119
1:45 PM	0	0	0	16	0	1	1	28	0	0	41	16	103
2:00 PM	0	0	0	13	0	4	2	32	0	0	43	16	110
2:15 PM	0	0	0	11	0	2	1	30	0	0	39	19	102
2:30 PM	0	0	0	10	0	5	3	33	0	0	30	14	95
2:45 PM	0	0	0	14	0	2	3	39	0	0	55	25	138
3:00 PM	0	0	0	15	0	4	3	33	0	0	43	13	111
3:15 PM	0	0	0	17	0	6	5	39	0	0	64	22	153
3:30 PM	0	0	0	23	0	10	5	52	0	0	63	28	181
3:45 PM	0	0	0	26	0	2	5	58	0	0	77	36	204
4:00 PM	0	0	0	27	0	2	4	55	0	0	80	31	199
4:15 PM	0	0	0	18	0	6	4	52	0	0	76	25	181
4:30 PM	0	0	0	27	0	3	6	65	0	0	77	26	204
4:45 PM	0	0	0	28	0	7	4	71	0	0	85	27	222
5:00 PM	0	0	0	15	0	6	6	56	0	0	90	32	205
5:15 PM	0	0	0	27	0	2	4	55	0	0	83	31	202
5:30 PM	0	0	0	19	0	3	6	54	0	0	69	22	173
5:45 PM	0	0	0	26	0	5	3	52	0	0	48	24	158
6:00 PM	0	0	0	26	0	4	3	44	0	0	64	19	160
6:15 PM	0	0	0	22	0	3	6	41	0	0	44	18	134
6:30 PM	0	0	0	16	0	6	4	48	0	0	43	20	137
6:45 PM	0	0	0	18	0	4	3	27	0	0	35	25	112
7:00 PM	0	0	0	17	0	4	3	30	0	0	48	18	120
7:15 PM	0	0	0	19	0	0	10	34	0	0	46	16	125
7:30 PM	0	0	0	21	0	2	4	47	0	0	48	12	134
7:45 PM	0	0	0	9	0	2	4	37	0	0	39	31	122
8:00 PM	0	0	0	10	0	3	5	23	0	0	38	25	104
8:15 PM	0	0	0	11	0	3	2	34	0	0	41	12	103
8:30 PM	0	0	0	7	0	5	1	28	0	0	36	16	93
8:45 PM	0	0	0	12	0	4	2	24	0	0	45	19	106
9:00 PM	0	0	0	14	0	5	5	27	0	0	35	19	105
9:15 PM	0	0	0	6	0	6	7	14	0	0	27	19	79
9:30 PM	0	0	0	18	0	2	4	23	0	0	23	14	84
9:45 PM	0	0	0	12	0	1	4	20	0	0	27	8	72
10:00 PM	0	0	0	3	0	3	1	12	0	0	21	12	52
10:15 PM	0	0	0	9	0	0	2	13	0	0	15	26	65
10:30 PM	0	0	0	9	0	3	3	12	0	0	17	23	67
10:45 PM	0	0	0	8	0	1	5	11	0	0	22	19	66
11:00 PM	0	0	0	55	0	7	0	14	0	0	16	7	99
11:15 PM	0	0	0	6	0	1	1	10	0	0	6	6	30
11:30 PM	0	0	0	0	0	1	2	8	0	0	11	8	30
11:45 PM	0	0	0	6	0	0	2	4	0	0	6	6	24

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	1395	0	240	251	3026	0	0	2996	1370	9278
Approach %	####	####	####	85.32	0.00	14.68	7.66	92.34	0.00	0.00	68.62	31.38	
App/Depart	0	/	1621	1635	/	0	3277	/	4421	4366	/	3236	

Peak Hr Begins at: 430 PM

PEAK													
Volumes	0	0	0	97	0	18	20	247	0	0	335	116	833
Approach %	####	####	####	84.35	0.00	15.65	7.49	92.51	0.00	0.00	74.28	25.72	
PEAK HR. FACTOR:	0.000			0.821			0.890			0.924			0.938

CONTROL: 1-Way Stop (SB)
COMMENT 1:
GPS: 34.882084, -117.094762
HOURS:

	FROM:		TO:	
AM	1200	AM	1200	AM
NOON				
PM				

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: Pettit Rd DATE: 05/22/25 LOCATION: Barstow

E-W STREET: Main St DAY: THURSDAY PROJECT# 25-1314-005

AM PEAK HOUR

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	1	2	0	0	2	0	
7:00 AM	0	0	0	58	0	8	0	37	0	0	17	9	129
7:15 AM	0	0	0	18	0	2	1	58	0	0	23	14	116
7:30 AM	0	0	0	27	0	4	2	55	0	0	25	11	124
7:45 AM	0	0	0	17	0	7	3	68	0	0	25	15	135
8:00 AM	0	0	0	11	0	1	2	43	0	0	40	14	111
8:15 AM	0	0	0	13	0	6	1	51	0	0	32	17	120
8:30 AM	0	0	0	24	0	0	6	51	0	0	30	31	142
8:45 AM	0	0	0	26	0	3	2	54	0	0	36	9	130
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
12:00 PM													
12:15 PM													
12:30 PM													
12:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	194	0	31	17	417	0	0	228	120	1007
Approach %	#DIV/0!	#DIV/0!	#DIV/0!	86.22	0.00	13.78	3.92	96.08	0.00	0.00	65.52	34.48	
App/Depart	0	/	137	225	/	0	434	/	611	348	/	259	
AM Peak Hour:			745 AM										
PEAK													
Volumes	0	0	0	65	0	14	12	213	0	0	127	77	508
Approach %	#DIV/0!	#DIV/0!	#DIV/0!	82.28	0.00	17.72	5.33	94.67	0.00	0.00	62.25	37.75	
PEAK HR. FACTOR:		**0.000**			**0.823**			**0.792**			**0.836**		**0.894**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: Pettit Rd | DATE: 05/22/25 | LOCATION: Barstow

E-W STREET: Main St | DAY: THURSDAY | PROJECT# 25-1314-005

PM PEAK HOUR

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	1	2	0	0	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	0	27	0	2	4	55	0	0	80	31	199
4:15 PM	0	0	0	18	0	6	4	52	0	0	76	25	181
4:30 PM	0	0	0	27	0	3	6	65	0	0	77	26	204
4:45 PM	0	0	0	28	0	7	4	71	0	0	85	27	222
5:00 PM	0	0	0	15	0	6	6	56	0	0	90	32	205
5:15 PM	0	0	0	27	0	2	4	55	0	0	83	31	202
5:30 PM	0	0	0	19	0	3	6	54	0	0	69	22	173
5:45 PM	0	0	0	26	0	5	3	52	0	0	48	24	158
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	187	0	34	37	460	0	0	608	218	1544
Approach %	#DIV/0!	#DIV/0!	#DIV/0!	84.62	0.00	15.38	7.44	92.56	0.00	0.00	73.61	26.39	
App/Depart	0	/	255	221	/	0	497	/	647	826	/	642	
PM Peak Hour:			430 PM										
PEAK													
Volumes	0	0	0	97	0	18	20	247	0	0	335	116	833
Approach %	#DIV/0!	#DIV/0!	#DIV/0!	84.35	0.00	15.65	7.49	92.51	0.00	0.00	74.28	25.72	
PEAK HR. FACTOR:		0.000			0.821			0.890			0.924		0.938

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-005

Location: Pettit Rd north of Main St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	6		3					12:00	20		18				
00:15	5		5					12:15	15		18				
00:30	6		3					12:30	13		13				
00:45	4	21	4	15			36	12:45	13	61	13	62			123
01:00	4		0					13:00	15		20				
01:15	3		1					13:15	14		20				
01:30	7		4					13:30	20		21				
01:45	2	16	2	7			23	13:45	17	66	17	78			144
02:00	1		4					14:00	18		17				
02:15	2		0					14:15	20		13				
02:30	0		4					14:30	17		15				
02:45	2	5	3	11			16	14:45	28	83	16	61			144
03:00	1		3					15:00	16		19				
03:15	0		1					15:15	27		23				
03:30	1		3					15:30	33		33				
03:45	6	8	4	11			19	15:45	41	117	28	103			220
04:00	4		2					16:00	35		29				
04:15	4		5					16:15	29		24				
04:30	4		9					16:30	32		30				
04:45	5	17	10	26			43	16:45	31	127	35	118			245
05:00	7		15					17:00	38		21				
05:15	4		11					17:15	35		29				
05:30	11		11					17:30	28		22				
05:45	5	27	27	64			91	17:45	27	128	31	103			231
06:00	16		17					18:00	22		30				
06:15	22		19					18:15	24		25				
06:30	44		24					18:30	24		22				
06:45	41	123	32	92			215	18:45	28	98	22	99			197
07:00	9		66					19:00	21		21				
07:15	15		20					19:15	26		19				
07:30	13		31					19:30	16		23				
07:45	18	55	24	141			196	19:45	35	98	11	74			172
08:00	16		12					20:00	30		13				
08:15	18		19					20:15	14		14				
08:30	37		24					20:30	17		12				
08:45	11	82	29	84			166	20:45	21	82	16	55			137
09:00	8		23					21:00	24		19				
09:15	6		17					21:15	26		12				
09:30	15		18					21:30	18		20				
09:45	19	48	19	77			125	21:45	12	80	13	64			144
10:00	23		28					22:00	13		6				
10:15	18		29					22:15	28		9				
10:30	16		23					22:30	26		12				
10:45	22	79	21	101			180	22:45	24	91	9	36			127
11:00	24		23					23:00	7		62				
11:15	14		15					23:15	7		7				
11:30	18		22					23:30	10		1				
11:45	21	77	17	77			154	23:45	8	32	6	76			108
Total Vol.		558		706			**1264**			1063		929			**1992**

GPS: 34.882084, -117.094762

Daily Totals

NB	SB	EB	WB	**Combined**
1621	1635			**3256**

	AM			PM		
Split %	44.1%	55.9%	**38.8%**	53.4%	46.6%	**61.2%**
Peak Hour	06:00	06:45	**06:15**	15:30	16:00	**15:30**
Volume	123	149	**257**	138	118	**252**
P.H.F.	0.70	0.56	**0.86**	0.84	0.84	**0.91**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-005

Location: Main St east of Pettit Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			15		22			12:00			68		63		
00:15			16		13			12:15			45		64		
00:30			10		17			12:30			41		51		
00:45			9	50	7	59	109	12:45			49	203	54	232	435
01:00			5		11			13:00			57		59		
01:15			6		8			13:15			59		63		
01:30			9		10			13:30			40		70		
01:45			5	25	4	33	58	13:45			44	200	57	249	449
02:00			6		6			14:00			45		59		
02:15			4		4			14:15			41		58		
02:30			8		4			14:30			43		44		
02:45			6	24	3	17	41	14:45			53	182	80	241	423
03:00			6		3			15:00			48		56		
03:15			4		7			15:15			56		86		
03:30			6		2			15:30			75		91		
03:45			9	25	3	15	40	15:45			84	263	113	346	609
04:00			8		10			16:00			82		111		
04:15			13		5			16:15			70		101		
04:30			20		9			16:30			92		103		
04:45			30	71	8	32	103	16:45			99	343	112	427	770
05:00			27		14			17:00			71		122		
05:15			41		16			17:15			82		114		
05:30			47		29			17:30			73		91		
05:45			78	193	21	80	273	17:45			78	304	72	399	703
06:00			51		32			18:00			70		83		
06:15			56		31			18:15			63		62		
06:30			56		44			18:30			64		63		
06:45			88	251	47	154	405	18:45			45	242	60	268	510
07:00			95		26			19:00			47		66		
07:15			76		37			19:15			53		62		
07:30			82		36			19:30			68		60		
07:45			85	338	40	139	477	19:45			46	214	70	258	472
08:00			54		54			20:00			33		63		
08:15			64		49			20:15			45		53		
08:30			75		61			20:30			35		52		
08:45			80	273	45	209	482	20:45			36	149	64	232	381
09:00			53		35			21:00			41		54		
09:15			56		26			21:15			20		46		
09:30			62		43			21:30			41		37		
09:45			69	240	56	160	400	21:45			32	134	35	172	306
10:00			73		60			22:00			15		33		
10:15			76		48			22:15			22		41		
10:30			66		47			22:30			21		40		
10:45			63	278	57	212	490	22:45			19	77	41	155	232
11:00			62		50			23:00			69		23		
11:15			59		45			23:15			16		12		
11:30			61		57			23:30			8		19		
11:45			57	239	59	211	450	23:45			10	103	12	66	169
Total Vol.				2007		1321	**3328**					2414		3045	**5459**

GPS: 34.882084, -117.094762

	NB	SB	EB	WB	**Combined**
Daily Totals			4421	4366	**8787**

	AM			PM		
Split %	60.3%	39.7%	**37.9%**	44.2%	55.8%	**62.1%**
Peak Hour	06:45	11:30	**09:45**	16:30	16:30	**16:30**
Volume	341	243	**495**	344	451	**795**
P.H.F.	0.90	0.95	**0.93**	0.87	0.92	**0.94**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-005

Location: Main St west of Pettit Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			13		17			12:00			54		47		
00:15			12		9			12:15			33		55		
00:30			7		11			12:30			33		43		
00:45			6	38	4	41	79	12:45			41	161	46	191	352
01:00			5		7			13:00			44		51		
01:15			5		5			13:15			42		52		
01:30			5		3			13:30			28		59		
01:45			4	19	3	18	37	13:45			29	143	42	204	347
02:00			2		5			14:00			34		47		
02:15			5		3			14:15			31		41		
02:30			6		6			14:30			36		35		
02:45			5	18	3	17	35	14:45			42	143	57	180	323
03:00			3		2			15:00			36		47		
03:15			4		8			15:15			44		70		
03:30			3		1			15:30			57		73		
03:45			8	18	0	11	29	15:45			63	200	79	269	469
04:00			6		6			16:00			59		82		
04:15			10		3			16:15			56		82		
04:30			12		6			16:30			71		80		
04:45			23	51	6	21	72	16:45			75	261	92	336	597
05:00			13		8			17:00			62		96		
05:15			30		12			17:15			59		85		
05:30			39		21			17:30			60		72		
05:45			53	135	18	59	194	17:45			55	236	53	306	542
06:00			38		20			18:00			47		68		
06:15			47		19			18:15			47		47		
06:30			48		16			18:30			52		49		
06:45			63	196	13	68	264	18:45			30	176	39	203	379
07:00			37		25			19:00			33		52		
07:15			59		25			19:15			44		46		
07:30			57		29			19:30			51		50		
07:45			71	224	32	111	335	19:45			41	169	41	189	358
08:00			45		41			20:00			28		41		
08:15			52		38			20:15			36		44		
08:30			57		30			20:30			29		41		
08:45			56	210	39	148	358	20:45			26	119	49	175	294
09:00			35		32			21:00			32		40		
09:15			46		27			21:15			21		33		
09:30			47		31			21:30			27		25		
09:45			53	181	40	130	311	21:45			24	104	28	126	230
10:00			49		41			22:00			13		24		
10:15			54		37			22:15			15		15		
10:30			46		34			22:30			15		20		
10:45			44	193	37	149	342	22:45			16	59	23	82	141
11:00			45		32			23:00			14		23		
11:15			46		33			23:15			11		7		
11:30			45		45			23:30			10		12		
11:45			46	182	44	154	336	23:45			6	41	6	48	89
Total Vol.			1465		927		**2392**				1812		2309		**4121**

GPS: 34.882084, -117.094762

	NB	SB	EB	WB	**Combined**
Daily Totals			3277	3236	**6513**

	AM			PM		
Split %	61.2%	38.8%	**36.7%**	44.0%	56.0%	**63.3%**
Peak Hour	07:15	11:30	**11:30**	16:30	16:30	**16:30**
Volume	232	191	**369**	267	353	**620**
P.H.F.	0.82	0.87	**0.91**	0.89	0.92	**0.93**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-005

Location: Pettit Rd & Main St

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
00:00	0		3		13		22			12:00	0		18		54		63		
00:15	0		5		12		13			12:15	0		18		33		64		
00:30	0		3		7		17			12:30	0		13		33		51		
00:45	0	0	4	15	6	38	7	59	112	12:45	0	0	13	62	41	161	54	232	455
01:00	0		0		5		11			13:00	0		20		44		59		
01:15	0		1		5		8			13:15	0		20		42		63		
01:30	0		4		5		10			13:30	0		21		28		70		
01:45	0	0	2	7	4	19	4	33	59	13:45	0	0	17	78	29	143	57	249	470
02:00	0		4		2		6			14:00	0		17		34		59		
02:15	0		0		5		4			14:15	0		13		31		58		
02:30	0		4		6		4			14:30	0		15		36		44		
02:45	0	0	3	11	5	18	3	17	46	14:45	0	0	16	61	42	143	80	241	445
03:00	0		3		3		3			15:00	0		19		36		56		
03:15	0		1		4		7			15:15	0		23		44		86		
03:30	0		3		3		2			15:30	0		33		57		91		
03:45	0	0	4	11	8	18	3	15	44	15:45	0	0	28	103	63	200	113	346	649
04:00	0		2		6		10			16:00	0		29		59		111		
04:15	0		5		10		5			16:15	0		24		56		101		
04:30	0		9		12		9			16:30	0		30		71		103		
04:45	0	0	10	26	23	51	8	32	109	16:45	0	0	35	118	75	261	112	427	806
05:00	0		15		13		14			17:00	0		21		62		122		
05:15	0		11		30		16			17:15	0		29		59		114		
05:30	0		11		39		29			17:30	0		22		60		91		
05:45	0	0	27	64	53	135	21	80	279	17:45	0	0	31	103	55	236	72	399	738
06:00	0		17		38		32			18:00	0		30		47		83		
06:15	0		19		47		31			18:15	0		25		47		62		
06:30	0		24		48		44			18:30	0		22		52		63		
06:45	0	0	32	92	63	196	47	154	442	18:45	0	0	22	99	30	176	60	268	543
07:00	0		66		37		26			19:00	0		21		33		66		
07:15	0		20		59		37			19:15	0		19		44		62		
07:30	0		31		57		36			19:30	0		23		51		60		
07:45	0	0	24	141	71	224	40	139	504	19:45	0	0	11	74	41	169	70	258	501
08:00	0		12		45		54			20:00	0		13		28		63		
08:15	0		19		52		49			20:15	0		14		36		53		
08:30	0		24		57		61			20:30	0		12		29		52		
08:45	0	0	29	84	56	210	45	209	503	20:45	0	0	16	55	26	119	64	232	406
09:00	0		23		35		35			21:00	0		19		32		54		
09:15	0		17		46		26			21:15	0		12		21		46		
09:30	0		18		47		43			21:30	0		20		27		37		
09:45	0	0	19	77	53	181	56	160	418	21:45	0	0	13	64	24	104	35	172	340
10:00	0		28		49		60			22:00	0		6		13		33		
10:15	0		29		54		48			22:15	0		9		15		41		
10:30	0		23		46		47			22:30	0		12		15		40		
10:45	0	0	21	101	44	193	57	212	506	22:45	0	0	9	36	16	59	41	155	250
11:00	0		23		45		50			23:00	0		62		14		23		
11:15	0		15		46		45			23:15	0		7		11		12		
11:30	0		22		45		57			23:30	0		1		10		19		
11:45	0	0	17	77	46	182	59	211	470	23:45	0	0	6	76	6	41	12	66	183
Total Vol.				706		1465		1321	**3492**					929		1812		3045	**5786**

GPS: 34.882084, -117.094762

Daily Totals

NB	SB	EB	WB	Combined
	1635	3277	4366	**9278**

	AM				PM			
Split %	20.2%	42.0%	37.8%	**37.6%**	16.1%	31.3%	52.6%	**62.4%**
Peak Hour	06:45	07:15	11:30	**09:45**	16:00	16:30	16:30	**16:30**
Volume	149	232	243	**512**	118	267	451	**833**
P.H.F.	0.56	0.82	0.95	**0.93**	0.84	0.89	0.92	**0.94**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Pettit Rd
E-W STREET: Main St

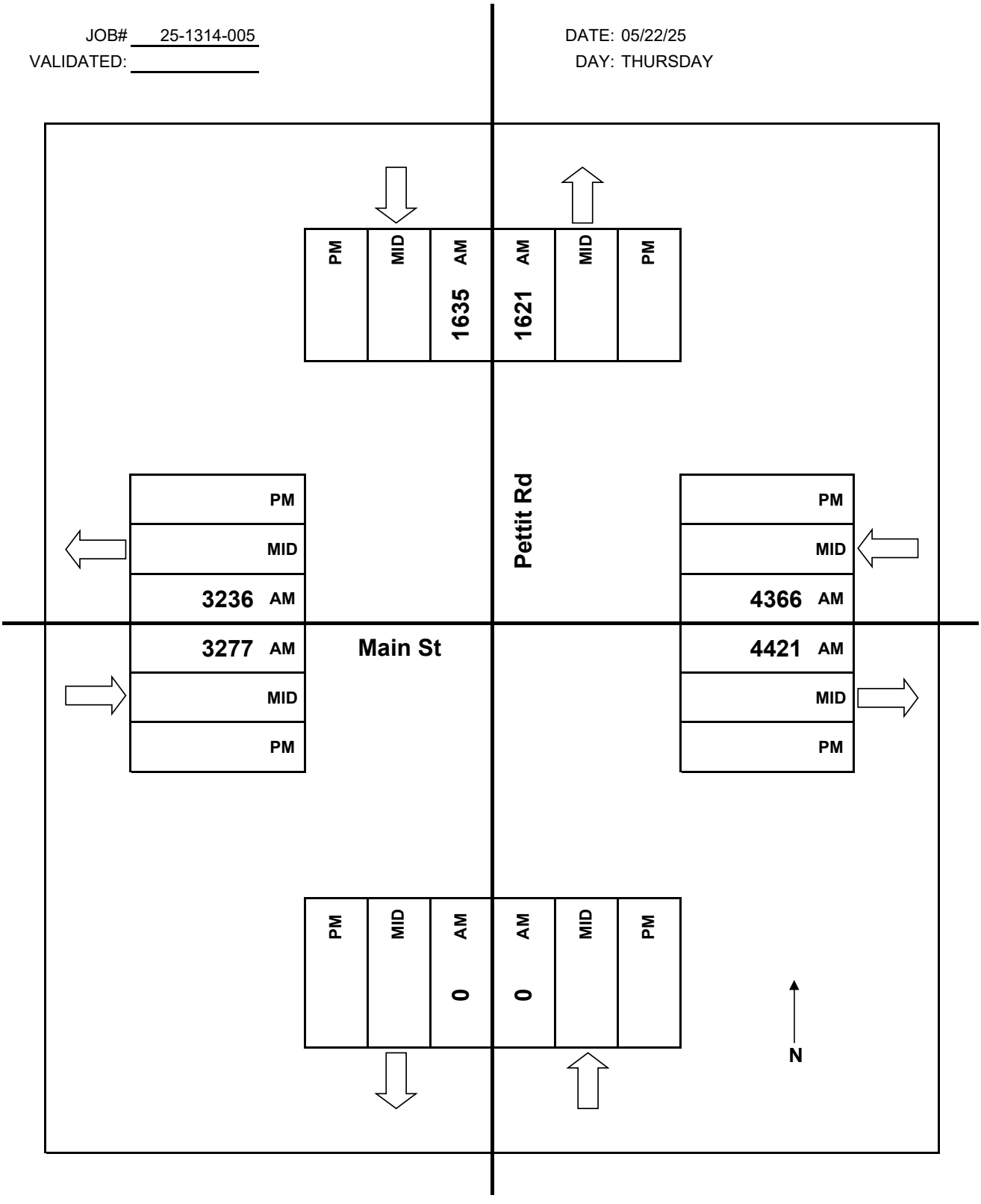
Date: 05/22/25
Day: THURSDAY

City: Barstow
Project #: 25-1314-005

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0
3:30 AM	1	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0
TOTAL	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

JOB# 25-1314-005
VALIDATED: _____

DATE: 05/22/25
DAY: THURSDAY



Field Data Services of Arizona, Inc./Veracity Traffic Group – May 2025

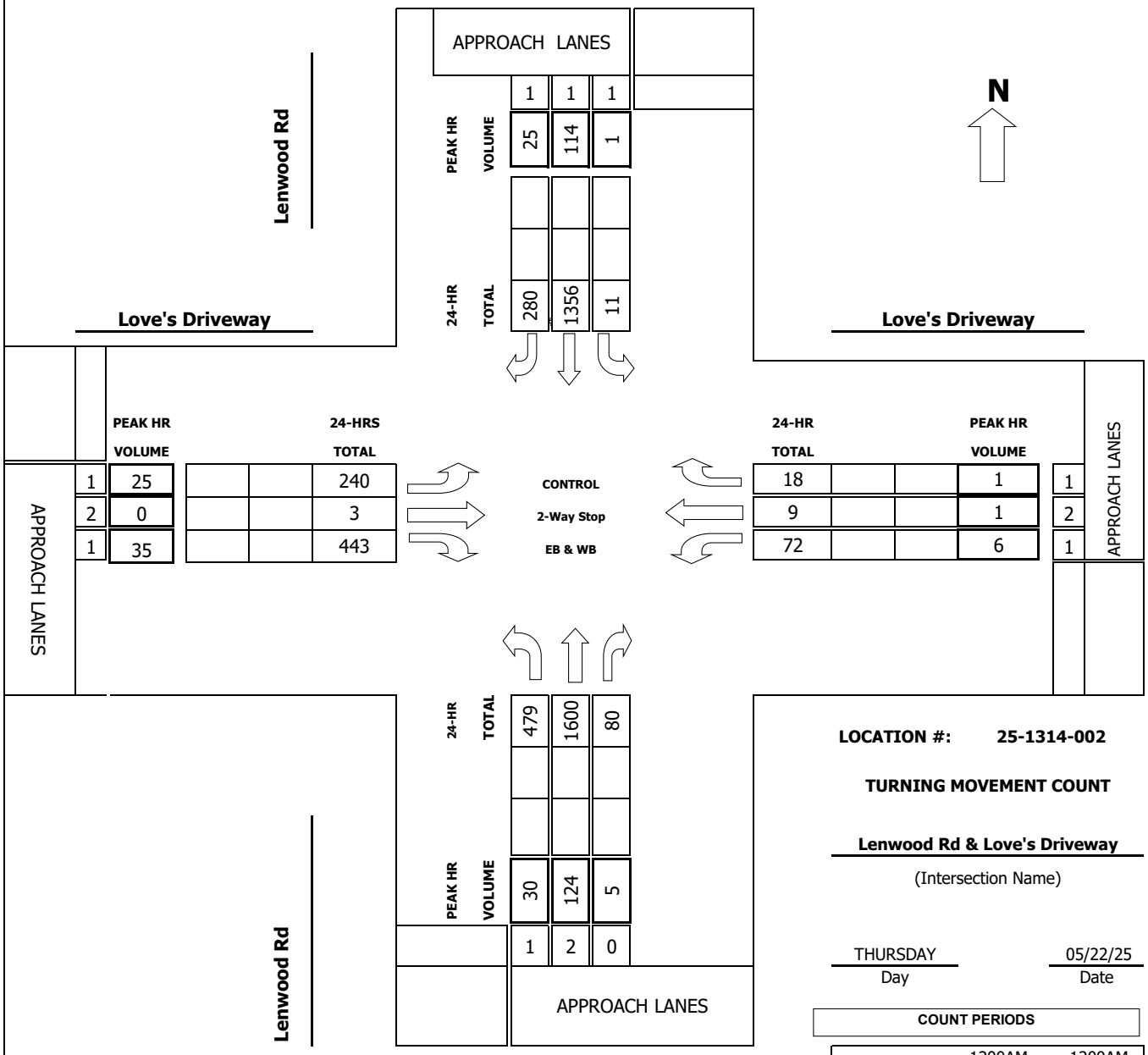
Intersection 17

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 25-1314-002

TMC SUMMARY OF Lenwood Rd & Love's Driveway



LOCATION #: 25-1314-002

TURNING MOVEMENT COUNT

Lenwood Rd & Love's Driveway
(Intersection Name)

THURSDAY (Day) 05/22/25 (Date)

COUNT PERIODS

1200AM	-	1200AM
	-	
	-	

PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Lenwood Rd | DATE: 05/22/25 | LOCATION: Barstow

E-W STREET: Love's Driveway | DAY: THURSDAY | PROJECT# 25-1314-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	1	1	1	2	1	1	2	1	
12:00 AM	0	13	0	0	5	0	0	0	2	1	0	0	21
12:15 AM	2	8	0	0	4	2	0	0	1	0	0	0	17
12:30 AM	3	5	0	0	3	0	2	0	1	0	0	0	14
12:45 AM	2	3	0	0	3	0	1	0	2	0	0	0	11
1:00 AM	1	2	0	0	5	0	0	0	1	0	0	0	9
1:15 AM	1	3	0	0	2	1	2	0	0	0	0	0	9
1:30 AM	0	6	0	0	2	1	1	0	0	0	0	0	10
1:45 AM	0	5	0	0	3	0	1	0	2	0	0	0	11
2:00 AM	3	4	1	0	2	0	0	0	1	0	0	0	11
2:15 AM	1	4	0	0	4	0	1	0	3	1	0	0	14
2:30 AM	3	2	0	0	3	0	0	0	2	0	0	0	10
2:45 AM	1	4	1	0	2	0	0	0	0	0	0	0	8
3:00 AM	2	1	0	0	4	0	1	0	0	0	0	1	9
3:15 AM	1	2	0	0	3	1	2	0	0	0	0	0	9
3:30 AM	0	2	0	0	3	0	1	0	0	0	0	0	6
3:45 AM	0	0	0	0	6	2	0	0	1	0	0	0	9
4:00 AM	3	2	0	0	6	0	0	0	3	0	0	0	14
4:15 AM	4	3	0	0	5	2	0	0	1	0	0	0	15
4:30 AM	3	3	0	0	7	2	2	0	3	0	0	0	20
4:45 AM	1	6	1	0	5	3	0	0	3	0	0	0	19
5:00 AM	4	10	0	0	11	2	1	0	8	1	0	0	37
5:15 AM	3	9	0	0	10	3	1	0	5	0	0	0	31
5:30 AM	3	23	0	0	11	6	2	0	5	1	0	0	51
5:45 AM	4	19	0	0	14	4	0	0	4	0	0	0	45
6:00 AM	2	12	0	0	11	2	2	0	2	0	0	0	31
6:15 AM	3	11	1	1	15	6	2	0	2	0	0	0	41
6:30 AM	6	13	1	0	16	3	2	0	10	0	0	0	51
6:45 AM	7	11	3	1	18	4	2	0	3	0	0	0	49
7:00 AM	7	15	2	0	11	3	0	0	5	1	0	0	44
7:15 AM	5	16	0	0	17	1	0	0	7	0	0	0	46
7:30 AM	3	17	0	0	13	4	4	0	2	2	0	0	45
7:45 AM	8	20	4	0	30	9	2	0	7	0	0	0	80
8:00 AM	6	20	2	1	22	5	1	0	7	1	0	0	65
8:15 AM	4	20	0	0	29	1	2	0	6	0	0	0	62
8:30 AM	6	17	1	0	11	2	1	0	4	0	0	0	42
8:45 AM	6	16	0	0	18	3	2	0	5	0	0	0	50
9:00 AM	6	19	2	2	22	4	2	0	4	1	1	0	63
9:15 AM	10	20	2	0	23	3	2	0	8	0	0	0	68
9:30 AM	12	18	2	1	18	5	3	0	11	0	0	0	70
9:45 AM	10	18	2	0	18	5	3	0	10	0	0	2	68
10:00 AM	9	16	2	0	19	5	1	0	7	0	0	0	59
10:15 AM	2	10	1	0	18	7	7	0	1	3	0	0	49
10:30 AM	7	10	2	0	19	2	1	0	5	1	0	2	49
10:45 AM	8	11	2	0	22	1	2	3	2	1	0	0	52
11:00 AM	9	16	5	0	23	3	5	0	1	1	0	0	63
11:15 AM	6	13	2	0	21	6	2	0	4	1	0	1	56
11:30 AM	8	17	1	1	24	4	4	0	1	2	0	0	62
11:45 AM	5	19	2	0	20	2	1	0	5	3	0	0	57
12:00 PM	7	20	1	0	17	5	6	0	2	1	0	1	60
12:15 PM	6	20	0	0	16	2	3	0	6	0	1	0	54
12:30 PM	9	17	1	0	20	3	2	0	3	1	0	0	56
12:45 PM	6	13	0	0	17	6	5	0	2	2	0	0	51
1:00 PM	3	12	1	0	21	1	2	0	8	3	0	0	51
1:15 PM	2	22	2	0	12	4	1	0	5	1	0	1	50
1:30 PM	5	23	1	1	15	2	4	0	9	0	0	0	60
1:45 PM	8	18	0	0	8	5	1	0	6	1	0	1	48
2:00 PM	5	9	1	0	11	2	5	0	8	2	0	0	43
2:15 PM	7	19	3	0	10	3	2	0	5	3	1	0	53
2:30 PM	4	24	2	0	9	6	6	0	7	1	0	0	59
2:45 PM	8	25	1	0	15	2	3	0	11	0	0	0	65
3:00 PM	5	19	0	1	17	5	3	0	10	1	0	1	62
3:15 PM	9	38	0	0	28	2	1	0	14	2	1	0	95
3:30 PM	9	23	1	0	30	7	5	0	13	2	1	1	92
3:45 PM	10	30	0	0	23	2	2	0	12	1	0	0	80
4:00 PM	13	23	1	0	25	3	6	0	11	0	1	0	83
4:15 PM	6	36	0	0	36	7	6	0	8	2	0	0	101
4:30 PM	8	32	2	0	24	6	10	0	8	0	0	0	90
4:45 PM	6	22	2	1	26	9	4	0	10	1	1	0	82
5:00 PM	10	34	1	0	28	3	5	0	9	3	0	1	94
5:15 PM	4	28	2	0	27	10	6	0	6	1	0	0	84
5:30 PM	11	36	2	0	21	4	8	0	5	2	0	0	89
5:45 PM	8	31	0	0	32	3	4	0	7	1	0	0	86
6:00 PM	9	19	0	0	17	3	3	0	13	0	0	0	64
6:15 PM	4	32	1	0	26	3	3	0	5	3	0	2	79
6:30 PM	7	31	0	0	21	4	5	0	4	0	0	0	72
6:45 PM	12	22	1	0	24	2	5	0	6	2	0	0	74
7:00 PM	3	39	1	0	12	3	5	0	4	1	0	1	69
7:15 PM	4	27	2	1	11	8	0	0	4	3	0	0	60
7:30 PM	6	28	1	0	19	1	7	0	4	2	0	2	70
7:45 PM	3	28	1	0	18	3	2	0	4	0	0	0	59
8:00 PM	6	33	1	0	19	5	9	0	3	0	1	0	77
8:15 PM	4	19	0	0	13	1	4	0	5	0	0	0	46
8:30 PM	5	18	1	0	14	1	2	0	7	0	1	0	49
8:45 PM	9	26	2	0	16	0	2	0	3	2	0	0	60
9:00 PM	4	30	0	0	12	7	3	0	3	1	0	0	60
9:15 PM	8	29	0	0	10	3	5	0	4	2	0	0	61
9:30 PM	3	26	0	0	7	5	1	0	7	0	0	0	49
9:45 PM	2	17	0	0	10	2	6	0	1	0	0	0	38
10:00 PM	3	20	0	0	6	1	4	0	3	1	0	0	38
10:15 PM	5	16	0	0	6	2	0	0	2	0	0	0	31
10:30 PM	2	11	2	0	7	2	0	0	4	0	0	0	28
10:45 PM	2	18	0	0	6	0	1	0	0	3	0	0	30
11:00 PM	3	15	0	0	7	0	0	0	1	0	0	1	27
11:15 PM	2	4	0	0	3	2	1	0	1	0	0	0	13
11:30 PM	2	3	1	0	2	1	1	0	2	0	0	0	12
11:45 PM	2	1	0	0	1	0	0	0	1	0	0	0	5

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	479	1600	80	11	1356	280	240	3	443	72	9	18	4591
Approach %	22.19	74.11	3.71	0.67	82.33	17.00	34.99	0.44	64.58	72.73	9.09	18.18	
App/Depart	2159	/	1858	1647	/	1871	686	/	94	99	/	768	

Peak Hr Begins at: 415 PM

PEAK													
Volumes	30	124	5	1	114	25	25	0	35	6	1	1	367
Approach %	18.87	77.99	3.14	0.71	81.43	17.86	41.67	0.00	58.33	75.00	12.50	12.50	

PEAK HR. FACTOR:	0.883	0.814	0.833	0.500	0.908

CONTROL: 2-Way Stop (EB & WB)
COMMENT 1:
GPS: 34.857413, -117.091248

HOURS:

	FROM:		TO:	
AM	1200	AM	1200	AM
NOON				
PM				

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: Lenwood Rd DATE: 05/22/25 LOCATION: Barstow

E-W STREET: Love's Driveway DAY: THURSDAY PROJECT# 25-1314-002

AM PEAK HOUR

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	1	1	1	2	1	1	2	1	
7:00 AM	7	15	2	0	11	3	0	0	5	1	0	0	44
7:15 AM	5	16	0	0	17	1	0	0	7	0	0	0	46
7:30 AM	3	17	0	0	13	4	4	0	2	2	0	0	45
7:45 AM	8	20	4	0	30	9	2	0	7	0	0	0	80
8:00 AM	6	20	2	1	22	5	1	0	7	1	0	0	65
8:15 AM	4	20	0	0	29	1	2	0	6	0	0	0	62
8:30 AM	6	17	1	0	11	2	1	0	4	0	0	0	42
8:45 AM	6	16	0	0	18	3	2	0	5	0	0	0	50
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
12:00 PM													
12:15 PM													
12:30 PM													
12:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	45	141	9	1	151	28	12	0	43	4	0	0	434
Approach %	23.08	72.31	4.62	0.56	83.89	15.56	21.82	0.00	78.18	100.00	0.00	0.00	
App/Depart	195	/	153	180	/	198	55	/	10	4	/	73	
AM Peak Hour:			730 AM										
PEAK													
Volumes	21	77	6	1	94	19	9	0	22	3	0	0	252
Approach %	20.19	74.04	5.77	0.88	82.46	16.67	29.03	0.00	70.97	100.00	0.00	0.00	
PEAK HR. FACTOR:		**0.813**			**0.731**			**0.861**			**0.375**		**0.788**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: Lenwood Rd DATE: 05/22/25 LOCATION: Barstow

E-W STREET: Love's Driveway DAY: THURSDAY PROJECT# 25-1314-002

PM PEAK HOUR

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	1	1	1	2	1	1	2	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	13	23	1	0	25	3	6	0	11	0	1	0	83
4:15 PM	6	36	0	0	36	7	6	0	8	2	0	0	101
4:30 PM	8	32	2	0	24	6	10	0	8	0	0	0	90
4:45 PM	6	22	2	1	26	9	4	0	10	1	1	0	82
5:00 PM	10	34	1	0	28	3	5	0	9	3	0	1	94
5:15 PM	4	28	2	0	27	10	6	0	6	1	0	0	84
5:30 PM	11	36	2	0	21	4	8	0	5	2	0	0	89
5:45 PM	8	31	0	0	32	3	4	0	7	1	0	0	86
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	66	242	10	1	219	45	49	0	64	10	2	1	709
Approach %	20.75	76.10	3.14	0.38	82.64	16.98	43.36	0.00	56.64	76.92	15.38	7.69	
App/Depart	318	/	292	265	/	293	113	/	11	13	/	113	
PM Peak Hour:			415 PM										
PEAK													
Volumes	30	124	5	1	114	25	25	0	35	6	1	1	367
Approach %	18.87	77.99	3.14	0.71	81.43	17.86	41.67	0.00	58.33	75.00	12.50	12.50	
PEAK HR. FACTOR:		0.883			0.814			0.833			0.500		0.908

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Lenwood Rd
E-W STREET: Love's Driveway

Date: 05/22/25
Day: THURSDAY

City: Barstow
Project #: 25-1314-002

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	1	0	0	0	0
6:30 AM	0	0	0	1	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	1	0	0	0	0	0	0
9:30 AM	0	2	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	1	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	1	1	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	1	0	0	0	0	0	0
3:45 PM	0	0	1	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	1	2	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	1	0	1	2	0	0	0	0
6:00 PM	0	3	0	1	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0
7:15 PM	0	3	0	2	0	0	0	0
7:30 PM	0	1	0	1	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	1	0	0	0	0
8:15 PM	0	0	0	2	0	0	0	0
8:30 PM	0	0	0	2	0	0	0	0
8:45 PM	0	0	0	1	0	0	0	0
9:00 PM	0	0	0	2	0	0	1	0
9:15 PM	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0
TOTAL	**1**	**16**	**5**	**17**	**0**	**0**	**1**	**1**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-002

Location: Lenwood Rd north of Love's Driveway

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	13		5					12:00	27		22				
00:15	8		6					12:15	23		18				
00:30	7		3					12:30	19		23				
00:45	4	32	3	17			49	12:45	18	87	23	86			173
01:00	2		5					13:00	14		22				
01:15	5		3					13:15	24		16				
01:30	7		3					13:30	27		18				
01:45	6	20	3	14			34	13:45	20	85	13	69			154
02:00	4		2					14:00	14		13				
02:15	5		4					14:15	21		13				
02:30	2		3					14:30	30		15				
02:45	4	15	2	11			26	14:45	28	93	17	58			151
03:00	3		4					15:00	23		23				
03:15	4		4					15:15	39		30				
03:30	3		3					15:30	29		37				
03:45	0	10	8	19			29	15:45	32	123	25	115			238
04:00	2		6					16:00	29		28				
04:15	3		7					16:15	42		43				
04:30	5		9					16:30	42		30				
04:45	6	16	8	30			46	16:45	26	139	36	137			276
05:00	11		13					17:00	40		31				
05:15	10		13					17:15	34		37				
05:30	25		17					17:30	44		25				
05:45	19	65	18	61			126	17:45	35	153	35	128			281
06:00	14		13					18:00	22		20				
06:15	13		22					18:15	37		29				
06:30	15		19					18:30	36		25				
06:45	13	55	23	77			132	18:45	27	122	26	100			222
07:00	15		14					19:00	45		15				
07:15	16		18					19:15	27		20				
07:30	21		17					19:30	37		20				
07:45	22	74	39	88			162	19:45	30	139	21	76			215
08:00	21		28					20:00	42		24				
08:15	22		30					20:15	23		14				
08:30	18		13					20:30	20		15				
08:45	18	79	21	92			171	20:45	28	113	16	69			182
09:00	21		28					21:00	33		19				
09:15	22		26					21:15	34		13				
09:30	21		24					21:30	27		12				
09:45	23	87	23	101			188	21:45	23	117	12	56			173
10:00	17		24					22:00	24		7				
10:15	17		25					22:15	16		8				
10:30	13		21					22:30	11		9				
10:45	13	60	23	93			153	22:45	19	70	6	30			100
11:00	21		26					23:00	16		7				
11:15	16		27					23:15	5		5				
11:30	21		29					23:30	4		3				
11:45	20	78	22	104			182	23:45	1	26	1	16			42
Total Vol.		591		707			**1298**			1267		940			**2207**

GPS: 34.857413, -117.091248

Daily Totals

NB	SB	EB	WB	**Combined**
1858	1647			**3505**

	AM			**PM**		
Split %	45.5%	54.5%	**37.0%**	57.4%	42.6%	**63.0%**
Peak Hour	11:30	07:30	**07:30**	17:00	16:15	**16:15**
Volume	91	114	**200**	153	140	**290**
P.H.F.	0.84	0.73	**0.82**	0.87	0.81	**0.85**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-002

Location: Lenwood Rd south of Love's Driveway

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	13		8					12:00	28		20				
00:15	10		5					12:15	26		22				
00:30	8		4					12:30	27		24				
00:45	5	36	5	22			58	12:45	19	100	21	87			187
01:00	3		6					13:00	16		32				
01:15	4		2					13:15	26		18				
01:30	6		2					13:30	29		24				
01:45	5	18	5	15			33	13:45	26	97	15	89			186
02:00	8		3					14:00	15		21				
02:15	5		8					14:15	29		18				
02:30	5		5					14:30	30		17				
02:45	6	24	2	18			42	14:45	34	108	26	82			190
03:00	3		4					15:00	24		28				
03:15	3		3					15:15	47		44				
03:30	2		3					15:30	33		45				
03:45	0	8	7	17			25	15:45	40	144	36	153			297
04:00	5		9					16:00	37		36				
04:15	7		6					16:15	42		46				
04:30	6		10					16:30	42		32				
04:45	8	26	8	33			59	16:45	30	151	37	151			302
05:00	14		20					17:00	45		40				
05:15	12		15					17:15	34		34				
05:30	26		17					17:30	49		28				
05:45	23	75	18	70			145	17:45	39	167	40	142			309
06:00	14		13					18:00	28		30				
06:15	15		17					18:15	37		34				
06:30	20		26					18:30	38		25				
06:45	21	70	21	77			147	18:45	35	138	32	121			259
07:00	24		17					19:00	43		17				
07:15	21		24					19:15	33		18				
07:30	20		17					19:30	35		25				
07:45	32	97	37	95			192	19:45	32	143	22	82			225
08:00	28		30					20:00	40		22				
08:15	24		35					20:15	23		18				
08:30	24		15					20:30	24		21				
08:45	22	98	23	103			201	20:45	37	124	21	82			206
09:00	27		27					21:00	34		16				
09:15	32		31					21:15	37		16				
09:30	32		29					21:30	29		14				
09:45	30	121	28	115			236	21:45	19	119	11	57			176
10:00	27		26					22:00	23		10				
10:15	13		22					22:15	21		8				
10:30	19		25					22:30	15		11				
10:45	21	80	25	98			178	22:45	20	79	9	38			117
11:00	30		25					23:00	18		8				
11:15	21		26					23:15	6		4				
11:30	26		27					23:30	6		4				
11:45	26	103	28	106			209	23:45	3	33	2	18			51
Total Vol.		756		769			**1525**			1403		1102			**2505**

GPS: 34.857413, -117.091248

Daily Totals

NB	SB	EB	WB	**Combined**
2159	1871			**4030**

	AM			PM		
Split %	49.6%	50.4%	**37.8%**	56.0%	44.0%	**62.2%**
Peak Hour	09:00	07:30	**09:00**	17:00	15:30	**15:15**
Volume	121	119	**236**	167	163	**318**
P.H.F.	0.95	0.80	**0.94**	0.85	0.89	**0.87**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-002

Location: Love's Driveway east of Lenwood Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			0		1			12:00			1		2		
00:15			0		0			12:15			0		1		
00:30			0		0			12:30			1		1		
00:45			0	0	0	1	1	12:45			0	2	2	6	8
01:00			0		0			13:00			1		3		
01:15			0		0			13:15			2		2		
01:30			0		0			13:30			2		0		
01:45			0	0	0	0		13:45			0	5	2	7	12
02:00			1		0			14:00			1		2		
02:15			0		1			14:15			3		4		
02:30			0		0			14:30			2		1		
02:45			1	2	0	1	3	14:45			1	7	0	7	14
03:00			0		1			15:00			1		2		
03:15			0		0			15:15			0		3		
03:30			0		0			15:30			1		4		
03:45			0	0	0	1	1	15:45			0	2	1	10	12
04:00			0		0			16:00			1		1		
04:15			0		0			16:15			0		2		
04:30			0		0			16:30			2		0		
04:45			1	1	0	0	1	16:45			3	6	2	5	11
05:00			0		1			17:00			1		4		
05:15			0		0			17:15			2		1		
05:30			0		1			17:30			2		2		
05:45			0	0	0	2	2	17:45			0	5	1	8	13
06:00			0		0			18:00			0		0		
06:15			2		0			18:15			1		5		
06:30			1		0			18:30			0		0		
06:45			4	7	0	0	7	18:45			1	2	2	7	9
07:00			2		1			19:00			1		2		
07:15			0		0			19:15			3		3		
07:30			0		2			19:30			1		4		
07:45			4	6	0	3	9	19:45			1	6	0	9	15
08:00			3		1			20:00			1		1		
08:15			0		0			20:15			0		0		
08:30			1		0			20:30			1		1		
08:45			0	4	0	1	5	20:45			2	4	2	4	8
09:00			4		2			21:00			0		1		
09:15			2		0			21:15			0		2		
09:30			3		0			21:30			0		0		
09:45			2	11	2	4	15	21:45			0	0	0	3	3
10:00			2		0			22:00			0		1		
10:15			1		3			22:15			0		0		
10:30			2		3			22:30			2		0		
10:45			5	10	1	7	17	22:45			0	2	3	4	6
11:00			5		1			23:00			0		1		
11:15			2		2			23:15			0		0		
11:30			2		2			23:30			1		0		
11:45			2	11	3	8	19	23:45			0	1	0	1	2
Total Vol.				52		28	**80**					42		71	**113**

GPS: 34.857413, -117.091248

Daily Totals

NB	SB	EB	WB	Combined
		94	99	**193**

	AM			PM		
Split %	65.0%	35.0%	**41.5%**	37.2%	62.8%	**58.5%**
Peak Hour	10:30	11:15	**10:15**	16:30	18:45	**16:45**
Volume	14	9	**21**	8	11	**17**
P.H.F.	0.70	0.75	**0.88**	0.67	0.69	**0.85**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-002

Location: Love's Driveway west of Lenwood Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		0			12:00			8		12		
00:15			1		4			12:15			9		9		
00:30			3		3			12:30			5		12		
00:45			3	9	2	9	18	12:45			7	29	12	45	74
01:00			1		1			13:00			10		4		
01:15			2		2			13:15			6		6		
01:30			1		1			13:30			13		7		
01:45			3	7	0	4	11	13:45			7	36	13	30	66
02:00			1		3			14:00			13		7		
02:15			4		1			14:15			7		11		
02:30			2		3			14:30			13		10		
02:45			0	7	1	8	15	14:45			14	47	10	38	85
03:00			1		2			15:00			13		10		
03:15			2		2			15:15			15		12		
03:30			1		0			15:30			18		17		
03:45			1	5	2	6	11	15:45			14	60	12	51	111
04:00			3		3			16:00			17		17		
04:15			1		6			16:15			14		13		
04:30			5		5			16:30			18		14		
04:45			3	12	4	18	30	16:45			14	63	16	60	123
05:00			9		6			17:00			14		13		
05:15			6		6			17:15			12		14		
05:30			7		9			17:30			13		15		
05:45			4	26	8	29	55	17:45			11	50	11	53	103
06:00			4		4			18:00			16		12		
06:15			4		9			18:15			8		7		
06:30			12		9			18:30			9		11		
06:45			5	25	11	33	58	18:45			11	44	14	44	88
07:00			5		10			19:00			9		6		
07:15			7		6			19:15			4		12		
07:30			6		7			19:30			11		7		
07:45			9	27	17	40	67	19:45			6	30	6	31	61
08:00			8		11			20:00			12		12		
08:15			8		5			20:15			9		5		
08:30			5		8			20:30			9		7		
08:45			7	28	9	33	61	20:45			5	35	9	33	68
09:00			6		11			21:00			6		11		
09:15			10		13			21:15			9		11		
09:30			14		17			21:30			8		8		
09:45			13	43	15	56	99	21:45			7	30	4	34	64
10:00			8		14			22:00			7		4		
10:15			8		9			22:15			2		7		
10:30			6		9			22:30			4		4		
10:45			7	29	9	41	70	22:45			1	14	2	17	31
11:00			6		12			23:00			1		3		
11:15			6		12			23:15			2		4		
11:30			5		12			23:30			3		3		
11:45			6	23	7	43	66	23:45			1	7	2	12	19
Total Vol.				241		320	**561**					445		448	**893**

GPS: 34.857413, -117.091248

Daily Totals

NB	SB	EB	WB	Combined
		686	768	**1454**

	AM			PM		
Split %	43.0%	57.0%	**38.6%**	49.8%	50.2%	**61.4%**
Peak Hour	09:15	09:15	**09:15**	15:15	16:00	**16:00**
Volume	45	59	**104**	64	60	**123**
P.H.F.	0.80	0.87	**0.84**	0.89	0.88	**0.90**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-002

Location: Lenwood Rd & Love's Driveway

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
00:00	13		5		2		1			12:00	28		22		8		2		
00:15	10		6		1		0			12:15	26		18		9		1		
00:30	8		3		3		0			12:30	27		23		5		1		
00:45	5	36	3	17	3	9	0	1	63	12:45	19	100	23	86	7	29	2	6	221
01:00	3		5		1		0			13:00	16		22		10		3		
01:15	4		3		2		0			13:15	26		16		6		2		
01:30	6		3		1		0			13:30	29		18		13		0		
01:45	5	18	3	14	3	7	0	0	39	13:45	26	97	13	69	7	36	2	7	209
02:00	8		2		1		0			14:00	15		13		13		2		
02:15	5		4		4		1			14:15	29		13		7		4		
02:30	5		3		2		0			14:30	30		15		13		1		
02:45	6	24	2	11	0	7	0	1	43	14:45	34	108	17	58	14	47	0	7	220
03:00	3		4		1		1			15:00	24		23		13		2		
03:15	3		4		2		0			15:15	47		30		15		3		
03:30	2		3		1		0			15:30	33		37		18		4		
03:45	0	8	8	19	1	5	0	1	33	15:45	40	144	25	115	14	60	1	10	329
04:00	5		6		3		0			16:00	37		28		17		1		
04:15	7		7		1		0			16:15	42		43		14		2		
04:30	6		9		5		0			16:30	42		30		18		0		
04:45	8	26	8	30	3	12	0	0	68	16:45	30	151	36	137	14	63	2	5	356
05:00	14		13		9		1			17:00	45		31		14		4		
05:15	12		13		6		0			17:15	34		37		12		1		
05:30	26		17		7		1			17:30	49		25		13		2		
05:45	23	75	18	61	4	26	0	2	164	17:45	39	167	35	128	11	50	1	8	353
06:00	14		13		4		0			18:00	28		20		16		0		
06:15	15		22		4		0			18:15	37		29		8		5		
06:30	20		19		12		0			18:30	38		25		9		0		
06:45	21	70	23	77	5	25	0	0	172	18:45	35	138	26	100	11	44	2	7	289
07:00	24		14		5		1			19:00	43		15		9		2		
07:15	21		18		7		0			19:15	33		20		4		3		
07:30	20		17		6		2			19:30	35		20		11		4		
07:45	32	97	39	88	9	27	0	3	215	19:45	32	143	21	76	6	30	0	9	258
08:00	28		28		8		1			20:00	40		24		12		1		
08:15	24		30		8		0			20:15	23		14		9		0		
08:30	24		13		5		0			20:30	24		15		9		1		
08:45	22	98	21	92	7	28	0	1	219	20:45	37	124	16	69	5	35	2	4	232
09:00	27		28		6		2			21:00	34		19		6		1		
09:15	32		26		10		0			21:15	37		13		9		2		
09:30	32		24		14		0			21:30	29		12		8		0		
09:45	30	121	23	101	13	43	2	4	269	21:45	19	119	12	56	7	30	0	3	208
10:00	27		24		8		0			22:00	23		7		7		1		
10:15	13		25		8		3			22:15	21		8		2		0		
10:30	19		21		6		3			22:30	15		9		4		0		
10:45	21	80	23	93	7	29	1	7	209	22:45	20	79	6	30	1	14	3	4	127
11:00	30		26		6		1			23:00	18		7		1		1		
11:15	21		27		6		2			23:15	6		5		2		0		
11:30	26		29		5		2			23:30	6		3		3		0		
11:45	26	103	22	104	6	23	3	8	238	23:45	3	33	1	16	1	7	0	1	57
Total Vol.		756		707		241		28	**1732**			1403		940		445		71	**2859**

GPS: 34.857413, -117.091248

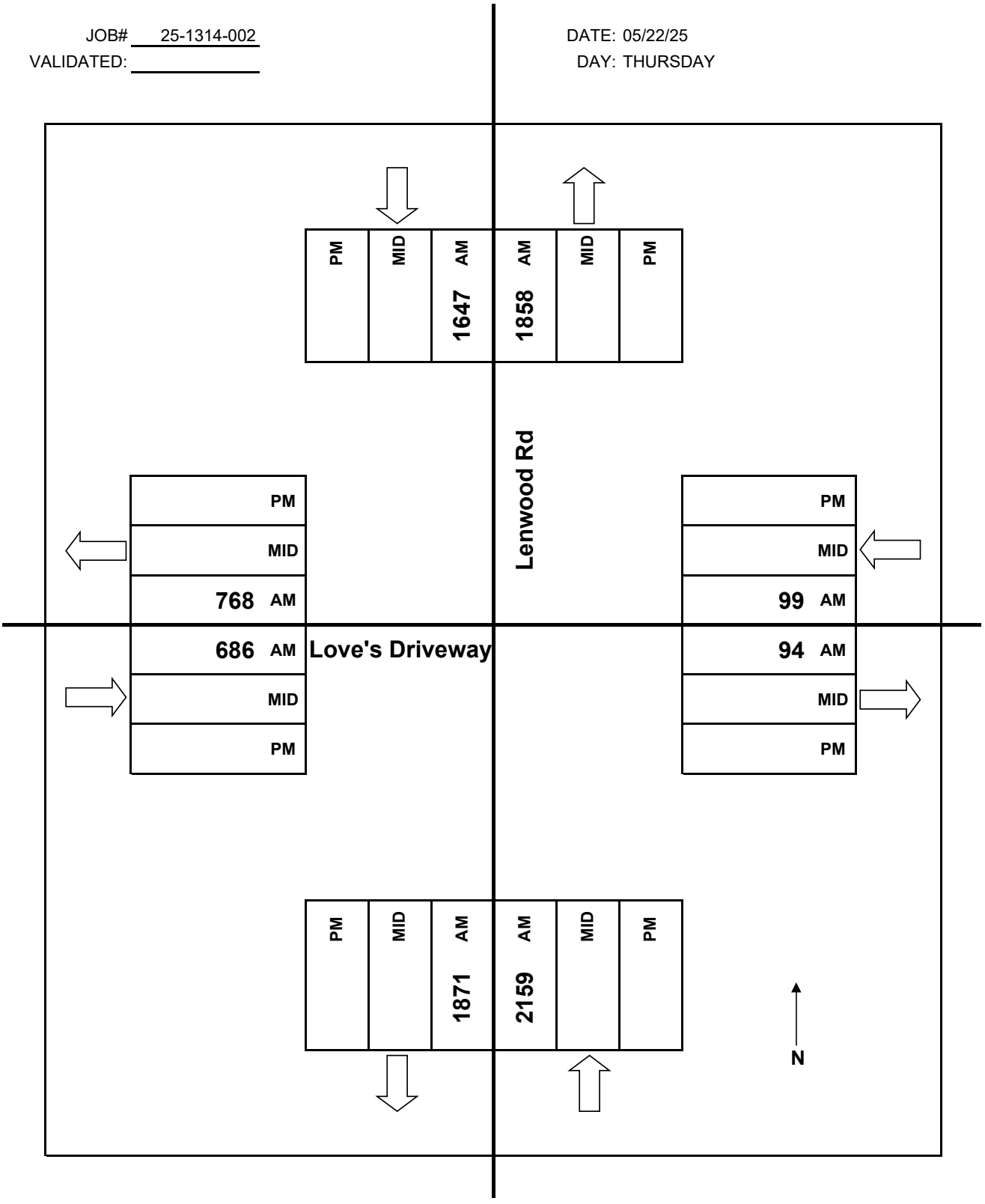
Daily Totals

NB	SB	EB	WB	Combined
2159	1647	686	99	**4591**

	AM					PM				
Split %	43.6%	40.8%	13.9%	1.6%	**37.7%**	49.1%	32.9%	15.6%	2.5%	**62.3%**
Peak Hour	09:00	07:30	09:15	11:15	**09:00**	17:00	16:15	15:15	18:45	**16:15**
Volume	121	114	45	9	**269**	167	140	64	11	**367**
P.H.F.	0.95	0.73	0.80	0.75	**0.96**	0.85	0.81	0.89	0.69	**0.91**

JOB# 25-1314-002
VALIDATED: _____

DATE: 05/22/25
DAY: THURSDAY



Field Data Services of Arizona, Inc./Veracity Traffic Group – May 2025

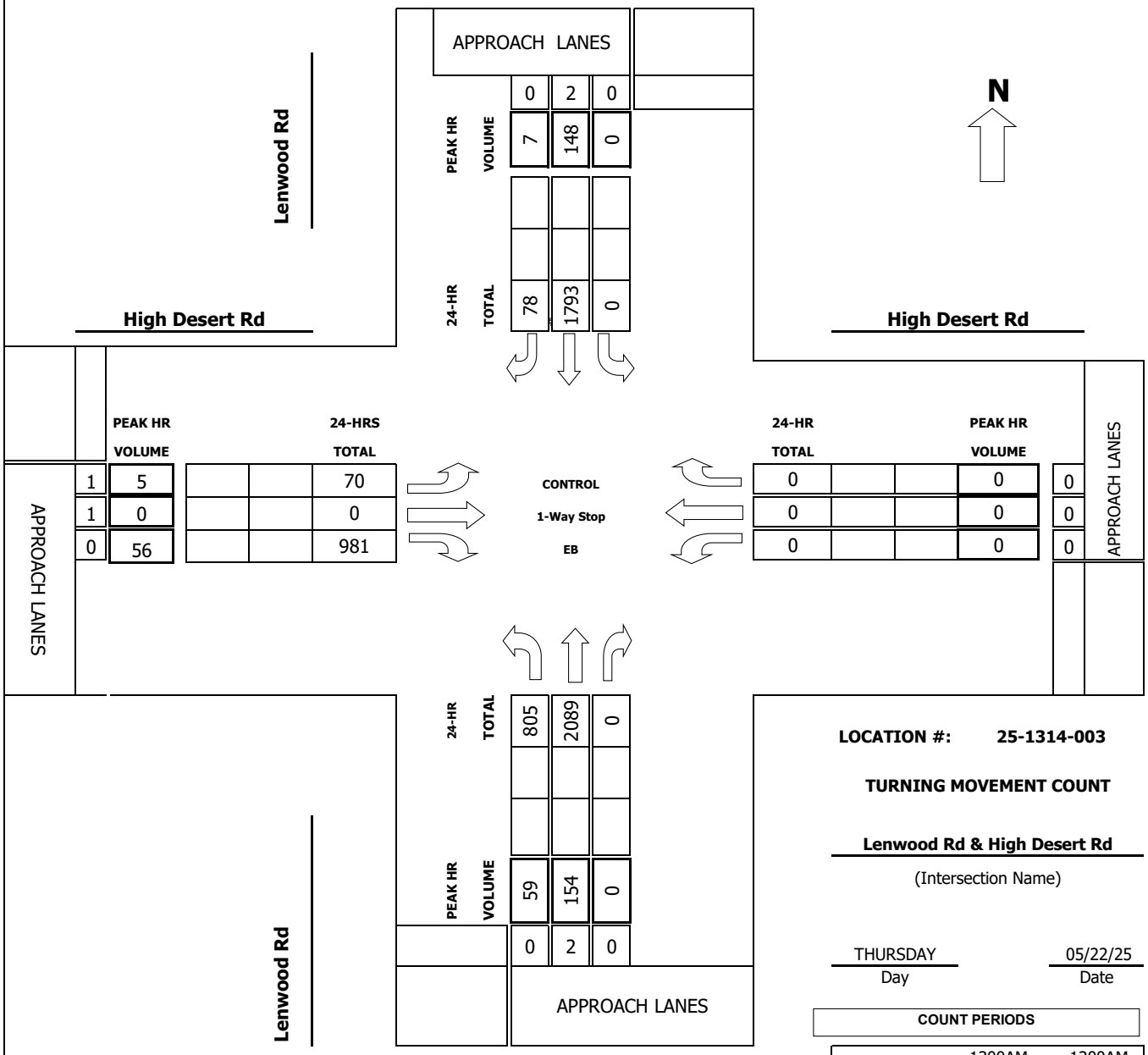
Intersection 18

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 25-1314-003

TMC SUMMARY OF Lenwood Rd & High Desert Rd



LOCATION #: 25-1314-003

TURNING MOVEMENT COUNT

Lenwood Rd & High Desert Rd
(Intersection Name)

THURSDAY
Day

05/22/25
Date

COUNT PERIODS

1200AM	-	1200AM
	-	
	-	

PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Lenwood Rd
E-W STREET: High Desert Rd

DATE: 05/22/25
DAY: THURSDAY

LOCATION: Barstow
PROJECT# 25-1314-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	1	1	0	0	0	0	
12:00 AM	4	12	0	0	7	1	1	0	8	0	0	0	33
12:15 AM	7	10	0	0	5	0	0	0	11	0	0	0	33
12:30 AM	5	8	0	0	3	1	0	0	9	0	0	0	26
12:45 AM	7	4	0	0	5	0	1	0	5	0	0	0	22
1:00 AM	8	3	0	0	6	0	0	0	7	0	0	0	24
1:15 AM	8	4	0	0	2	0	0	0	1	0	0	0	15
1:30 AM	2	6	0	0	2	0	0	0	5	0	0	0	15
1:45 AM	4	5	0	0	5	0	0	0	6	0	0	0	20
2:00 AM	4	8	0	0	2	1	0	0	7	0	0	0	22
2:15 AM	3	5	0	0	6	2	0	0	6	0	0	0	22
2:30 AM	4	5	0	0	5	0	0	0	6	0	0	0	20
2:45 AM	7	5	0	0	2	0	1	0	8	0	0	0	23
3:00 AM	6	3	0	0	4	0	0	0	8	0	0	0	21
3:15 AM	4	2	0	0	3	0	1	0	4	0	0	0	14
3:30 AM	9	2	0	0	3	0	0	0	5	0	0	0	19
3:45 AM	11	0	0	0	7	0	0	0	6	0	0	0	24
4:00 AM	6	5	0	0	9	0	0	0	11	0	0	0	31
4:15 AM	4	7	0	0	6	0	0	0	9	0	0	0	26
4:30 AM	9	6	0	0	10	0	0	0	5	0	0	0	30
4:45 AM	14	8	0	0	8	0	0	0	13	0	0	0	43
5:00 AM	9	14	0	0	17	3	0	0	13	0	0	0	56
5:15 AM	9	11	0	0	15	0	1	0	14	0	0	0	50
5:30 AM	5	26	0	0	15	2	0	0	12	0	0	0	60
5:45 AM	7	22	0	0	18	0	1	0	12	0	0	0	60
6:00 AM	3	14	0	0	13	0	0	0	14	0	0	0	44
6:15 AM	5	15	0	0	17	0	0	0	8	0	0	0	45
6:30 AM	6	20	0	0	25	1	0	0	8	0	0	0	60
6:45 AM	13	20	0	0	20	1	1	0	11	0	0	0	66
7:00 AM	5	24	0	0	16	1	0	0	10	0	0	0	56
7:15 AM	6	19	0	0	21	3	2	0	8	0	0	0	59
7:30 AM	7	20	0	0	16	1	0	0	14	0	0	0	58
7:45 AM	9	30	0	0	37	0	2	0	7	0	0	0	85
8:00 AM	8	27	0	0	28	2	1	0	14	0	0	0	80
8:15 AM	8	23	0	0	35	0	1	0	18	0	0	0	85
8:30 AM	9	24	0	0	14	1	0	0	11	0	0	0	59
8:45 AM	10	22	0	0	23	0	0	0	11	0	0	0	66
9:00 AM	12	25	0	0	27	0	2	0	15	0	0	0	81
9:15 AM	21	30	0	0	31	0	2	0	19	0	0	0	103
9:30 AM	22	32	0	0	27	2	0	0	10	0	0	0	93
9:45 AM	18	26	0	0	26	2	4	0	17	0	0	0	93
10:00 AM	14	27	0	0	26	0	0	0	26	0	0	0	93
10:15 AM	21	13	0	0	20	2	0	0	21	0	0	0	77
10:30 AM	13	18	0	0	23	2	1	0	21	0	0	0	78
10:45 AM	9	21	0	0	24	1	0	0	11	0	0	0	66
11:00 AM	8	29	0	0	24	1	1	0	10	0	0	0	73
11:15 AM	5	19	0	0	26	0	2	0	14	0	0	0	66
11:30 AM	9	25	0	0	26	1	1	0	8	0	0	0	70
11:45 AM	6	26	0	0	28	0	0	0	5	0	0	0	65
12:00 PM	3	27	0	0	19	1	1	0	9	0	0	0	60
12:15 PM	2	24	0	0	20	2	2	0	16	0	0	0	66
12:30 PM	5	26	0	0	23	1	1	0	13	0	0	0	69
12:45 PM	2	19	0	0	21	0	0	0	9	0	0	0	51
1:00 PM	7	15	0	0	31	1	1	0	11	0	0	0	66
1:15 PM	4	24	0	0	15	3	2	0	10	0	0	0	58
1:30 PM	9	26	0	0	22	2	3	0	14	0	0	0	76
1:45 PM	6	25	0	0	15	0	1	0	8	0	0	0	55
2:00 PM	3	15	0	0	20	1	0	0	9	0	0	0	48
2:15 PM	2	28	0	0	16	2	1	0	11	0	0	0	60
2:30 PM	5	28	0	0	16	1	2	0	10	0	0	0	62
2:45 PM	2	31	0	0	26	0	3	0	7	0	0	0	69
3:00 PM	4	23	0	0	27	1	1	0	4	0	0	0	60
3:15 PM	1	47	0	0	42	2	0	0	8	0	0	0	100
3:30 PM	6	32	0	0	44	1	1	0	5	0	0	0	89
3:45 PM	6	38	0	0	35	1	2	0	6	0	0	0	88
4:00 PM	9	37	0	0	34	2	0	0	8	0	0	0	90
4:15 PM	13	39	0	0	44	2	3	0	17	0	0	0	118
4:30 PM	11	42	0	0	31	1	0	0	14	0	0	0	99
4:45 PM	13	29	0	0	35	2	1	0	14	0	0	0	94
5:00 PM	22	44	0	0	38	2	1	0	11	0	0	0	118
5:15 PM	15	33	0	0	33	1	1	0	17	0	0	0	100
5:30 PM	7	49	0	0	26	2	0	0	7	0	0	0	91
5:45 PM	12	39	0	0	38	2	0	0	12	0	0	0	103
6:00 PM	14	26	0	0	29	1	2	0	9	0	0	0	81
6:15 PM	14	35	0	0	33	1	2	0	9	0	0	0	94
6:30 PM	12	37	0	0	25	0	1	0	15	0	0	0	90
6:45 PM	16	34	0	0	28	4	1	0	11	0	0	0	94
7:00 PM	12	43	0	0	17	0	0	0	16	0	0	0	88
7:15 PM	9	32	0	0	17	1	1	0	12	0	0	0	72
7:30 PM	12	33	0	0	24	1	2	0	10	0	0	0	82
7:45 PM	14	32	0	0	22	0	0	0	13	0	0	0	81
8:00 PM	10	39	0	0	20	2	1	0	8	0	0	0	80
8:15 PM	6	23	0	0	17	1	0	0	15	0	0	0	62
8:30 PM	9	23	0	0	21	0	1	0	4	0	0	0	58
8:45 PM	10	35	0	0	21	0	2	0	9	0	0	0	77
9:00 PM	12	34	0	0	15	1	0	0	12	0	0	0	74
9:15 PM	9	37	0	0	16	0	0	0	10	0	0	0	72
9:30 PM	8	27	0	0	12	2	2	0	11	0	0	0	62
9:45 PM	10	18	0	0	11	0	1	0	15	0	0	0	55
10:00 PM	6	22	0	0	10	0	1	0	5	0	0	0	44
10:15 PM	4	21	0	0	8	0	0	0	7	0	0	0	40
10:30 PM	10	15	0	0	11	0	0	0	5	0	0	0	41
10:45 PM	10	20	0	0	9	0	0	0	9	0	0	0	48
11:00 PM	4	18	0	0	8	0	0	0	7	0	0	0	37
11:15 PM	6	6	0	0	4	0	0	0	9	0	0	0	25
11:30 PM	6	6	0	0	4	0	0	0	4	0	0	0	20
11:45 PM	10	3	0	0	2	0	0	0	4	0	0	0	19

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	805	2089	0	0	1793	78	70	0	981	0	0	0	5816
Approach %	27.82	72.18	0.00	0.00	95.83	4.17	6.66	0.00	93.34	####	####	####	
App/Depart	2894	/	2159	1871	/	2774	1051	/	0	0	/	883	

Peak Hr Begins at: 415 PM

PEAK													
Volumes	59	154	0	0	148	7	5	0	56	0	0	0	429
Approach %	27.70	72.30	0.00	0.00	95.48	4.52	8.20	0.00	91.80	####	####	####	

PEAK HR. FACTOR:	0.807	0.842	0.763	0.000	0.909

CONTROL: 1-Way Stop (EB)
COMMENT 1:
GPS: 34.856064, -117.090212

HOURS:

	FROM:		TO:	
AM	1200	AM	1200	AM
NOON				
PM				

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: Lenwood Rd | DATE: 05/22/25 | LOCATION: Barstow

E-W STREET: High Desert Rd | DAY: THURSDAY | PROJECT# 25-1314-003

AM PEAK HOUR

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	1	1	0	0	0	0	
7:00 AM	5	24	0	0	16	1	0	0	10	0	0	0	56
7:15 AM	6	19	0	0	21	3	2	0	8	0	0	0	59
7:30 AM	7	20	0	0	16	1	0	0	14	0	0	0	58
7:45 AM	9	30	0	0	37	0	2	0	7	0	0	0	85
8:00 AM	8	27	0	0	28	2	1	0	14	0	0	0	80
8:15 AM	8	23	0	0	35	0	1	0	18	0	0	0	85
8:30 AM	9	24	0	0	14	1	0	0	11	0	0	0	59
8:45 AM	10	22	0	0	23	0	0	0	11	0	0	0	66
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
12:00 PM													
12:15 PM													
12:30 PM													
12:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	62	189	0	0	190	8	6	0	93	0	0	0	548
Approach %	24.70	75.30	0.00	0.00	95.96	4.04	6.06	0.00	93.94	#DIV/0!	#DIV/0!	#DIV/0!	
App/Depart	251	/	195	198	/	283	99	/	0	0	/	70	
AM Peak Hour:			745 AM										
PEAK													
Volumes	34	104	0	0	114	3	4	0	50	0	0	0	309
Approach %	24.64	75.36	0.00	0.00	97.44	2.56	7.41	0.00	92.59	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR. FACTOR:		**0.885**			**0.791**			**0.711**			**0.000**		**0.909**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: Lenwood Rd DATE: 05/22/25 LOCATION: Barstow

E-W STREET: High Desert Rd DAY: THURSDAY PROJECT# 25-1314-003

PM PEAK HOUR

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	1	1	0	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	9	37	0	0	34	2	0	0	8	0	0	0	90
4:15 PM	13	39	0	0	44	2	3	0	17	0	0	0	118
4:30 PM	11	42	0	0	31	1	0	0	14	0	0	0	99
4:45 PM	13	29	0	0	35	2	1	0	14	0	0	0	94
5:00 PM	22	44	0	0	38	2	1	0	11	0	0	0	118
5:15 PM	15	33	0	0	33	1	1	0	17	0	0	0	100
5:30 PM	7	49	0	0	26	2	0	0	7	0	0	0	91
5:45 PM	12	39	0	0	38	2	0	0	12	0	0	0	103
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	102	312	0	0	279	14	6	0	100	0	0	0	813
Approach %	24.64	75.36	0.00	0.00	95.22	4.78	5.66	0.00	94.34	#DIV/0!	#DIV/0!	#DIV/0!	
App/Depart	414	/	318	293	/	379	106	/	0	0	/	116	
PM Peak Hour:			415 PM										
PEAK													
Volumes	59	154	0	0	148	7	5	0	56	0	0	0	429
Approach %	27.70	72.30	0.00	0.00	95.48	4.52	8.20	0.00	91.80	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR. FACTOR:		**0.807**			**0.842**			**0.763**			**0.000**		**0.909**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Lenwood Rd
E-W STREET: High Desert Rd

Date: 05/22/25
Day: THURSDAY

City: Barstow
Project #: 25-1314-003

	PEDESTRIANS				BICYCLES				
	N-LEG	S-LEG	E-LEG	W-LEG		N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0	12:00 AM	0	0	0	0
12:15 AM	0	0	0	0	12:15 AM	0	0	0	0
12:30 AM	0	0	0	0	12:30 AM	0	0	0	0
12:45 AM	0	0	0	0	12:45 AM	0	0	0	0
1:00 AM	0	0	0	0	1:00 AM	0	0	0	0
1:15 AM	0	0	0	0	1:15 AM	0	0	0	0
1:30 AM	0	0	0	0	1:30 AM	0	0	0	0
1:45 AM	0	0	0	0	1:45 AM	0	0	0	0
2:00 AM	0	0	0	0	2:00 AM	0	0	0	0
2:15 AM	0	0	0	0	2:15 AM	0	0	0	0
2:30 AM	0	0	0	0	2:30 AM	0	0	0	0
2:45 AM	0	0	0	0	2:45 AM	0	0	0	0
3:00 AM	0	0	0	0	3:00 AM	0	0	0	0
3:15 AM	0	0	0	1	3:15 AM	0	0	0	0
3:30 AM	0	1	0	1	3:30 AM	0	0	0	0
3:45 AM	0	0	0	0	3:45 AM	0	0	0	0
4:00 AM	0	0	0	0	4:00 AM	0	0	0	0
4:15 AM	0	0	0	0	4:15 AM	0	0	0	0
4:30 AM	0	0	0	0	4:30 AM	0	0	0	0
4:45 AM	0	0	0	0	4:45 AM	0	0	0	0
5:00 AM	0	1	0	0	5:00 AM	0	0	0	0
5:15 AM	0	0	0	0	5:15 AM	0	0	0	0
5:30 AM	0	0	0	0	5:30 AM	0	0	0	0
5:45 AM	0	0	0	0	5:45 AM	0	0	0	0
6:00 AM	0	0	0	0	6:00 AM	0	0	0	0
6:15 AM	0	0	0	1	6:15 AM	0	0	0	0
6:30 AM	0	0	0	1	6:30 AM	0	0	0	0
6:45 AM	0	0	0	0	6:45 AM	0	0	0	0
7:00 AM	0	0	0	0	7:00 AM	0	0	0	0
7:15 AM	0	0	0	0	7:15 AM	0	0	0	0
7:30 AM	0	0	0	1	7:30 AM	0	0	0	0
7:45 AM	0	0	0	0	7:45 AM	0	0	0	0
8:00 AM	0	0	0	0	8:00 AM	0	0	0	0
8:15 AM	0	0	0	0	8:15 AM	0	0	0	0
8:30 AM	0	0	0	0	8:30 AM	1	0	0	0
8:45 AM	0	0	0	0	8:45 AM	0	0	0	0
9:00 AM	0	0	0	0	9:00 AM	0	0	0	0
9:15 AM	0	0	0	0	9:15 AM	0	0	0	0
9:30 AM	0	0	0	1	9:30 AM	0	0	0	0
9:45 AM	0	0	0	1	9:45 AM	0	0	0	0
10:00 AM	0	0	0	0	10:00 AM	0	0	0	0
10:15 AM	0	0	0	0	10:15 AM	0	0	0	0
10:30 AM	0	0	0	0	10:30 AM	0	0	0	0
10:45 AM	0	0	0	0	10:45 AM	0	0	0	0
11:00 AM	0	0	0	0	11:00 AM	0	0	0	0
11:15 AM	0	0	0	0	11:15 AM	0	0	0	0
11:30 AM	0	0	0	0	11:30 AM	0	0	0	0
11:45 AM	0	0	0	0	11:45 AM	0	0	0	0
12:00 PM	0	0	0	0	12:00 PM	0	0	0	0
12:15 PM	0	0	0	0	12:15 PM	0	0	0	0
12:30 PM	0	0	0	0	12:30 PM	0	0	0	0
12:45 PM	0	0	0	0	12:45 PM	0	0	0	0
1:00 PM	0	0	0	0	1:00 PM	0	0	0	0
1:15 PM	0	0	0	0	1:15 PM	0	0	0	0
1:30 PM	0	0	0	0	1:30 PM	0	0	0	0
1:45 PM	0	0	0	0	1:45 PM	0	0	0	0
2:00 PM	0	0	0	0	2:00 PM	0	0	0	0
2:15 PM	0	0	0	0	2:15 PM	0	0	0	0
2:30 PM	0	0	0	0	2:30 PM	0	0	0	0
2:45 PM	0	0	0	0	2:45 PM	0	0	0	0
3:00 PM	0	0	0	0	3:00 PM	0	0	0	0
3:15 PM	0	0	0	0	3:15 PM	0	0	0	0
3:30 PM	0	0	0	0	3:30 PM	0	0	0	0
3:45 PM	0	0	0	0	3:45 PM	0	0	0	0
4:00 PM	0	0	0	0	4:00 PM	0	0	0	0
4:15 PM	0	0	0	1	4:15 PM	0	0	0	0
4:30 PM	0	0	0	0	4:30 PM	0	0	0	0
4:45 PM	0	0	0	0	4:45 PM	0	0	0	0
5:00 PM	0	0	0	0	5:00 PM	0	0	0	0
5:15 PM	1	0	0	0	5:15 PM	0	0	0	0
5:30 PM	0	0	0	0	5:30 PM	0	0	0	0
5:45 PM	0	0	0	4	5:45 PM	0	0	0	0
6:00 PM	1	0	0	1	6:00 PM	0	0	0	0
6:15 PM	0	0	0	0	6:15 PM	0	0	0	0
6:30 PM	0	0	0	1	6:30 PM	0	0	0	0
6:45 PM	0	0	0	0	6:45 PM	0	0	0	0
7:00 PM	0	0	0	1	7:00 PM	0	0	0	0
7:15 PM	0	0	0	0	7:15 PM	0	0	0	0
7:30 PM	0	0	0	2	7:30 PM	0	0	0	0
7:45 PM	0	0	0	0	7:45 PM	0	0	0	0
8:00 PM	0	0	0	3	8:00 PM	0	0	0	0
8:15 PM	0	0	0	2	8:15 PM	0	0	0	0
8:30 PM	0	0	0	1	8:30 PM	0	0	0	1
8:45 PM	0	1	0	3	8:45 PM	0	2	0	0
9:00 PM	0	0	0	0	9:00 PM	0	0	0	0
9:15 PM	0	0	0	0	9:15 PM	0	0	0	0
9:30 PM	0	1	0	1	9:30 PM	0	0	0	0
9:45 PM	0	0	0	0	9:45 PM	0	0	0	0
10:00 PM	0	0	0	0	10:00 PM	0	0	0	0
10:15 PM	0	0	0	0	10:15 PM	0	0	0	0
10:30 PM	0	0	0	0	10:30 PM	0	0	0	0
10:45 PM	0	0	0	0	10:45 PM	0	0	0	0
11:00 PM	0	0	0	2	11:00 PM	0	0	0	0
11:15 PM	0	0	0	0	11:15 PM	0	0	0	0
11:30 PM	0	1	0	0	11:30 PM	0	0	0	0
11:45 PM	0	0	0	0	11:45 PM	0	0	0	0
TOTAL	**2**	**5**	**0**	**29**	**TOTAL**	**1**	**2**	**0**	**1**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-003

Location: Lenwood Rd north of High Desert Rd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	13		8					12:00	28		20				
00:15	10		5					12:15	26		22				
00:30	8		4					12:30	27		24				
00:45	5	36	5	22			58	12:45	19	100	21	87			187
01:00	3		6					13:00	16		32				
01:15	4		2					13:15	26		18				
01:30	6		2					13:30	29		24				
01:45	5	18	5	15			33	13:45	26	97	15	89			186
02:00	8		3					14:00	15		21				
02:15	5		8					14:15	29		18				
02:30	5		5					14:30	30		17				
02:45	6	24	2	18			42	14:45	34	108	26	82			190
03:00	3		4					15:00	24		28				
03:15	3		3					15:15	47		44				
03:30	2		3					15:30	33		45				
03:45	0	8	7	17			25	15:45	40	144	36	153			297
04:00	5		9					16:00	37		36				
04:15	7		6					16:15	42		46				
04:30	6		10					16:30	42		32				
04:45	8	26	8	33			59	16:45	30	151	37	151			302
05:00	14		20					17:00	45		40				
05:15	12		15					17:15	34		34				
05:30	26		17					17:30	49		28				
05:45	23	75	18	70			145	17:45	39	167	40	142			309
06:00	14		13					18:00	28		30				
06:15	15		17					18:15	37		34				
06:30	20		26					18:30	38		25				
06:45	21	70	21	77			147	18:45	35	138	32	121			259
07:00	24		17					19:00	43		17				
07:15	21		24					19:15	33		18				
07:30	20		17					19:30	35		25				
07:45	32	97	37	95			192	19:45	32	143	22	82			225
08:00	28		30					20:00	40		22				
08:15	24		35					20:15	23		18				
08:30	24		15					20:30	24		21				
08:45	22	98	23	103			201	20:45	37	124	21	82			206
09:00	27		27					21:00	34		16				
09:15	32		31					21:15	37		16				
09:30	32		29					21:30	29		14				
09:45	30	121	28	115			236	21:45	19	119	11	57			176
10:00	27		26					22:00	23		10				
10:15	13		22					22:15	21		8				
10:30	19		25					22:30	15		11				
10:45	21	80	25	98			178	22:45	20	79	9	38			117
11:00	30		25					23:00	18		8				
11:15	21		26					23:15	6		4				
11:30	26		27					23:30	6		4				
11:45	26	103	28	106			209	23:45	3	33	2	18			51
Total Vol.		756		769			**1525**			1403		1102			**2505**

GPS: 34.856064, -117.090212

Daily Totals

NB	SB	EB	WB	**Combined**
2159	1871			**4030**

	AM			PM		
Split %	49.6%	50.4%	**37.8%**	56.0%	44.0%	**62.2%**
Peak Hour	09:00	07:30	**09:00**	17:00	15:30	**15:15**
Volume	121	119	**236**	167	163	**318**
P.H.F.	0.95	0.80	**0.94**	0.85	0.89	**0.87**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-003

Location: Lenwood Rd south of High Desert Rd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	16		15					12:00	30		28				
00:15	17		16					12:15	26		36				
00:30	13		12					12:30	31		36				
00:45	11	57	10	53			110	12:45	21	108	30	130			238
01:00	11		13					13:00	22		42				
01:15	12		3					13:15	28		25				
01:30	8		7					13:30	35		36				
01:45	9	40	11	34			74	13:45	31	116	23	126			242
02:00	12		9					14:00	18		29				
02:15	8		12					14:15	30		27				
02:30	9		11					14:30	33		26				
02:45	12	41	10	42			83	14:45	33	114	33	115			229
03:00	9		12					15:00	27		31				
03:15	6		7					15:15	48		50				
03:30	11		8					15:30	38		49				
03:45	11	37	13	40			77	15:45	44	157	41	171			328
04:00	11		20					16:00	46		42				
04:15	11		15					16:15	52		61				
04:30	15		15					16:30	53		45				
04:45	22	59	21	71			130	16:45	42	193	49	197			390
05:00	23		30					17:00	66		49				
05:15	20		29					17:15	48		50				
05:30	31		27					17:30	56		33				
05:45	29	103	30	116			219	17:45	51	221	50	182			403
06:00	17		27					18:00	40		38				
06:15	20		25					18:15	49		42				
06:30	26		33					18:30	49		40				
06:45	33	96	31	116			212	18:45	50	188	39	159			347
07:00	29		26					19:00	55		33				
07:15	25		29					19:15	41		29				
07:30	27		30					19:30	45		34				
07:45	39	120	44	129			249	19:45	46	187	35	131			318
08:00	35		42					20:00	49		28				
08:15	31		53					20:15	29		32				
08:30	33		25					20:30	32		25				
08:45	32	131	34	154			285	20:45	45	155	30	115			270
09:00	37		42					21:00	46		27				
09:15	51		50					21:15	46		26				
09:30	54		37					21:30	35		23				
09:45	44	186	43	172			358	21:45	28	155	26	102			257
10:00	41		52					22:00	28		15				
10:15	34		41					22:15	25		15				
10:30	31		44					22:30	25		16				
10:45	30	136	35	172			308	22:45	30	108	18	64			172
11:00	37		34					23:00	22		15				
11:15	24		40					23:15	12		13				
11:30	34		34					23:30	12		8				
11:45	32	127	33	141			268	23:45	13	59	6	42			101
Total Vol.		1133		1240			**2373**			1761		1534			**3295**

GPS: 34.856064, -117.090212

Daily Totals

NB	SB	EB	WB	**Combined**
2894	2774			**5668**

	AM			**PM**		
Split %	47.7%	52.3%	**41.9%**	53.4%	46.6%	**58.1%**
Peak Hour	09:15	09:15	**09:15**	17:00	16:15	**16:15**
Volume	190	182	**372**	221	204	**417**
P.H.F.	0.88	0.88	**0.92**	0.84	0.84	**0.91**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-003

Location: High Desert Rd west of Lenwood Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			9		5			12:00			10		4		
00:15			11		7			12:15			18		4		
00:30			9		6			12:30			14		6		
00:45			6	35	7	25	60	12:45			9	51	2	16	67
01:00			7		8			13:00			12		8		
01:15			1		8			13:15			12		7		
01:30			5		2			13:30			17		11		
01:45			6	19	4	22	41	13:45			9	50	6	32	82
02:00			7		5			14:00			9		4		
02:15			6		5			14:15			12		4		
02:30			6		4			14:30			12		6		
02:45			9	28	7	21	49	14:45			10	43	2	16	59
03:00			8		6			15:00			5		5		
03:15			5		4			15:15			8		3		
03:30			5		9			15:30			6		7		
03:45			6	24	11	30	54	15:45			8	27	7	22	49
04:00			11		6			16:00			8		11		
04:15			9		4			16:15			20		15		
04:30			5		9			16:30			14		12		
04:45			13	38	14	33	71	16:45			15	57	15	53	110
05:00			13		12			17:00			12		24		
05:15			15		9			17:15			18		16		
05:30			12		7			17:30			7		9		
05:45			13	53	7	35	88	17:45			12	49	14	63	112
06:00			14		3			18:00			11		15		
06:15			8		5			18:15			11		15		
06:30			8		7			18:30			16		12		
06:45			12	42	14	29	71	18:45			12	50	20	62	112
07:00			10		6			19:00			16		12		
07:15			10		9			19:15			13		10		
07:30			14		8			19:30			12		13		
07:45			9	43	9	32	75	19:45			13	54	14	49	103
08:00			15		10			20:00			9		12		
08:15			19		8			20:15			15		7		
08:30			11		10			20:30			5		9		
08:45			11	56	10	38	94	20:45			11	40	10	38	78
09:00			17		12			21:00			12		13		
09:15			21		21			21:15			10		9		
09:30			10		24			21:30			13		10		
09:45			21	69	20	77	146	21:45			16	51	10	42	93
10:00			26		14			22:00			6		6		
10:15			21		23			22:15			7		4		
10:30			22		15			22:30			5		10		
10:45			11	80	10	62	142	22:45			9	27	10	30	57
11:00			11		9			23:00			7		4		
11:15			16		5			23:15			9		6		
11:30			9		10			23:30			4		6		
11:45			5	41	6	30	71	23:45			4	24	10	26	50
Total Vol.				528		434	**962**					523		449	**972**

GPS: 34.856064, -117.090212

Daily Totals

NB	SB	EB	WB	Combined
		1051	883	**1934**

	AM			PM		
Split %	54.9%	45.1%	**49.7%**	53.8%	46.2%	**50.3%**
Peak Hour	09:45	09:30	**09:45**	16:15	16:30	**16:15**
Volume	90	81	**162**	61	67	**127**
P.H.F.	0.87	0.84	**0.92**	0.76	0.70	**0.88**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-003

Location: Lenwood Rd & High Desert Rd

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
00:00	16		8		9		0			12:00	30		20		10		0		
00:15	17		5		11		0			12:15	26		22		18		0		
00:30	13		4		9		0			12:30	31		24		14		0		
00:45	11	57	5	22	6	35	0	0	114	12:45	21	108	21	87	9	51	0	0	246
01:00	11		6		7		0			13:00	22		32		12		0		
01:15	12		2		1		0			13:15	28		18		12		0		
01:30	8		2		5		0			13:30	35		24		17		0		
01:45	9	40	5	15	6	19	0	0	74	13:45	31	116	15	89	9	50	0	0	255
02:00	12		3		7		0			14:00	18		21		9		0		
02:15	8		8		6		0			14:15	30		18		12		0		
02:30	9		5		6		0			14:30	33		17		12		0		
02:45	12	41	2	18	9	28	0	0	87	14:45	33	114	26	82	10	43	0	0	239
03:00	9		4		8		0			15:00	27		28		5		0		
03:15	6		3		5		0			15:15	48		44		8		0		
03:30	11		3		5		0			15:30	38		45		6		0		
03:45	11	37	7	17	6	24	0	0	78	15:45	44	157	36	153	8	27	0	0	337
04:00	11		9		11		0			16:00	46		36		8		0		
04:15	11		6		9		0			16:15	52		46		20		0		
04:30	15		10		5		0			16:30	53		32		14		0		
04:45	22	59	8	33	13	38	0	0	130	16:45	42	193	37	151	15	57	0	0	401
05:00	23		20		13		0			17:00	66		40		12		0		
05:15	20		15		15		0			17:15	48		34		18		0		
05:30	31		17		12		0			17:30	56		28		7		0		
05:45	29	103	18	70	13	53	0	0	226	17:45	51	221	40	142	12	49	0	0	412
06:00	17		13		14		0			18:00	40		30		11		0		
06:15	20		17		8		0			18:15	49		34		11		0		
06:30	26		26		8		0			18:30	49		25		16		0		
06:45	33	96	21	77	12	42	0	0	215	18:45	50	188	32	121	12	50	0	0	359
07:00	29		17		10		0			19:00	55		17		16		0		
07:15	25		24		10		0			19:15	41		18		13		0		
07:30	27		17		14		0			19:30	45		25		12		0		
07:45	39	120	37	95	9	43	0	0	258	19:45	46	187	22	82	13	54	0	0	323
08:00	35		30		15		0			20:00	49		22		9		0		
08:15	31		35		19		0			20:15	29		18		15		0		
08:30	33		15		11		0			20:30	32		21		5		0		
08:45	32	131	23	103	11	56	0	0	290	20:45	45	155	21	82	11	40	0	0	277
09:00	37		27		17		0			21:00	46		16		12		0		
09:15	51		31		21		0			21:15	46		16		10		0		
09:30	54		29		10		0			21:30	35		14		13		0		
09:45	44	186	28	115	21	69	0	0	370	21:45	28	155	11	57	16	51	0	0	263
10:00	41		26		26		0			22:00	28		10		6		0		
10:15	34		22		21		0			22:15	25		8		7		0		
10:30	31		25		22		0			22:30	25		11		5		0		
10:45	30	136	25	98	11	80	0	0	314	22:45	30	108	9	38	9	27	0	0	173
11:00	37		25		11		0			23:00	22		8		7		0		
11:15	24		26		16		0			23:15	12		4		9		0		
11:30	34		27		9		0			23:30	12		4		4		0		
11:45	32	127	28	106	5	41	0	0	274	23:45	13	59	2	18	4	24	0	0	101
Total Vol.		1133		769		528			**2430**			1761		1102		523			**3386**

GPS: 34.856064, -117.090212

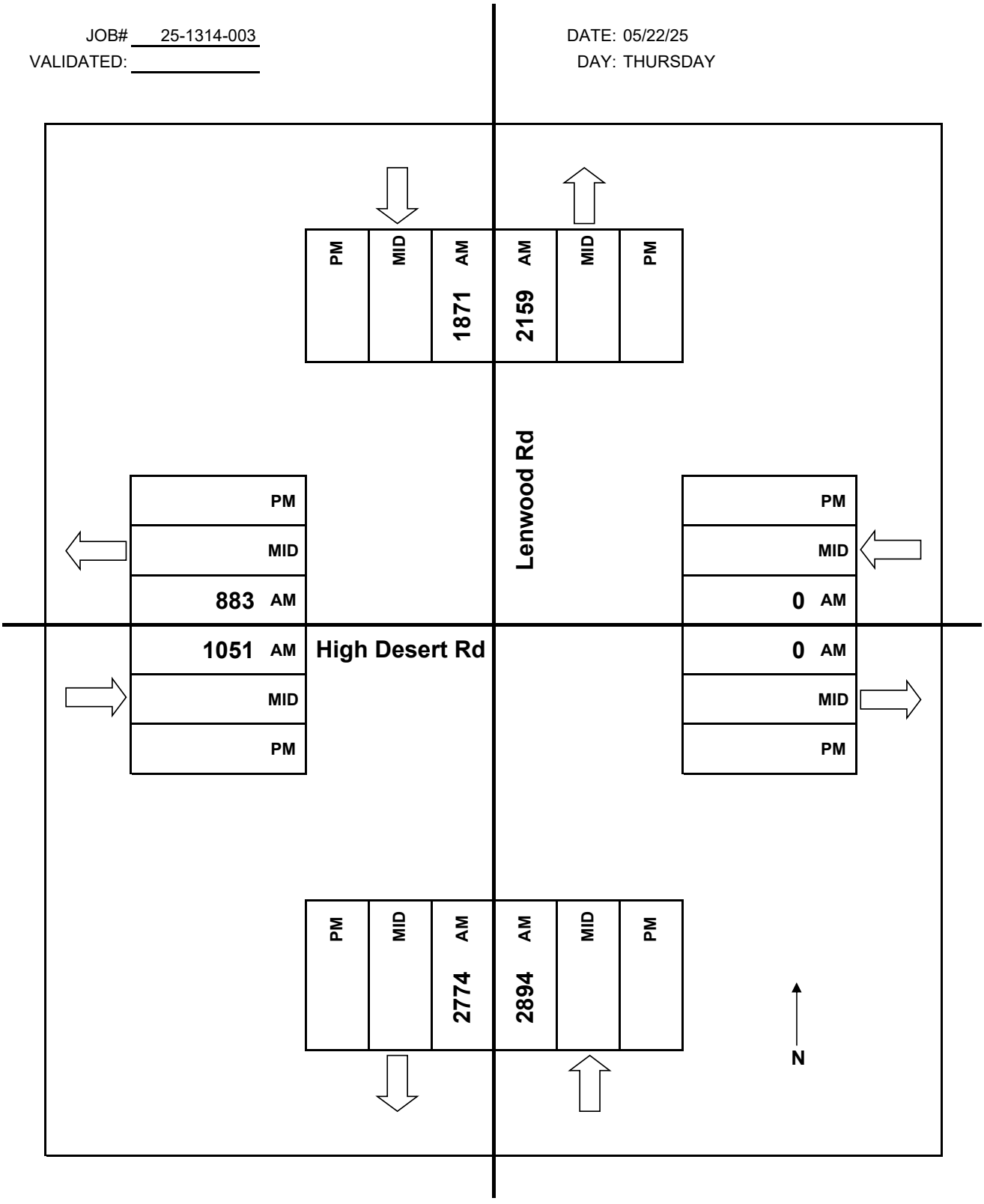
Daily Totals

NB	SB	EB	WB	**Combined**
2894	1871	1051		**5816**

	AM				**PM**			
Split %	46.6%	31.6%	21.7%	**41.8%**	52.0%	32.5%	15.4%	**58.2%**
Peak Hour	09:15	07:30	09:45	**09:15**	17:00	15:30	16:15	**16:15**
Volume	190	119	90	**382**	221	163	61	**429**
P.H.F.	0.88	0.80	0.87	**0.93**	0.84	0.89	0.76	**0.91**

JOB# 25-1314-003
VALIDATED:

DATE: 05/22/25
DAY: THURSDAY



Field Data Services of Arizona, Inc./Veracity Traffic Group – May 2025

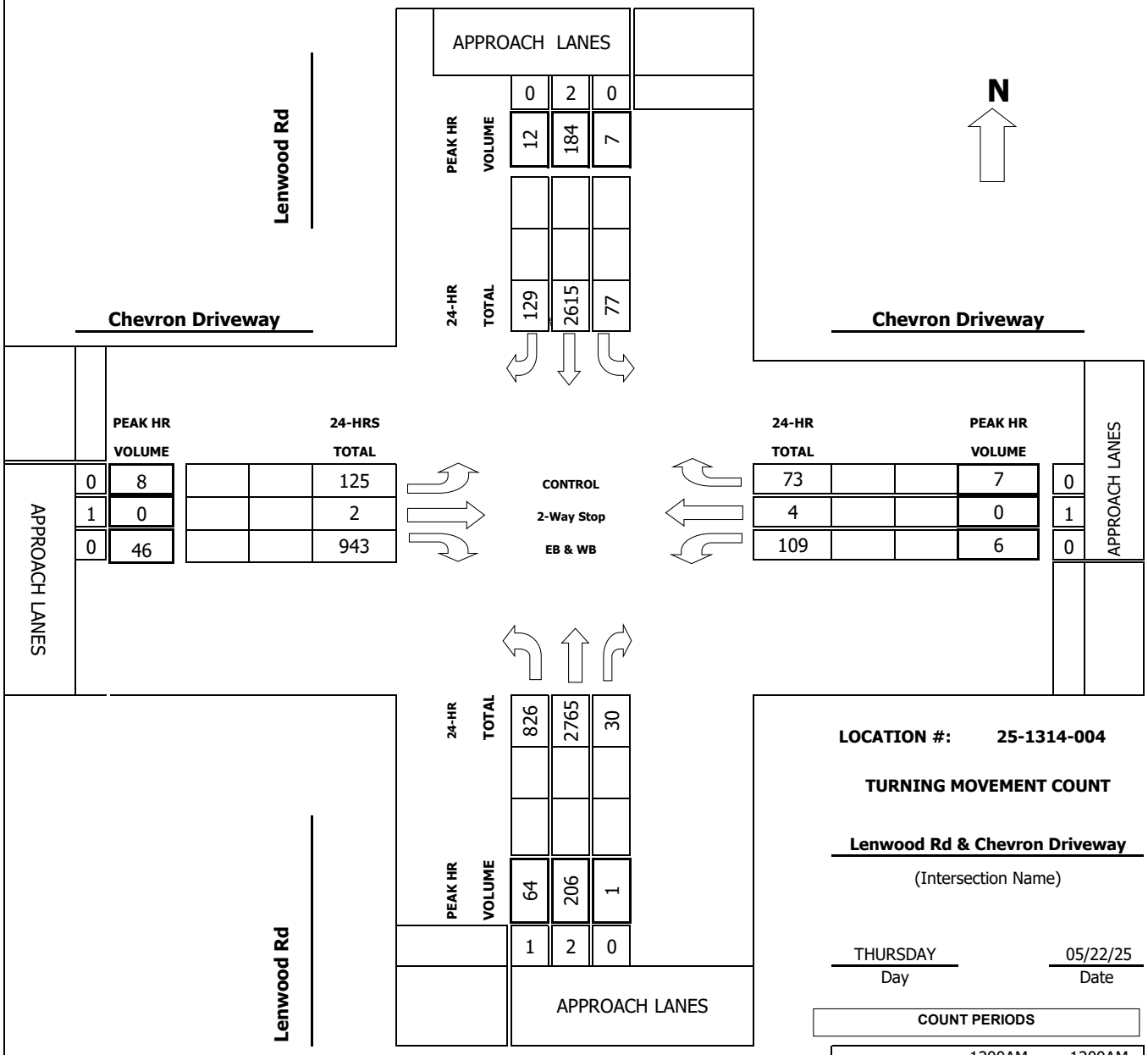
Intersection 19

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 25-1314-004

TMC SUMMARY OF Lenwood Rd & Chevron Driveway



LOCATION #: 25-1314-004

TURNING MOVEMENT COUNT

Lenwood Rd & Chevron Driveway
(Intersection Name)

THURSDAY (Day) 05/22/25 (Date)

COUNT PERIODS

1200AM	-	1200AM
	-	
	-	

PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Lenwood Rd | DATE: 05/22/25 | LOCATION: Barstow

E-W STREET: Chevron Driveway | DAY: THURSDAY | PROJECT# 25-1314-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
12:00 AM	9	16	0	0	13	1	2	0	5	0	0	0	46
12:15 AM	7	14	0	0	18	0	2	0	6	1	0	0	48
12:30 AM	6	13	0	0	11	1	1	0	6	1	0	0	39
12:45 AM	6	13	1	0	8	0	0	0	3	0	0	0	31
1:00 AM	7	12	1	1	11	0	0	0	8	1	0	0	41
1:15 AM	6	13	0	1	4	0	1	0	6	0	0	0	31
1:30 AM	3	6	0	1	7	0	0	0	5	0	0	1	23
1:45 AM	6	7	0	0	10	0	0	0	2	1	0	0	26
2:00 AM	6	10	0	1	8	0	1	0	7	0	0	0	33
2:15 AM	9	6	0	0	10	0	1	0	7	1	0	0	34
2:30 AM	4	9	0	2	9	2	2	0	5	0	0	0	33
2:45 AM	2	11	0	0	11	0	0	0	5	0	0	0	29
3:00 AM	6	9	0	0	13	0	0	0	10	0	0	0	38
3:15 AM	2	6	0	0	8	1	1	0	7	0	0	0	25
3:30 AM	10	11	0	0	7	2	0	0	8	0	0	0	38
3:45 AM	7	11	0	0	11	0	0	0	8	0	0	0	37
4:00 AM	8	10	0	0	16	0	2	0	8	0	0	0	44
4:15 AM	2	10	0	1	15	0	0	0	10	1	0	1	40
4:30 AM	4	13	0	1	13	1	1	0	4	1	0	0	38
4:45 AM	2	22	0	0	20	1	0	0	10	0	0	0	55
5:00 AM	4	19	0	0	29	1	2	1	12	1	0	1	70
5:15 AM	5	19	0	1	28	1	1	0	15	2	0	0	72
5:30 AM	6	28	1	2	29	0	2	0	10	0	0	1	79
5:45 AM	5	29	0	0	27	0	0	0	11	0	0	0	72
6:00 AM	6	14	1	1	28	0	2	0	11	1	0	2	66
6:15 AM	2	17	0	2	26	0	0	0	20	1	0	2	70
6:30 AM	1	26	0	1	29	0	0	0	13	0	0	0	70
6:45 AM	3	32	0	1	29	0	3	0	11	0	0	0	79
7:00 AM	8	29	1	0	26	2	1	0	16	1	0	1	85
7:15 AM	7	25	0	0	26	2	1	0	11	0	0	1	73
7:30 AM	3	24	0	2	32	1	1	0	16	1	0	1	81
7:45 AM	7	35	0	0	41	1	3	0	10	1	0	3	101
8:00 AM	8	32	1	3	40	1	2	0	16	0	0	2	105
8:15 AM	3	26	0	0	53	3	3	0	13	0	1	3	105
8:30 AM	10	33	0	0	24	3	1	0	15	1	0	1	88
8:45 AM	8	28	0	1	32	2	1	0	13	3	1	2	91
9:00 AM	10	34	1	1	39	2	4	0	9	2	0	1	103
9:15 AM	8	45	0	1	46	3	3	0	14	5	0	0	125
9:30 AM	4	52	0	0	36	4	3	0	12	5	0	1	117
9:45 AM	5	40	1	2	39	3	1	0	14	3	0	5	113
10:00 AM	10	44	0	0	53	1	0	0	5	2	1	2	118
10:15 AM	12	30	1	0	37	5	5	0	9	4	0	0	103
10:30 AM	6	32	1	1	43	3	1	0	9	1	0	0	97
10:45 AM	2	31	0	2	32	0	1	0	3	4	0	0	75
11:00 AM	2	32	1	1	28	3	2	0	5	6	0	1	81
11:15 AM	6	21	0	2	35	2	3	0	8	3	0	2	82
11:30 AM	8	33	1	1	31	5	2	0	15	2	0	0	98
11:45 AM	5	25	2	0	31	2	5	0	14	5	0	1	90
12:00 PM	9	27	1	2	27	1	2	0	10	2	0	0	81
12:15 PM	6	26	0	3	33	0	1	0	11	1	0	1	82
12:30 PM	3	25	0	1	35	1	4	0	6	0	0	0	75
12:45 PM	2	19	1	0	29	2	1	0	9	1	0	1	65
1:00 PM	5	21	2	1	41	1	2	0	13	2	0	0	88
1:15 PM	7	25	1	2	23	0	1	0	16	1	0	0	76
1:30 PM	4	33	0	1	34	1	0	0	16	0	0	0	89
1:45 PM	8	29	1	0	22	2	1	0	14	1	0	0	78
2:00 PM	5	17	2	1	25	1	2	0	10	2	0	1	66
2:15 PM	9	25	1	2	25	1	3	0	11	1	0	0	78
2:30 PM	11	32	0	1	23	3	1	0	7	0	0	1	79
2:45 PM	10	35	1	0	31	2	0	0	10	1	0	0	90
3:00 PM	7	27	1	1	30	1	1	0	11	3	0	0	82
3:15 PM	8	46	0	2	45	1	2	0	8	2	0	1	115
3:30 PM	12	36	1	2	47	1	2	0	12	2	0	1	116
3:45 PM	10	44	1	1	39	2	2	0	10	1	0	0	110
4:00 PM	7	45	1	0	42	1	0	0	9	2	0	3	110
4:15 PM	21	51	0	3	58	2	2	0	11	0	0	1	149
4:30 PM	14	53	1	1	37	7	4	0	12	1	0	1	131
4:45 PM	10	40	0	2	41	3	1	0	18	4	0	3	122
5:00 PM	19	62	0	1	48	0	1	0	5	1	0	2	139
5:15 PM	23	44	0	0	45	3	2	0	7	0	0	3	127
5:30 PM	11	54	0	2	31	0	2	0	13	0	0	0	113
5:45 PM	20	50	0	0	50	1	3	0	15	2	0	0	141
6:00 PM	19	39	0	0	33	4	2	0	13	2	0	1	113
6:15 PM	21	50	0	2	40	0	1	0	11	1	0	1	127
6:30 PM	13	46	0	0	39	2	1	0	12	0	0	2	115
6:45 PM	18	49	0	2	35	2	2	1	6	3	0	1	119
7:00 PM	12	53	0	0	31	3	1	0	10	2	1	0	113
7:15 PM	9	41	0	0	27	3	1	0	12	1	0	1	95
7:30 PM	14	46	0	2	29	2	1	0	11	2	0	0	107
7:45 PM	14	45	0	1	32	2	0	0	5	0	0	1	100
8:00 PM	15	49	0	0	27	2	1	0	11	0	0	1	106
8:15 PM	10	27	0	0	31	2	1	0	14	0	0	1	86
8:30 PM	18	32	0	0	27	0	0	0	7	1	0	2	87
8:45 PM	10	42	0	1	27	2	1	0	15	0	0	2	100
9:00 PM	14	44	0	0	26	1	1	0	5	0	0	1	92
9:15 PM	17	46	0	0	26	2	0	0	8	0	0	0	99
9:30 PM	18	35	0	1	20	2	1	0	14	0	0	0	91
9:45 PM	13	27	0	0	25	1	1	0	11	0	0	1	79
10:00 PM	7	31	0	1	16	0	0	0	14	1	0	0	70
10:15 PM	4	22	0	4	12	0	2	0	13	2	0	1	60
10:30 PM	11	25	0	0	19	0	0	0	4	0	0	0	59
10:45 PM	13	30	0	0	18	0	0	0	0	1	0	2	64
11:00 PM	5	22	1	0	15	1	0	0	8	1	0	0	53
11:15 PM	12	13	0	0	14	0	0	0	6	0	0	1	46
11:30 PM	10	12	0	1	5	1	1	0	3	1	0	0	34
11:45 PM	12	16	0	0	8	1	0	0	6	0	0	0	43

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	826	2765	30	77	2615	129	125	2	943	109	4	73	7698
Approach %	22.81	76.36	0.83	2.73	92.70	4.57	11.68	0.19	88.13	58.60	2.15	39.25	
App/Depart	3621	/	2963	2821	/	3667	1070	/	109	186	/	959	

Peak Hr Begins at: 415 PM

PEAK													
Volumes	64	206	1	7	184	12	8	0	46	6	0	7	541
Approach %	23.62	76.01	0.37	3.45	90.64	5.91	14.81	0.00	85.19	46.15	0.00	53.85	

PEAK HR. FACTOR:	0.836	0.806	0.711	0.464	0.908

CONTROL: 2-Way Stop (EB & WB)
COMMENT 1:
GPS: 34.855015, -117.089146

HOURS:

	FROM:		TO:	
AM	1200	AM	1200	AM
NOON				
PM				

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: Lenwood Rd DATE: 05/22/25 LOCATION: Barstow

E-W STREET: Chevron Driveway DAY: THURSDAY PROJECT# 25-1314-004

AM PEAK HOUR

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	2	0	0	1	0	0	1	0	
7:00 AM	8	29	1	0	26	2	1	0	16	1	0	1	85
7:15 AM	7	25	0	0	26	2	1	0	11	0	0	1	73
7:30 AM	3	24	0	2	32	1	1	0	16	1	0	1	81
7:45 AM	7	35	0	0	41	1	3	0	10	1	0	3	101
8:00 AM	8	32	1	3	40	1	2	0	16	0	0	2	105
8:15 AM	3	26	0	0	53	3	3	0	13	0	1	3	105
8:30 AM	10	33	0	0	24	3	1	0	15	1	0	1	88
8:45 AM	8	28	0	1	32	2	1	0	13	3	1	2	91
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
12:00 PM													
12:15 PM													
12:30 PM													
12:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	54	232	2	6	274	15	13	0	110	7	2	14	729
Approach %	18.75	80.56	0.69	2.03	92.88	5.08	10.57	0.00	89.43	30.43	8.70	60.87	
App/Depart	288	/	259	295	/	391	123	/	8	23	/	71	
AM Peak Hour:			745 AM										
PEAK													
Volumes	28	126	1	3	158	8	9	0	54	2	1	9	399
Approach %	18.06	81.29	0.65	1.78	93.49	4.73	14.29	0.00	85.71	16.67	8.33	75.00	
PEAK HR. FACTOR:		**0.901**			**0.754**			**0.875**			**0.750**		**0.950**

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: Lenwood Rd DATE: 05/22/25 LOCATION: Barstow

E-W STREET: Chevron Driveway DAY: THURSDAY PROJECT# 25-1314-004

PM PEAK HOUR

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	2	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	7	45	1	0	42	1	0	0	9	2	0	3	110
4:15 PM	21	51	0	3	58	2	2	0	11	0	0	1	149
4:30 PM	14	53	1	1	37	7	4	0	12	1	0	1	131
4:45 PM	10	40	0	2	41	3	1	0	18	4	0	3	122
5:00 PM	19	62	0	1	48	0	1	0	5	1	0	2	139
5:15 PM	23	44	0	0	45	3	2	0	7	0	0	3	127
5:30 PM	11	54	0	2	31	0	2	0	13	0	0	0	113
5:45 PM	20	50	0	0	50	1	3	0	15	2	0	0	141
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	125	399	2	9	352	17	15	0	90	10	0	13	1032
Approach %	23.76	75.86	0.38	2.38	93.12	4.50	14.29	0.00	85.71	43.48	0.00	56.52	
App/Depart	526	/	427	378	/	452	105	/	11	23	/	142	
PM Peak Hour:			415 PM										
PEAK													
Volumes	64	206	1	7	184	12	8	0	46	6	0	7	541
Approach %	23.62	76.01	0.37	3.45	90.64	5.91	14.81	0.00	85.19	46.15	0.00	53.85	
PEAK HR. FACTOR:		**0.836**			**0.806**			**0.711**			**0.464**		**0.908**

N-S STREET: Lenwood Rd
E-W STREET: Chevron Driveway

Date: 05/22/25
Day: THURSDAY

City: Barstow
Project #: 25-1314-004

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	1
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	1
3:30 AM	0	0	0	0
3:45 AM	0	0	0	1
4:00 AM	0	0	1	2
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	1	0	0	1
5:15 AM	0	0	0	0
5:30 AM	0	0	0	1
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	1
6:45 AM	0	0	0	0
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	1	1
8:30 AM	0	0	0	0
8:45 AM	0	1	1	0
9:00 AM	0	0	0	0
9:15 AM	0	1	0	0
9:30 AM	0	0	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	0	1
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	0	0	0
12:30 PM	0	0	0	0
12:45 PM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
2:00 PM	0	0	0	0
2:15 PM	0	0	0	0
2:30 PM	0	0	0	0
2:45 PM	0	0	0	0
3:00 PM	0	0	0	0
3:15 PM	0	0	0	0
3:30 PM	1	0	0	0
3:45 PM	0	0	0	0
4:00 PM	0	0	0	0
4:15 PM	0	0	0	1
4:30 PM	0	0	1	4
4:45 PM	0	1	0	0
5:00 PM	0	1	0	2
5:15 PM	0	0	0	2
5:30 PM	0	1	0	0
5:45 PM	3	0	0	2
6:00 PM	0	0	4	0
6:15 PM	0	0	0	0
6:30 PM	0	3	0	0
6:45 PM	1	0	1	1
7:00 PM	0	0	1	1
7:15 PM	1	0	0	3
7:30 PM	1	1	0	3
7:45 PM	5	1	3	1
8:00 PM	1	0	0	3
8:15 PM	0	0	0	2
8:30 PM	0	0	2	0
8:45 PM	0	1	0	2
9:00 PM	0	0	0	1
9:15 PM	0	0	0	1
9:30 PM	0	0	0	0
9:45 PM	0	1	0	1
10:00 PM	2	2	0	0
10:15 PM	3	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	1
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	1	0
TOTAL	**19**	**14**	**16**	**41**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
2:15 AM	0	0	0	0
2:30 AM	0	0	0	0
2:45 AM	0	0	0	0
3:00 AM	0	0	0	0
3:15 AM	0	0	0	0
3:30 AM	0	0	0	0
3:45 AM	0	0	0	0
4:00 AM	0	0	0	0
4:15 AM	0	0	0	0
4:30 AM	0	0	0	0
4:45 AM	0	0	0	0
5:00 AM	0	0	0	0
5:15 AM	0	0	0	0
5:30 AM	0	0	0	0
5:45 AM	0	0	0	0
6:00 AM	0	0	0	0
6:15 AM	0	0	0	0
6:30 AM	0	0	0	0
6:45 AM	0	0	0	0
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
9:00 AM	0	0	0	0
9:15 AM	0	0	0	0
9:30 AM	0	0	0	0
9:45 AM	0	0	0	0
10:00 AM	0	0	0	0
10:15 AM	0	0	0	0
10:30 AM	0	0	0	0
10:45 AM	0	0	0	0
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	0	0	0
12:30 PM	0	0	0	0
12:45 PM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
2:00 PM	0	0	0	0
2:15 PM	0	0	0	0
2:30 PM	0	0	0	0
2:45 PM	0	0	0	0
3:00 PM	0	0	0	0
3:15 PM	0	0	0	0
3:30 PM	0	0	0	0
3:45 PM	0	0	0	0
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
6:00 PM	0	0	0	0
6:15 PM	0	0	0	0
6:30 PM	0	0	0	0
6:45 PM	0	0	0	0
7:00 PM	0	0	0	0
7:15 PM	0	0	0	0
7:30 PM	0	0	0	0
7:45 PM	0	0	0	0
8:00 PM	0	0	0	0
8:15 PM	0	0	0	0
8:30 PM	0	0	0	0
8:45 PM	0	0	0	1
9:00 PM	0	0	0	0
9:15 PM	0	0	0	0
9:30 PM	0	0	0	0
9:45 PM	0	0	0	0
10:00 PM	0	0	0	0
10:15 PM	0	0	0	0
10:30 PM	0	0	0	0
10:45 PM	0	0	0	0
11:00 PM	0	0	0	0
11:15 PM	0	0	0	0
11:30 PM	0	0	0	0
11:45 PM	0	0	0	0
TOTAL	**0**	**0**	**0**	**1**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-004

Location: Lenwood Rd north of Chevron Driveway

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	18		14					12:00	29		30				
00:15	16		18					12:15	28		36				
00:30	14		12					12:30	29		37				
00:45	13	61	8	52			113	12:45	21	107	31	134			241
01:00	12		12					13:00	23		43				
01:15	14		5					13:15	26		25				
01:30	7		8					13:30	33		36				
01:45	7	40	10	35			75	13:45	30	112	24	128			240
02:00	11		9					14:00	20		27				
02:15	7		10					14:15	28		28				
02:30	11		13					14:30	34		27				
02:45	11	40	11	43			83	14:45	35	117	33	115			232
03:00	9		13					15:00	28		32				
03:15	7		9					15:15	49		48				
03:30	11		9					15:30	39		50				
03:45	11	38	11	42			80	15:45	46	162	42	172			334
04:00	12		16					16:00	48		43				
04:15	11		16					16:15	54		63				
04:30	14		15					16:30	58		45				
04:45	22	59	21	68			127	16:45	44	204	46	197			401
05:00	22		30					17:00	65		49				
05:15	20		30					17:15	49		48				
05:30	31		31					17:30	56		33				
05:45	29	102	27	118			220	17:45	53	223	51	181			404
06:00	18		29					18:00	42		37				
06:15	19		28					18:15	52		42				
06:30	26		30					18:30	49		41				
06:45	35	98	30	117			215	18:45	52	195	39	159			354
07:00	31		28					19:00	54		34				
07:15	27		28					19:15	43		30				
07:30	26		35					19:30	47		33				
07:45	41	125	42	133			258	19:45	46	190	35	132			322
08:00	36		44					20:00	51		29				
08:15	32		56					20:15	29		33				
08:30	35		27					20:30	34		27				
08:45	31	134	35	162			296	20:45	45	159	30	119			278
09:00	39		42					21:00	46		27				
09:15	48		50					21:15	46		28				
09:30	56		40					21:30	36		23				
09:45	46	189	44	176			365	21:45	29	157	26	104			261
10:00	46		54					22:00	31		17				
10:15	35		42					22:15	25		16				
10:30	33		47					22:30	25		19				
10:45	32	146	34	177			323	22:45	32	113	18	70			183
11:00	35		32					23:00	22		16				
11:15	26		39					23:15	14		14				
11:30	35		37					23:30	13		7				
11:45	31	127	33	141			268	23:45	16	65	9	46			111
Total Vol.		1159		1264			**2423**			1804		1557			**3361**

GPS: 34.855015, -117.089146

Daily Totals	NB	SB	EB	WB	Combined
	2963	2821			**5784**

	AM			PM		
Split %	47.8%	52.2%	**41.9%**	53.7%	46.3%	**58.1%**
Peak Hour	09:15	09:15	**09:15**	17:00	16:15	**16:15**
Volume	196	188	**384**	223	203	**424**
P.H.F.	0.88	0.87	**0.96**	0.86	0.81	**0.91**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-004

Location: Lenwood Rd south of Chevron Driveway

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	25		18					12:00	37		39				
00:15	21		25					12:15	32		45				
00:30	19		18					12:30	28		41				
00:45	20	85	11	72			157	12:45	22	119	39	164			283
01:00	20		20					13:00	28		56				
01:15	19		10					13:15	33		40				
01:30	9		12					13:30	37		50				
01:45	13	61	13	55			116	13:45	38	136	37	183			319
02:00	16		15					14:00	24		37				
02:15	15		18					14:15	35		37				
02:30	13		14					14:30	43		30				
02:45	13	57	16	63			120	14:45	46	148	42	146			294
03:00	15		23					15:00	35		44				
03:15	8		15					15:15	54		55				
03:30	21		15					15:30	49		61				
03:45	18	62	19	72			134	15:45	55	193	50	210			403
04:00	18		24					16:00	53		53				
04:15	12		26					16:15	72		69				
04:30	17		18					16:30	68		50				
04:45	24	71	30	98			169	16:45	50	243	63	235			478
05:00	23		42					17:00	81		54				
05:15	24		45					17:15	67		52				
05:30	35		39					17:30	65		44				
05:45	34	116	38	164			280	17:45	70	283	67	217			500
06:00	21		40					18:00	58		48				
06:15	19		47					18:15	71		52				
06:30	27		42					18:30	59		51				
06:45	35	102	40	169			271	18:45	67	255	44	195			450
07:00	38		43					19:00	65		43				
07:15	32		37					19:15	50		40				
07:30	27		49					19:30	60		42				
07:45	42	139	52	181			320	19:45	59	234	37	162			396
08:00	41		56					20:00	64		38				
08:15	29		66					20:15	37		45				
08:30	43		40					20:30	50		35				
08:45	36	149	48	210			359	20:45	52	203	42	160			363
09:00	45		50					21:00	58		31				
09:15	53		65					21:15	63		34				
09:30	56		53					21:30	53		34				
09:45	46	200	56	224			424	21:45	40	214	36	135			349
10:00	54		60					22:00	38		31				
10:15	43		50					22:15	26		27				
10:30	39		53					22:30	36		23				
10:45	33	169	39	202			371	22:45	43	143	19	100			243
11:00	35		39					23:00	28		24				
11:15	27		46					23:15	25		20				
11:30	42		48					23:30	22		9				
11:45	32	136	50	183			319	23:45	28	103	14	67			170
Total Vol.		1347		1693			**3040**			2274		1974			**4248**

GPS: 34.855015, -117.089146

Daily Totals

NB	SB	EB	WB	**Combined**
3621	3667			**7288**

	AM			PM		
Split %	44.3%	55.7%	**41.7%**	53.5%	46.5%	**58.3%**
Peak Hour	09:15	09:15	**09:15**	17:00	16:15	**16:15**
Volume	209	234	**443**	283	236	**507**
P.H.F.	0.93	0.90	**0.94**	0.87	0.86	**0.90**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-004

Location: Chevron Driveway east of Lenwood Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			0		0			12:00			3		2		
00:15			0		1			12:15			3		2		
00:30			0		1			12:30			1		0		
00:45			1	1	0	2	3	12:45			1	8	2	6	14
01:00			2		1			13:00			3		2		
01:15			1		0			13:15			3		1		
01:30			1		1			13:30			1		0		
01:45			0	4	1	3	7	13:45			1	8	1	4	12
02:00			1		0			14:00			3		3		
02:15			0		1			14:15			3		1		
02:30			2		0			14:30			1		1		
02:45			0	3	0	1	4	14:45			1	8	1	6	14
03:00			0		0			15:00			2		3		
03:15			0		0			15:15			2		3		
03:30			0		0			15:30			3		3		
03:45			0	0	0	0		15:45			2	9	1	10	19
04:00			0		0			16:00			1		5		
04:15			1		2			16:15			3		1		
04:30			1		1			16:30			2		2		
04:45			0	2	0	3	5	16:45			2	8	7	15	23
05:00			1		2			17:00			1		3		
05:15			1		2			17:15			0		3		
05:30			3		1			17:30			2		0		
05:45			0	5	0	5	10	17:45			0	3	2	8	11
06:00			2		3			18:00			0		3		
06:15			2		3			18:15			2		2		
06:30			1		0			18:30			0		2		
06:45			1	6	0	6	12	18:45			3	5	4	11	16
07:00			1		2			19:00			0		3		
07:15			0		1			19:15			0		2		
07:30			2		2			19:30			2		2		
07:45			0	3	4	9	12	19:45			1	3	1	8	11
08:00			4		2			20:00			0		1		
08:15			0		4			20:15			0		1		
08:30			0		2			20:30			0		3		
08:45			1	5	6	14	19	20:45			1	1	2	7	8
09:00			2		3			21:00			0		1		
09:15			1		5			21:15			0		0		
09:30			0		6			21:30			1		0		
09:45			3	6	8	22	28	21:45			0	1	1	2	3
10:00			0		5			22:00			1		1		
10:15			1		4			22:15			4		3		
10:30			2		1			22:30			0		0		
10:45			2	5	4	14	19	22:45			0	5	3	7	12
11:00			2		7			23:00			1		1		
11:15			2		5			23:15			0		1		
11:30			2		2			23:30			1		1		
11:45			2	8	6	20	28	23:45			0	2	0	3	5
Total Vol.			48		99		**147**				61		87		**148**

GPS: 34.855015, -117.089146

Daily Totals

NB	SB	EB	WB	**Combined**
		109	186	**295**

	AM			**PM**		
Split %	32.7%	67.3%	**49.8%**	41.2%	58.8%	**50.2%**
Peak Hour	11:30	09:15	**09:00**	15:00	16:00	**16:00**
Volume	10	24	**28**	9	15	**23**
P.H.F.	0.83	0.75	**0.64**	0.75	0.54	**0.64**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-004

Location: Chevron Driveway west of Lenwood Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			7		10			12:00			12		10		
00:15			8		7			12:15			12		6		
00:30			7		7			12:30			10		4		
00:45			3	25	6	30	55	12:45			10	44	4	24	68
01:00			8		7			13:00			15		6		
01:15			7		6			13:15			17		7		
01:30			5		3			13:30			16		5		
01:45			2	22	6	22	44	13:45			15	63	10	28	91
02:00			8		6			14:00			12		6		
02:15			8		9			14:15			14		10		
02:30			7		6			14:30			8		14		
02:45			5	28	2	23	51	14:45			10	44	12	42	86
03:00			10		6			15:00			12		8		
03:15			8		3			15:15			10		9		
03:30			8		12			15:30			14		13		
03:45			8	34	7	28	62	15:45			12	48	12	42	90
04:00			10		8			16:00			9		8		
04:15			10		2			16:15			13		23		
04:30			5		5			16:30			16		21		
04:45			10	35	3	18	53	16:45			19	57	13	65	122
05:00			15		5			17:00			6		19		
05:15			16		6			17:15			9		26		
05:30			12		6			17:30			15		11		
05:45			11	54	5	22	76	17:45			18	48	21	77	125
06:00			13		6			18:00			15		23		
06:15			20		2			18:15			12		21		
06:30			13		1			18:30			13		15		
06:45			14	60	3	12	72	18:45			9	49	20	79	128
07:00			17		10			19:00			11		16		
07:15			12		9			19:15			13		12		
07:30			17		4			19:30			12		16		
07:45			13	59	8	31	90	19:45			5	41	16	60	101
08:00			18		9			20:00			12		17		
08:15			16		7			20:15			15		12		
08:30			16		13			20:30			7		18		
08:45			14	64	11	40	104	20:45			16	50	12	59	109
09:00			13		12			21:00			6		15		
09:15			17		11			21:15			8		19		
09:30			15		8			21:30			15		20		
09:45			15	60	8	39	99	21:45			12	41	14	68	109
10:00			5		12			22:00			14		7		
10:15			14		17			22:15			15		4		
10:30			10		9			22:30			4		11		
10:45			4	33	2	40	73	22:45			0	33	13	35	68
11:00			7		5			23:00			8		6		
11:15			11		8			23:15			6		12		
11:30			17		13			23:30			4		11		
11:45			19	54	7	33	87	23:45			6	24	13	42	66
Total Vol.				528		338	**866**					542		621	**1163**

GPS: 34.855015, -117.089146

Daily Totals

NB	SB	EB	WB	**Combined**
		1070	959	**2029**

	AM			**PM**		
Split %	61.0%	39.0%	**42.7%**	46.6%	53.4%	**57.3%**
Peak Hour	06:15	08:30	**08:30**	13:00	17:15	**17:15**
Volume	64	47	**107**	63	81	**138**
P.H.F.	0.80	0.90	**0.92**	0.93	0.78	**0.88**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, May 22, 2025 City: Barstow Project #: 25-1314-004

Location: Lenwood Rd & Chevron Driveway

AM Period	NB		SB		EB		WB			PM Period	NB		SB		EB		WB		
00:00	25		14		7		0			12:00	37		30		12		2		
00:15	21		18		8		1			12:15	32		36		12		2		
00:30	19		12		7		1			12:30	28		37		10		0		
00:45	20	85	8	52	3	25	0	2	164	12:45	22	119	31	134	10	44	2	6	303
01:00	20		12		8		1			13:00	28		43		15		2		
01:15	19		5		7		0			13:15	33		25		17		1		
01:30	9		8		5		1			13:30	37		36		16		0		
01:45	13	61	10	35	2	22	1	3	121	13:45	38	136	24	128	15	63	1	4	331
02:00	16		9		8		0			14:00	24		27		12		3		
02:15	15		10		8		1			14:15	35		28		14		1		
02:30	13		13		7		0			14:30	43		27		8		1		
02:45	13	57	11	43	5	28	0	1	129	14:45	46	148	33	115	10	44	1	6	313
03:00	15		13		10		0			15:00	35		32		12		3		
03:15	8		9		8		0			15:15	54		48		10		3		
03:30	21		9		8		0			15:30	49		50		14		3		
03:45	18	62	11	42	8	34	0	0	138	15:45	55	193	42	172	12	48	1	10	423
04:00	18		16		10		0			16:00	53		43		9		5		
04:15	12		16		10		2			16:15	72		63		13		1		
04:30	17		15		5		1			16:30	68		45		16		2		
04:45	24	71	21	68	10	35	0	3	177	16:45	50	243	46	197	19	57	7	15	512
05:00	23		30		15		2			17:00	81		49		6		3		
05:15	24		30		16		2			17:15	67		48		9		3		
05:30	35		31		12		1			17:30	65		33		15		0		
05:45	34	116	27	118	11	54	0	5	293	17:45	70	283	51	181	18	48	2	8	520
06:00	21		29		13		3			18:00	58		37		15		3		
06:15	19		28		20		3			18:15	71		42		12		2		
06:30	27		30		13		0			18:30	59		41		13		2		
06:45	35	102	30	117	14	60	0	6	285	18:45	67	255	39	159	9	49	4	11	474
07:00	38		28		17		2			19:00	65		34		11		3		
07:15	32		28		12		1			19:15	50		30		13		2		
07:30	27		35		17		2			19:30	60		33		12		2		
07:45	42	139	42	133	13	59	4	9	340	19:45	59	234	35	132	5	41	1	8	415
08:00	41		44		18		2			20:00	64		29		12		1		
08:15	29		56		16		4			20:15	37		33		15		1		
08:30	43		27		16		2			20:30	50		27		7		3		
08:45	36	149	35	162	14	64	6	14	389	20:45	52	203	30	119	16	50	2	7	379
09:00	45		42		13		3			21:00	58		27		6		1		
09:15	53		50		17		5			21:15	63		28		8		0		
09:30	56		40		15		6			21:30	53		23		15		0		
09:45	46	200	44	176	15	60	8	22	458	21:45	40	214	26	104	12	41	1	2	361
10:00	54		54		5		5			22:00	38		17		14		1		
10:15	43		42		14		4			22:15	26		16		15		3		
10:30	39		47		10		1			22:30	36		19		4		0		
10:45	33	169	34	177	4	33	4	14	393	22:45	43	143	18	70	0	33	3	7	253
11:00	35		32		7		7			23:00	28		16		8		1		
11:15	27		39		11		5			23:15	25		14		6		1		
11:30	42		37		17		2			23:30	22		7		4		1		
11:45	32	136	33	141	19	54	6	20	351	23:45	28	103	9	46	6	24	0	3	176
Total Vol.		1347		1264		528		99	**3238**			2274		1557		542		87	**4460**

GPS: 34.855015, -117.089146

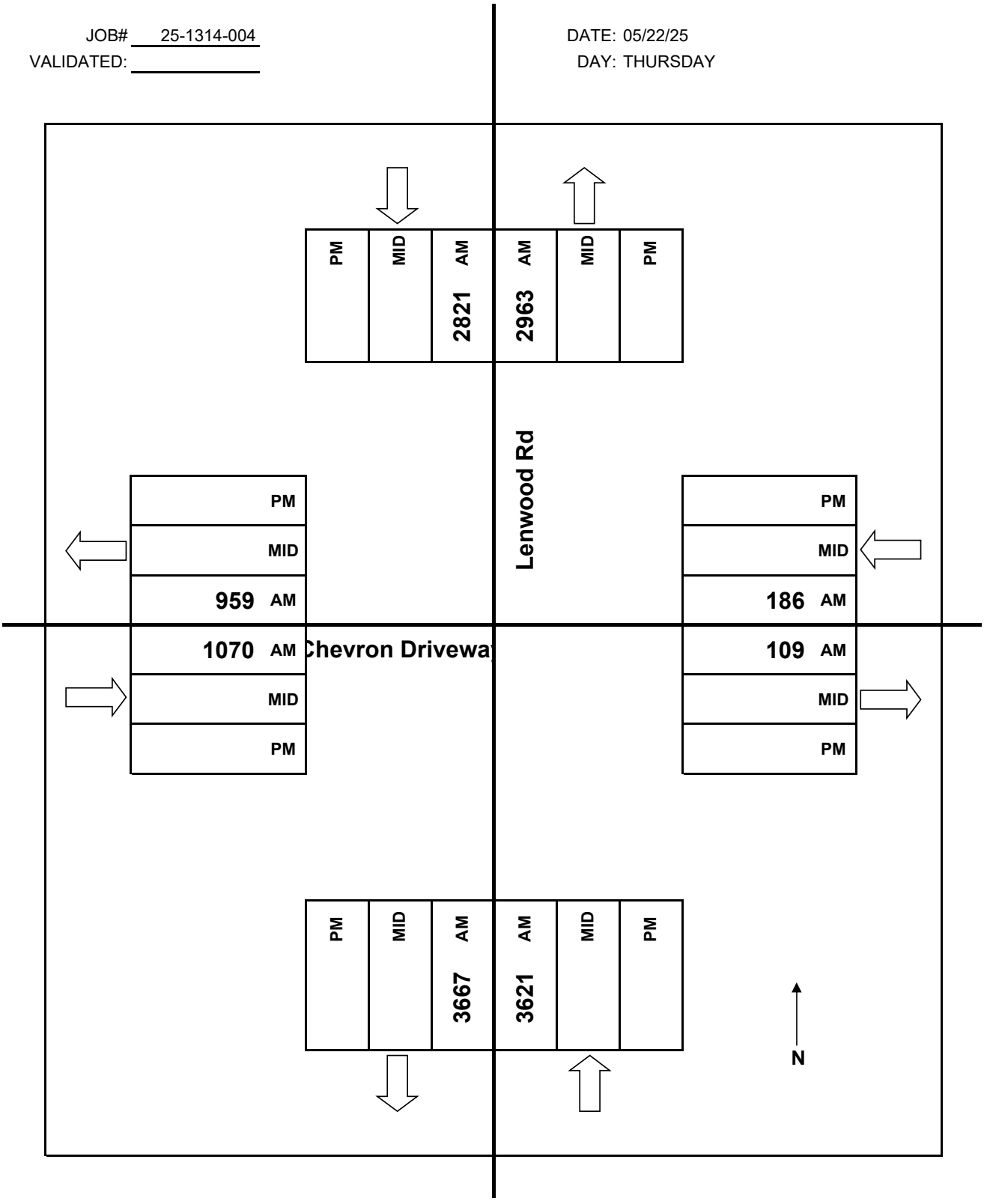
Daily Totals

NB	SB	EB	WB	**Combined**
3621	2821	1070	186	**7698**

	AM					PM				
Split %	41.6%	39.0%	16.3%	3.1%	**42.1%**	51.0%	34.9%	12.2%	2.0%	**57.9%**
Peak Hour	09:15	09:15	06:15	09:15	**09:15**	17:00	16:15	13:00	16:00	**16:15**
Volume	209	188	64	24	**473**	283	203	63	15	**541**
P.H.F.	0.93	0.87	0.80	0.75	**0.95**	0.87	0.81	0.93	0.54	**0.91**

JOB# 25-1314-004
VALIDATED:

DATE: 05/22/25
DAY: THURSDAY



Field Data Services of Arizona, Inc./Veracity Traffic Group – May 2025

Intersection 23

FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP

PROJECT: 25-1314-008

DATE: 5/22/2025

LOCATION: Lenwood Rd south of Jasper Rd

NORTHBOUND

TIME	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	TOTAL
00:00 AM	0	18	0	0	0	1	0	0	0	0	0	0	0	19
01:00	0	16	0	0	0	0	0	0	0	0	0	0	0	16
02:00	0	6	0	0	1	0	0	0	0	0	0	0	0	7
03:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
04:00	0	18	0	0	0	0	0	0	0	0	0	0	0	18
05:00	0	52	0	0	1	0	0	1	0	0	0	0	0	54
06:00	0	55	0	1	1	1	0	0	5	0	0	0	0	63
07:00	1	49	1	1	0	0	1	0	3	0	0	0	0	56
08:00	1	51	1	2	3	0	0	1	0	0	0	0	0	59
09:00	0	53	0	1	2	0	0	0	0	0	0	0	0	56
10:00	0	47	2	1	0	0	0	0	1	0	0	0	0	51
11:00	0	54	2	1	0	1	0	0	0	0	0	0	0	58
12:00 PM	0	58	0	1	0	0	0	0	0	0	0	0	0	59
13:00	0	59	1	0	0	0	0	0	0	0	0	0	0	60
14:00	0	68	0	1	0	0	0	0	0	0	0	0	0	69
15:00	0	103	1	1	0	0	0	0	0	0	0	0	0	105
16:00	0	110	2	1	0	0	0	0	0	0	0	0	0	113
17:00	1	120	1	2	0	0	0	0	1	0	0	0	0	125
18:00	2	86	0	1	0	0	0	0	0	0	0	0	0	89
19:00	0	97	0	1	0	0	0	0	0	0	0	0	0	98
20:00	2	99	0	1	0	0	0	0	2	0	0	0	0	104
21:00	0	90	0	0	0	0	0	0	1	0	0	0	0	91
22:00	0	40	1	0	1	0	0	0	2	0	0	0	0	44
23:00	0	21	0	0	0	0	0	0	0	0	0	0	0	21
TOTAL	**7**	**1380**	**12**	**16**	**9**	**3**	**1**	**2**	**15**					**1445**
% OF TOTAL	0%	96%	1%	1%	1%	0%	0%	0%	1%					100%
% AM	0%	30%	0%	0%	1%	0%	0%	0%	1%					32%
AM PEAK HOUR	07:00	06:00	10:00	08:00	08:00		07:00	05:00	06:00					06:00
VOLUME	1	55	2	2	3	1	1	1	5					63
% PM	0%	66%	0%	1%	0%				0%					68%
PM PEAK HOUR	18:00	17:00	16:00	17:00	22:00				20:00					17:00
VOLUME	2	120	2	2	1				2					125

SUMMARY	CLASS TYPE	TOTAL	PERCENT OF TOTAL VEHICLES			PERCENT OF CLASS		
	TOTAL VEHICLES	**1445**	**TOTAL%**	**AM%**	**PM%**	**TOTAL%**	**AM%**	**PM%**
	CLASS #1	7	0.5%	0.1%	0.3%	100.0%	28.6%	71.4%
	CLASS #2	1380	95.5%	29.7%	65.8%	100.0%	31.1%	68.9%
	CLASS #3	12	0.8%	0.4%	0.4%	100.0%	50.0%	50.0%
	CLASS #4 THRU #13	46	3.2%	2.1%	1.1%	100.0%	65.2%	34.8%
	% of Commerical Traffic	**21**	**1.5%**	**(Classes 6-13)**				
	% of Single Unit Trucks	**21**	**1.5%**	**(Classes 6-10)**				
	% of Multi-Unit Trucks	**0**	**0.0%**	**(Classes 11-13)**				

1: MOTORCYCLES - 2 AXLES **5: SINGLE UNIT - 2 AXLES & 6 TIRES** **9: DOUBLE UNIT - 5 AXLES** **13: MULTI UNIT - >6 AXLES**
2: PASSENGER CARS - 2 AXLES **6: SINGLE UNIT TRUCK - 3 AXLES** **10: DOUBLE UNIT - >5 AXLES**
3: PICKUP TRUCKS & VANS - 2 AXLE **7: SINGLE UNIT - 4 AXLES** **11: MULTI UNIT - 6 AXLES**
4: BUSES **8: DOUBLE UNIT - <5 AXLES** **12: MULTI UNIT - <6 AXLES**

FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP

PROJECT: 25-1314-008

DATE: 5/22/2025

LOCATION: Lenwood Rd south of Jasper Rd

SOUTHBOUND

TIME	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	TOTAL
00:00 AM	0	7	1	0	0	0	0	0	2	0	0	0	0	10
01:00	0	11	0	0	0	0	0	0	1	0	0	0	0	12
02:00	1	5	0	0	0	0	0	0	2	0	0	0	0	8
03:00	0	9	0	0	0	0	0	0	3	0	1	0	0	13
04:00	0	10	0	0	0	0	0	0	0	0	1	0	0	11
05:00	1	31	0	0	0	0	0	0	2	0	0	0	0	34
06:00	0	54	1	0	0	0	0	0	1	0	0	0	0	56
07:00	0	58	2	0	3	0	0	0	1	0	0	0	0	64
08:00	1	70	0	0	2	0	0	1	1	0	0	0	0	75
09:00	0	66	0	0	3	0	0	0	2	0	1	0	0	72
10:00	0	46	0	0	0	2	1	0	1	0	0	0	0	50
11:00	0	46	0	0	2	0	1	0	2	0	0	0	0	51
12:00 PM	0	46	0	1	0	1	0	0	1	0	0	0	0	49
13:00	0	49	0	2	2	0	1	0	0	0	0	0	0	54
14:00	0	45	0	0	0	0	0	0	2	0	0	0	0	47
15:00	1	91	0	3	0	0	1	0	7	1	0	0	0	104
16:00	0	127	2	0	1	0	0	0	7	2	0	0	0	139
17:00	1	108	1	0	3	0	0	0	5	0	0	0	0	118
18:00	0	76	0	1	3	0	0	0	3	0	0	0	0	83
19:00	2	66	0	0	0	0	0	0	5	0	0	0	0	73
20:00	0	54	0	0	0	0	0	1	5	0	0	0	0	60
21:00	1	46	1	1	1	0	0	0	3	0	0	0	0	53
22:00	1	29	0	0	0	0	0	0	2	0	0	0	0	32
23:00	0	15	0	0	0	0	0	0	0	0	0	0	0	15
TOTAL	**9**	**1165**	**8**	**8**	**20**	**3**	**4**	**2**	**58**	**3**	**3**			**1283**
% OF TOTAL	1%	91%	1%	1%	2%	0%	0%	0%	5%	0%	0%			100%
% AM	0%	32%	0%		1%	0%	0%	0%	1%		0%			36%
AM PEAK HOUR	02:00	08:00	07:00		07:00	10:00	10:00	08:00	03:00		03:00			08:00
VOLUME	1	70	2		3	2	1	1	3		1			75
% PM	0%	59%	0%	1%	1%	0%	0%	0%	3%	0%				64%
PM PEAK HOUR	19:00	16:00	16:00	15:00	17:00	12:00	13:00	20:00	15:00	16:00				16:00
VOLUME	2	127	2	3	3	1	1	1	7	2				139

SUMMARY	CLASS TYPE	TOTAL	PERCENT OF TOTAL VEHICLES			PERCENT OF CLASS		
	TOTAL VEHICLES	**1283**	**TOTAL%**	**AM%**	**PM%**	**TOTAL%**	**AM%**	**PM%**
	CLASS #1	9	0.7%	0.2%	0.5%	100.0%	33.3%	66.7%
	CLASS #2	1165	90.8%	32.2%	58.6%	100.0%	35.5%	64.5%
	CLASS #3	8	0.6%	0.3%	0.3%	100.0%	50.0%	50.0%
	CLASS #4 THRU #13	101	7.9%	2.8%	5.1%	100.0%	35.6%	64.4%
	% of Commerical Traffic	**73**	**5.7% (Classes 6-13)**					
	% of Single Unit Trucks	**70**	**5.5% (Classes 6-10)**					
	% of Multi-Unit Trucks	**3**	**0.2% (Classes 11-13)**					

1: MOTORCYCLES - 2 AXLES **5: SINGLE UNIT - 2 AXLES & 6 TIRES** **9: DOUBLE UNIT - 5 AXLES** **13: MULTI UNIT - >6 AXLES**

2: PASSENGER CARS - 2 AXLES **6: SINGLE UNIT TRUCK - 3 AXLES** **10: DOUBLE UNIT - >5 AXLES**

3: PICKUP TRUCKS & VANS - 2 AXLE **7: SINGLE UNIT - 4 AXLES** **11: MULTI UNIT - 6 AXLES**

4: BUSES **8: DOUBLE UNIT - <5 AXLES** **12: MULTI UNIT - <6 AXLES**

	PV		HV	
	NB	SB	NB	SB
12:00:00 AM	18	8	1	2
1:00:00 AM	16	11	0	1
2:00:00 AM	6	6	1	2
3:00:00 AM	10	9	0	4
4:00:00 AM	18	10	0	1
5:00:00 AM	52	32	2	2
6:00:00 AM	55	55	8	1
7:00:00 AM	51	60	5	4
8:00:00 AM	53	71	6	4
9:00:00 AM	53	66	3	6
10:00:00 AM	49	46	2	4
11:00:00 AM	56	46	2	5
12:00:00 PM	58	46	1	3
1:00:00 PM	60	49	0	5
2:00:00 PM	68	45	1	2
3:00:00 PM	104	92	1	12
4:00:00 PM	112	129	1	10
5:00:00 PM	122	110	3	8
6:00:00 PM	88	76	1	7
7:00:00 PM	97	68	1	5
8:00:00 PM	101	54	3	6
9:00:00 PM	90	48	1	5
10:00:00 PM	41	30	3	2
11:00:00 PM	21	15	0	0

FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP

PROJECT: 25-1314-008

DATE: 5/22/2025 LOCATION: Lenwood Rd south of Jasper Rd

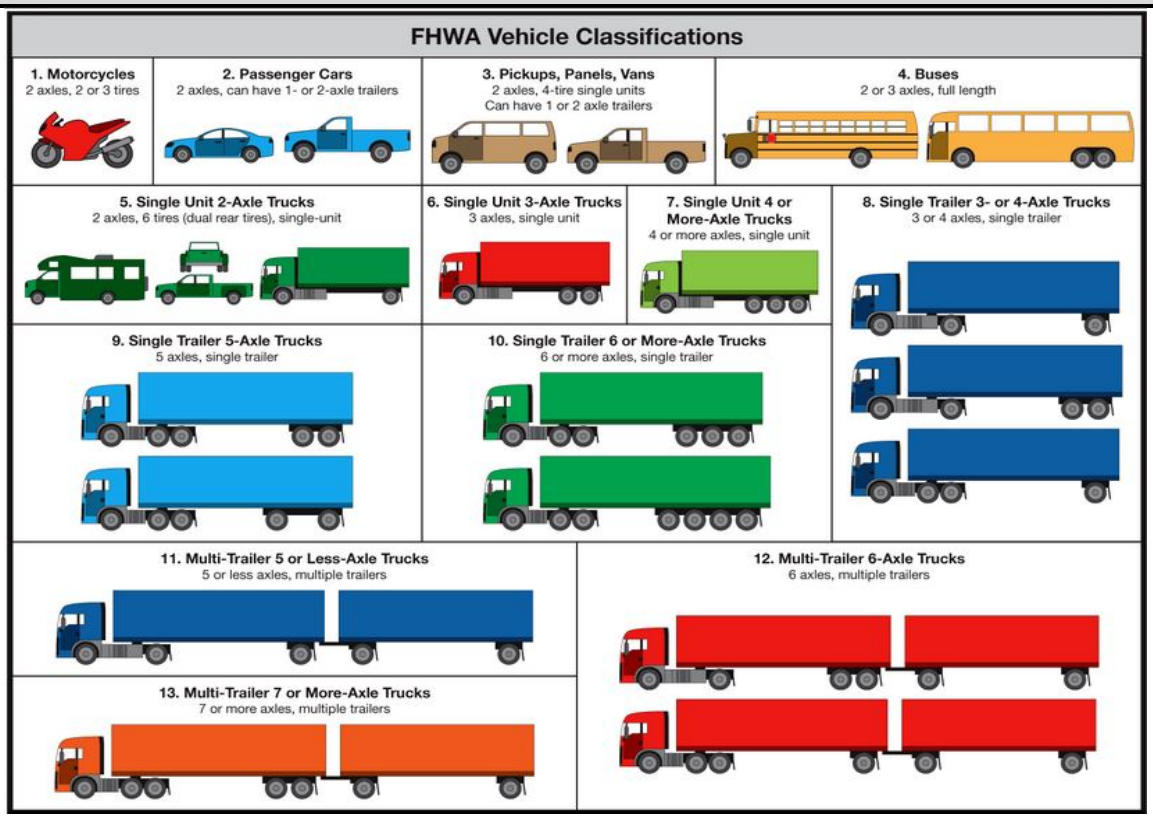
NORTHBOUND/SOUTHBOUND

TIME	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	TOTAL
00:00 AM	0	25	1	0	0	1	0	0	2	0	0	0	0	29
01:00	0	27	0	0	0	0	0	0	1	0	0	0	0	28
02:00	1	11	0	0	1	0	0	0	2	0	0	0	0	15
03:00	0	19	0	0	0	0	0	0	3	0	1	0	0	23
04:00	0	28	0	0	0	0	0	0	0	0	1	0	0	29
05:00	1	83	0	0	1	0	0	1	2	0	0	0	0	88
06:00	0	109	1	1	1	1	0	0	6	0	0	0	0	119
07:00	1	107	3	1	3	0	1	0	4	0	0	0	0	120
08:00	2	121	1	2	5	0	0	2	1	0	0	0	0	134
09:00	0	119	0	1	5	0	0	0	2	0	1	0	0	128
10:00	0	93	2	1	0	2	1	0	2	0	0	0	0	101
11:00	0	100	2	1	2	1	1	0	2	0	0	0	0	109
12:00 PM	0	104	0	2	0	1	0	0	1	0	0	0	0	108
13:00	0	108	1	2	2	0	1	0	0	0	0	0	0	114
14:00	0	113	0	1	0	0	0	0	2	0	0	0	0	116
15:00	1	194	1	4	0	0	1	0	7	1	0	0	0	209
16:00	0	237	4	1	1	0	0	0	7	2	0	0	0	252
17:00	2	228	2	2	3	0	0	0	6	0	0	0	0	243
18:00	2	162	0	2	3	0	0	0	3	0	0	0	0	172
19:00	2	163	0	1	0	0	0	0	5	0	0	0	0	171
20:00	2	153	0	1	0	0	0	1	7	0	0	0	0	164
21:00	1	136	1	1	1	0	0	0	4	0	0	0	0	144
22:00	1	69	1	0	1	0	0	0	4	0	0	0	0	76
23:00	0	36	0	0	0	0	0	0	0	0	0	0	0	36
TOTAL	**16**	**2545**	**20**	**24**	**29**	**6**	**5**	**4**	**73**	**3**	**3**			**2728**
% OF TOTAL	1%	93%	1%	1%	1%	0%	0%	0%	3%	0%	0%			100%
% AM	0%	31%	0%	0%	1%	0%	0%	0%	1%		0%			34%
AM PEAK HOUR	08:00	08:00	07:00	08:00	08:00	10:00	07:00	08:00	06:00		03:00			08:00
VOLUME	2	121	3	2	5	2	1	2	6		1			134
% PM	0%	62%	0%	1%	0%	0%	0%	0%	2%	0%				66%
PM PEAK HOUR	17:00	16:00	16:00	15:00	17:00	12:00	13:00	20:00	15:00	16:00				16:00
VOLUME	2	237	4	4	3	1	1	1	7	2				252

SUMMARY	CLASS TYPE	TOTAL	PERCENT OF TOTAL VEHICLES			PERCENT OF CLASS		
	TOTAL VEHICLES	**2728**	**TOTAL%**	**AM%**	**PM%**	**TOTAL%**	**AM%**	**PM%**
	CLASS #1	16	0.6%	0.2%	0.4%	100.0%	31.3%	68.8%
	CLASS #2	2545	93.3%	30.9%	62.4%	100.0%	33.1%	66.9%
	CLASS #3	20	0.7%	0.4%	0.4%	100.0%	50.0%	50.0%
	CLASS #4 THRU #13	147	5.4%	2.4%	3.0%	100.0%	44.9%	55.1%
	% of Commerical Traffic	**94**	**3.4% (Classes 6-13)**					
	% of Single Unit Trucks	**91**	**3.3% (Classes 6-10)**					
	% of Multi-Unit Trucks	**3**	**0.1% (Classes 11-13)**					

1: MOTORCYCLES - 2 AXLES **5: SINGLE UNIT - 2 AXLES & 6 TIRES** **9: DOUBLE UNIT - 5 AXLES** **13: MULTI UNIT - >6 AXLES**
2: PASSENGER CARS - 2 AXLES **6: SINGLE UNIT TRUCK - 3 AXLES** **10: DOUBLE UNIT - >5 AXLES**
3: PICKUP TRUCKS & VANS - 2 AXLE **7: SINGLE UNIT - 4 AXLES** **11: MULTI UNIT - 6 AXLES**
4: BUSES **8: DOUBLE UNIT - <5 AXLES** **12: MULTI UNIT - <6 AXLES**

FHWA Vehicle Classifications



FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP

Project #: 25-1314-008

0

GPS INFORMATION

Date: 5/22/2025

Location: Lenwood Rd south of Jasper Rd

0

NORTHBOUND

0

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
00:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
00:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
00:45	0	0	0	0	0	1	0	0	0	0	0	0	0	1
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
02:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
04:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7
05:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
05:15	0	14	0	0	1	0	0	0	0	0	0	0	0	15
05:30	0	14	0	0	0	0	0	1	0	0	0	0	0	15
05:45	0	17	0	0	0	0	0	0	0	0	0	0	0	17
06:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
06:15	0	11	0	1	0	0	0	0	0	0	0	0	0	12
06:30	0	16	0	0	1	0	0	0	0	0	0	0	0	17
06:45	0	19	0	0	0	1	0	0	4	0	0	0	0	24
07:00	0	12	0	0	0	0	0	0	1	0	0	0	0	13
07:15	0	12	0	1	0	0	0	0	1	0	0	0	0	14
07:30	0	13	0	0	0	0	0	0	1	0	0	0	0	14
07:45	1	12	1	0	0	0	1	0	0	0	0	0	0	15
08:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14
08:15	0	15	0	2	0	0	0	0	0	0	0	0	0	17
08:30	1	11	1	0	2	0	0	0	0	0	0	0	0	15
08:45	0	11	0	0	1	0	0	1	0	0	0	0	0	13
09:00	0	18	0	0	0	0	0	0	0	0	0	0	0	18
09:15	0	15	0	1	0	0	0	0	0	0	0	0	0	16
09:30	0	12	0	0	1	0	0	0	0	0	0	0	0	13
09:45	0	8	0	0	1	0	0	0	0	0	0	0	0	9
10:00	0	14	1	0	0	0	0	0	1	0	0	0	0	16
10:15	0	14	0	1	0	0	0	0	0	0	0	0	0	15
10:30	0	7	1	0	0	0	0	0	0	0	0	0	0	8
10:45	0	12	0	0	0	0	0	0	0	0	0	0	0	12
11:00	0	17	0	0	0	0	0	0	0	0	0	0	0	17
11:15	0	10	0	1	0	1	0	0	0	0	0	0	0	12
11:30	0	16	1	0	0	0	0	0	0	0	0	0	0	17
11:45	0	11	1	0	0	0	0	0	0	0	0	0	0	12
12:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14
12:15	0	14	0	0	0	0	0	0	0	0	0	0	0	14
12:30	0	15	0	1	0	0	0	0	0	0	0	0	0	16
12:45	0	15	0	0	0	0	0	0	0	0	0	0	0	15
13:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
13:15	0	16	0	0	0	0	0	0	0	0	0	0	0	16
13:30	0	17	1	0	0	0	0	0	0	0	0	0	0	18
13:45	0	17	0	0	0	0	0	0	0	0	0	0	0	17
14:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
14:15	0	12	0	1	0	0	0	0	0	0	0	0	0	13
14:30	0	23	0	0	0	0	0	0	0	0	0	0	0	23
14:45	0	22	0	0	0	0	0	0	0	0	0	0	0	22
15:00	0	16	0	0	0	0	0	0	0	0	0	0	0	16
15:15	0	33	1	1	0	0	0	0	0	0	0	0	0	35
15:30	0	26	0	0	0	0	0	0	0	0	0	0	0	26
15:45	0	28	0	0	0	0	0	0	0	0	0	0	0	28
16:00	0	26	1	0	0	0	0	0	0	0	0	0	0	27
16:15	0	27	0	1	0	0	0	0	0	0	0	0	0	28
16:30	0	34	1	0	0	0	0	0	0	0	0	0	0	35
16:45	0	23	0	0	0	0	0	0	0	0	0	0	0	23
17:00	1	28	0	0	0	0	0	0	0	0	0	0	0	29
17:15	0	27	1	2	0	0	0	0	1	0	0	0	0	31
17:30	0	38	0	0	0	0	0	0	0	0	0	0	0	38
17:45	0	27	0	0	0	0	0	0	0	0	0	0	0	27
18:00	0	23	0	0	0	0	0	0	0	0	0	0	0	23
18:15	1	20	0	1	0	0	0	0	0	0	0	0	0	22
18:30	1	21	0	0	0	0	0	0	0	0	0	0	0	22
18:45	0	22	0	0	0	0	0	0	0	0	0	0	0	22
19:00	0	35	0	0	0	0	0	0	0	0	0	0	0	35
19:15	0	14	0	1	0	0	0	0	0	0	0	0	0	15
19:30	0	26	0	0	0	0	0	0	0	0	0	0	0	26
19:45	0	22	0	0	0	0	0	0	0	0	0	0	0	22
20:00	0	32	0	0	0	0	0	0	1	0	0	0	0	33
20:15	0	20	0	1	0	0	0	0	0	0	0	0	0	21
20:30	1	19	0	0	0	0	0	0	1	0	0	0	0	21
20:45	1	28	0	0	0	0	0	0	0	0	0	0	0	29
21:00	0	24	0	0	0	0	0	0	0	0	0	0	0	24
21:15	0	22	0	0	0	0	0	0	0	0	0	0	0	22
21:30	0	22	0	0	0	0	0	0	1	0	0	0	0	23
21:45	0	22	0	0	0	0	0	0	0	0	0	0	0	22
22:00	0	19	0	0	1	0	0	0	1	0	0	0	0	21
22:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7
22:30	0	4	0	0	0	0	0	0	1	0	0	0	0	5
22:45	0	10	1	0	0	0	0	0	0	0	0	0	0	11
23:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
23:15	0	9	0	0	0	0	0	0	0	0	0	0	0	9
23:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**7**	**1380**	**12**	**16**	**9**	**3**	**1**	**2**	**15**	**0**	**0**	**0**	**0**	**1445**

FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP

Project #: 25-1314-008 | 0 | GPS INFORMATION

Date: 5/22/2025 | Location: Lenwood Rd south of Jasper Rd | 0

SOUTHBOUND | 0

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00	0	2	1	0	0	0	0	0	1	0	0	0	0	4
00:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
00:30	0	3	0	0	0	0	0	0	1	0	0	0	0	4
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
01:15	0	2	0	0	0	0	0	0	1	0	0	0	0	3
01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:30	0	3	0	0	0	0	0	0	1	0	0	0	0	4
02:45	1	1	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:15	0	1	0	0	0	0	0	0	1	0	1	0	0	3
03:30	0	1	0	0	0	0	0	0	1	0	0	0	0	2
03:45	0	4	0	0	0	0	0	0	1	0	0	0	0	5
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	3	0	0	0	0	0	0	0	0	1	0	0	4
04:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
05:00	0	4	0	0	0	0	0	0	1	0	0	0	0	5
05:15	0	9	0	0	0	0	0	0	1	0	0	0	0	10
05:30	0	10	0	0	0	0	0	0	0	0	0	0	0	10
05:45	1	8	0	0	0	0	0	0	0	0	0	0	0	9
06:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
06:15	0	18	0	0	0	0	0	0	1	0	0	0	0	19
06:30	0	12	0	0	0	0	0	0	0	0	0	0	0	12
06:45	0	15	0	0	0	0	0	0	0	0	0	0	0	15
07:00	0	10	0	0	1	0	0	0	0	0	0	0	0	11
07:15	0	13	0	0	1	0	0	0	1	0	0	0	0	15
07:30	0	16	0	0	1	0	0	0	0	0	0	0	0	17
07:45	0	19	2	0	0	0	0	0	0	0	0	0	0	21
08:00	0	20	0	0	0	0	0	0	0	0	0	0	0	20
08:15	0	21	0	0	0	0	0	0	0	0	0	0	0	21
08:30	1	11	0	0	0	0	0	0	1	0	0	0	0	13
08:45	0	18	0	0	2	0	0	1	0	0	0	0	0	21
09:00	0	17	0	0	0	0	0	0	0	0	0	0	0	17
09:15	0	13	0	0	0	0	0	0	1	0	0	0	0	14
09:30	0	17	0	0	3	0	0	0	0	0	1	0	0	21
09:45	0	19	0	0	0	0	0	0	1	0	0	0	0	20
10:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
10:15	0	19	0	0	0	2	1	0	0	0	0	0	0	22
10:30	0	9	0	0	0	0	0	0	1	0	0	0	0	10
10:45	0	10	0	0	0	0	0	0	0	0	0	0	0	10
11:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
11:15	0	10	0	0	1	0	0	0	0	0	0	0	0	11
11:30	0	15	0	0	1	0	1	0	2	0	0	0	0	19
11:45	0	15	0	0	0	0	0	0	0	0	0	0	0	15
12:00	0	10	0	1	0	0	0	0	0	0	0	0	0	11
12:15	0	9	0	0	0	0	0	0	1	0	0	0	0	10
12:30	0	11	0	0	0	1	0	0	0	0	0	0	0	12
12:45	0	16	0	0	0	0	0	0	0	0	0	0	0	16
13:00	0	16	0	0	0	0	0	0	0	0	0	0	0	16
13:15	0	14	0	0	0	0	1	0	0	0	0	0	0	15
13:30	0	7	0	0	2	0	0	0	0	0	0	0	0	9
13:45	0	12	0	2	0	0	0	0	0	0	0	0	0	14
14:00	0	13	0	0	0	0	0	0	1	0	0	0	0	14
14:15	0	12	0	0	0	0	0	0	0	0	0	0	0	12
14:30	0	7	0	0	0	0	0	0	1	0	0	0	0	8
14:45	0	13	0	0	0	0	0	0	0	0	0	0	0	13
15:00	0	14	0	2	0	0	1	0	0	0	0	0	0	17
15:15	0	23	0	0	0	0	0	0	3	1	0	0	0	27
15:30	1	28	0	1	0	0	0	0	1	0	0	0	0	31
15:45	0	26	0	0	0	0	0	0	3	0	0	0	0	29
16:00	0	33	1	0	0	0	0	0	1	0	0	0	0	35
16:15	0	30	1	0	1	0	0	0	3	1	0	0	0	36
16:30	0	28	0	0	0	0	0	0	1	1	0	0	0	30
16:45	0	36	0	0	0	0	0	0	2	0	0	0	0	38
17:00	0	29	0	0	1	0	0	0	2	0	0	0	0	32
17:15	0	30	1	0	0	0	0	0	2	0	0	0	0	33
17:30	0	24	0	0	2	0	0	0	0	0	0	0	0	26
17:45	1	25	0	0	0	0	0	0	1	0	0	0	0	27
18:00	0	16	0	0	2	0	0	0	0	0	0	0	0	18
18:15	0	22	0	0	0	0	0	0	1	0	0	0	0	23
18:30	0	24	0	1	1	0	0	0	1	0	0	0	0	27
18:45	0	14	0	0	0	0	0	0	1	0	0	0	0	15
19:00	0	19	0	0	0	0	0	0	1	0	0	0	0	20
19:15	0	18	0	0	0	0	0	0	1	0	0	0	0	19
19:30	2	12	0	0	0	0	0	0	3	0	0	0	0	17
19:45	0	17	0	0	0	0	0	0	0	0	0	0	0	17
20:00	0	15	0	0	0	0	0	1	3	0	0	0	0	19
20:15	0	11	0	0	0	0	0	0	1	0	0	0	0	12
20:30	0	15	0	0	0	0	0	0	0	0	0	0	0	15
20:45	0	13	0	0	0	0	0	0	1	0	0	0	0	14
21:00	0	9	0	1	0	0	0	0	1	0	0	0	0	11
21:15	0	9	1	0	0	0	0	0	1	0	0	0	0	11
21:30	1	15	0	0	1	0	0	0	0	0	0	0	0	17
21:45	0	13	0	0	0	0	0	0	1	0	0	0	0	14
22:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
22:15	1	9	0	0	0	0	0	0	0	0	0	0	0	10
22:30	0	6	0	0	0	0	0	0	1	0	0	0	0	7
22:45	0	7	0	0	0	0	0	0	1	0	0	0	0	8
23:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
23:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8
23:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**9**	**1165**	**8**	**8**	**20**	**3**	**4**	**2**	**58**	**3**	**3**	**0**	**0**	**1283**

FIELD DATA SERVICES OF ARIZONA INC./VERACIT
31894 WHITETAIL LN
TEMECULA, CA 92592
520.316.6745 PHONE
866.686.7612 FAX

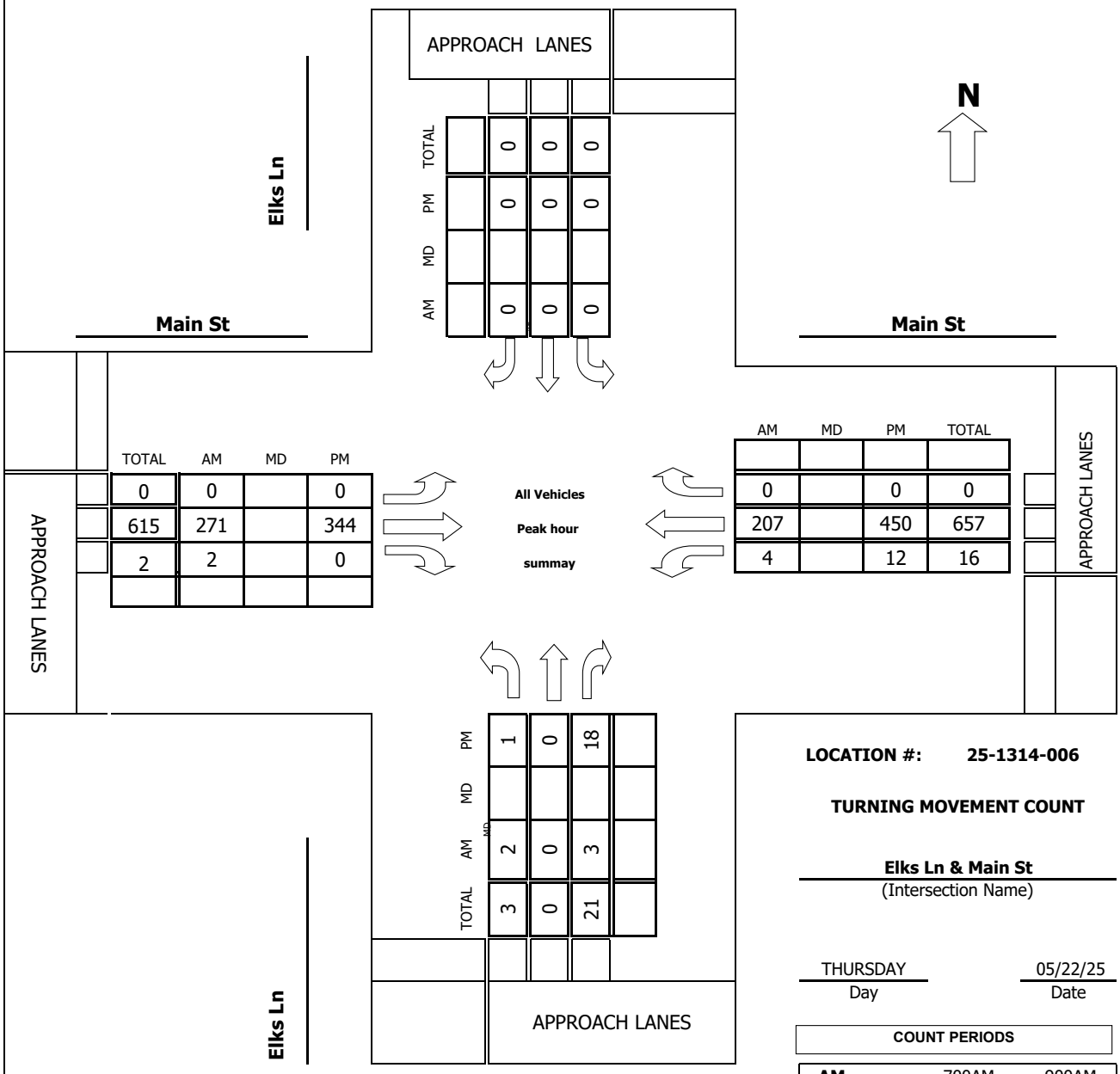
INPUT INFORMATION	
JOB #:	25-1314-008
DATE:	5/22/2025
MAIN-HEADER INFORMATION:	FIELD DATA SERVICES OF ARIZONA, INC./VERACITY TRAFFIC GROUP
SUB-HEADER:	
LOCATION INFORMATION:	Lenwood Rd south of Jasper Rd
GPS-N:	34.87791
GPS-W:	-117.11806

Field Data Services of Arizona, Inc./Veracity Traffic Group – May 2025

Intersection 40

Project #: 25-1314-006

TMC SUMMARY OF Elks Ln & Main St



LOCATION #: 25-1314-006

TURNING MOVEMENT COUNT

Elks Ln & Main St
(Intersection Name)

THURSDAY (Day) 05/22/25 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 700 AM

NOON PEAK HOUR

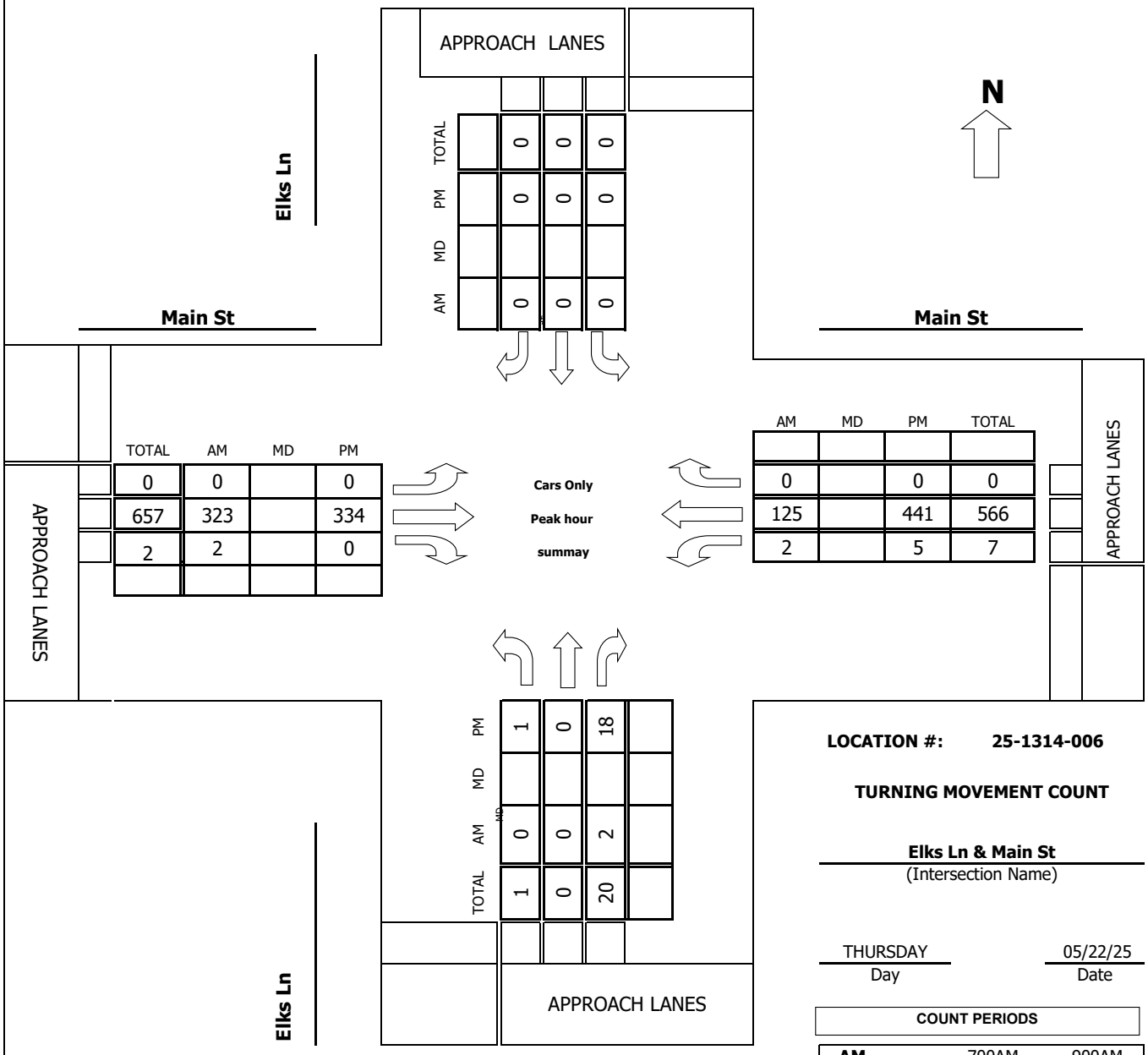
PM PEAK HOUR 430 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 25-1314-006

TMC SUMMARY OF Elks Ln & Main St



LOCATION #: 25-1314-006

TURNING MOVEMENT COUNT

Elks Ln & Main St
(Intersection Name)

THURSDAY (Day) 05/22/25 (Date)

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

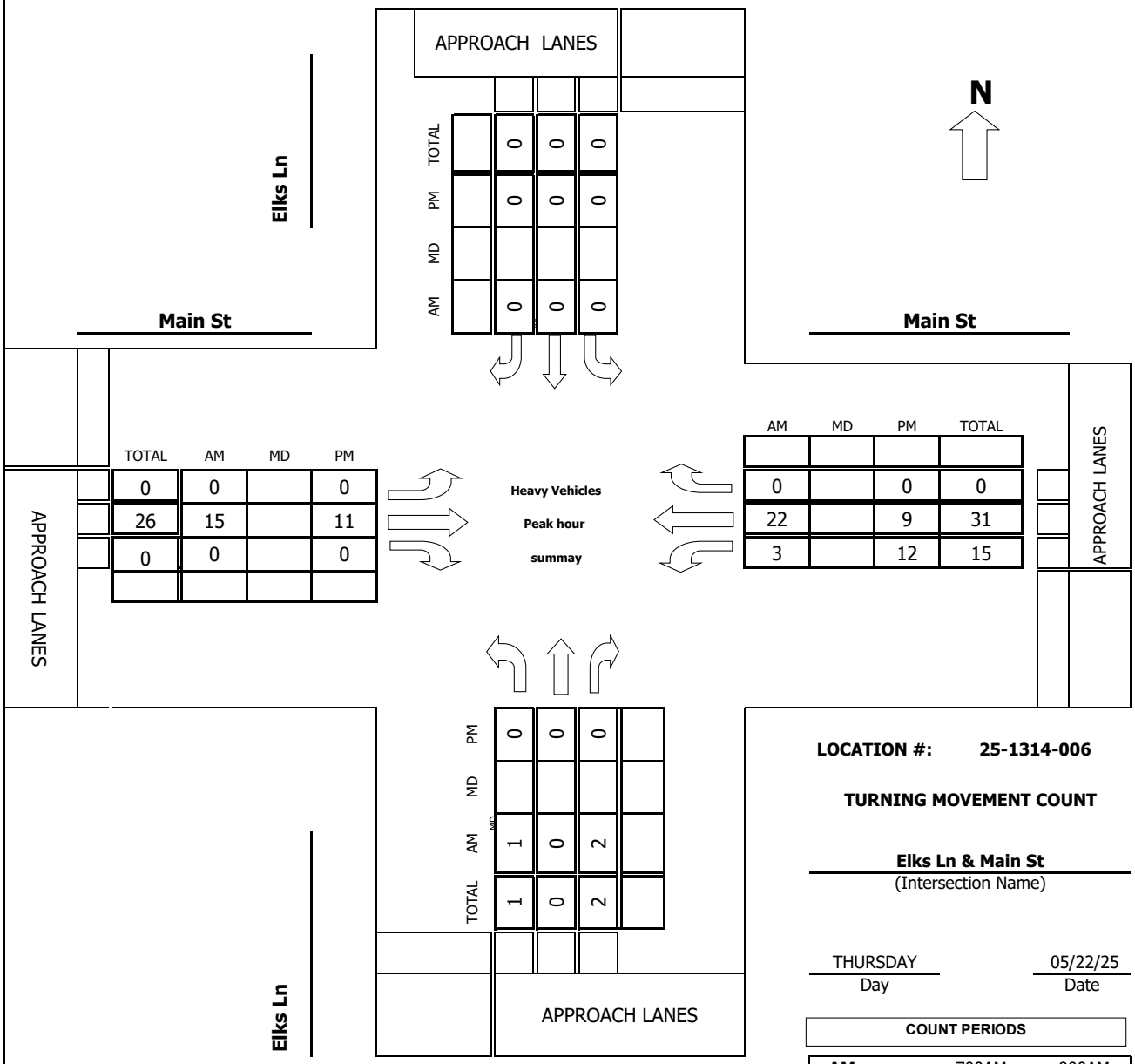
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Project #: 25-1314-006

TMC SUMMARY OF Elks Ln & Main St



LOCATION #: 25-1314-006

TURNING MOVEMENT COUNT

Elks Ln & Main St
(Intersection Name)

THURSDAY (Day) 05/22/25 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR	700 AM
NOON PEAK HOUR	
PM PEAK HOUR	430 PM

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Elks Ln DATE: 05/22/25 LOCATION: Barstow

E-W STREET: Main St DAY: THURSDAY PROJECT# 25-1314-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
ALL VEHICLES													
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	0	0	0	0	95	0	1	26	0	122
7:15 AM	0	0	1	0	0	0	0	76	0	0	37	0	114
7:30 AM	0	0	2	0	0	0	0	81	1	1	36	0	121
7:45 AM	0	0	0	0	0	0	0	84	1	1	40	0	126
8:00 AM	0	0	0	0	0	0	0	54	0	1	54	0	109
8:15 AM	1	0	0	0	0	0	0	64	0	2	48	0	115
8:30 AM	1	0	1	0	0	0	0	75	0	1	60	0	138
8:45 AM	0	0	2	0	0	0	0	78	2	0	45	0	127
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	2	0	6	0	0	0	0	607	4	7	346	0	972
Approach %	25.00	0.00	75.00	####	####	####	0.00	99.35	0.65	1.98	98.02	0.00	
App/Depart	8	/	0	0	/	11	611	/	613	353	/	348	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	2	0	3	0	0	0	0	271	2	4	207	0	489
Approach %	40.00	0.00	60.00	####	####	####	0.00	99.27	0.73	1.90	98.10	0.00	
PEAK HR. FACTOR:		0.625			0.000			0.853			0.865		0.886

CONTROL: 1-Way Stop (NB)
COMMENT 1: 0
GPS: 34.882854, -117.091666

HOURS:

	FROM:		TO:	
AM	700	AM	900	AM
NOON				
PM	400	PM	600	PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Elks Ln DATE: 05/22/25 LOCATION: Barstow

E-W STREET: Main St DAY: THURSDAY PROJECT# 25-1314-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
						CARS ONLY							
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	0	0	0	0	94	0	0	24	0	118
7:15 AM	0	0	0	0	0	0	0	72	0	0	34	0	106
7:30 AM	0	0	2	0	0	0	0	76	1	1	29	0	109
7:45 AM	0	0	0	0	0	0	0	81	1	1	38	0	121
8:00 AM	0	0	0	0	0	0	0	51	0	1	50	0	102
8:15 AM	0	0	0	0	0	0	0	63	0	0	44	0	107
8:30 AM	1	0	0	0	0	0	0	69	0	0	51	0	121
8:45 AM	0	0	1	0	0	0	0	73	2	0	40	0	116
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	1	0	3	0	0	0	0	579	4	3	310	0	900
Approach %	25.00	0.00	75.00	####	####	####	0.00	99.31	0.69	0.96	99.04	0.00	
App/Depart	4	/	0	0	/	7	583	/	582	313	/	311	

AM Peak Hr Begins at: 700 AM

PEAK													
Volumes	0	0	2	0	0	0	0	323	2	2	125	0	454
Approach %	0.00	0.00	100.00	####	####	####	0.00	99.38	0.62	1.57	98.43	0.00	
PEAK HR. FACTOR:		0.250			0.000			0.864			0.814		0.938

CONTROL: 1-Way Stop (NB)
COMMENT 1:
GPS: 34.882854, -117.091666

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Elks Ln 0 DATE: 05/22/25 LOCATION: Barstow

E-W STREET: Main St DAY: THURSDAY PROJECT# 25-1314-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	HEAVY VEHICLES ONLY												
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	0	0	0	0	1	0	1	2	0	4
7:15 AM	0	0	1	0	0	0	0	4	0	0	3	0	8
7:30 AM	0	0	0	0	0	0	0	5	0	0	7	0	12
7:45 AM	0	0	0	0	0	0	0	3	0	0	2	0	5
8:00 AM	0	0	0	0	0	0	0	3	0	0	4	0	7
8:15 AM	1	0	0	0	0	0	0	1	0	2	4	0	8
8:30 AM	0	0	1	0	0	0	0	6	0	1	9	0	17
8:45 AM	0	0	1	0	0	0	0	5	0	0	5	0	11
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	1	0	3	0	0	0	0	28	0	4	36	0	72
Approach %	25.00	0.00	75.00	####	####	####	0.00	100.00	0.00	10.00	90.00	0.00	
App/Depart	4	/	0	0	/	4	28	/	31	40	/	37	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	1	0	2	0	0	0	0	15	0	3	22	0	43
Approach %	33.33	0.00	66.67	####	####	####	0.00	100.00	0.00	12.00	88.00	0.00	

PEAK HR. FACTOR:	0.750	0.000	0.625	0.625	0.632

CONTROL: 1-Way Stop (NB)
COMMENT 1: 0
GPS: 34.882854, -117.091666

HOURS:

	FROM:		TO:	
AM	700	AM	900	AM
NOON				
PM	400	PM	600	PM

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Elks Ln
0
E-W STREET: Main St

DATE: 05/22/25
DAY: THURSDAY

LOCATION: Barstow
PROJECT# 25-1314-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	ALL VEHICLES												
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	3	0	0	0	0	82	0	1	111	0	197
4:15 PM	0	0	3	0	0	0	0	69	1	5	101	0	179
4:30 PM	0	0	4	0	0	0	0	92	0	8	103	0	207
4:45 PM	0	0	4	0	0	0	0	99	0	2	112	0	217
5:00 PM	0	0	8	0	0	0	0	71	0	0	122	0	201
5:15 PM	1	0	2	0	0	0	0	82	0	2	113	0	200
5:30 PM	0	0	0	0	0	0	0	73	0	0	91	0	164
5:45 PM	0	0	0	0	0	0	0	78	0	0	72	0	150
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	1	0	24	0	0	0	0	646	1	18	825	0	1515
Approach %	4.00	0.00	96.00	####	####	####	0.00	99.85	0.15	2.14	97.86	0.00	
App/Depart	25	/	0	0	/	19	647	/	670	843	/	826	

PM Peak Hr Begins at: 430 PM

PEAK													
Volumes	1	0	18	0	0	0	0	344	0	12	450	0	825
Approach %	5.26	0.00	94.74	####	####	####	0.00	100.00	0.00	2.60	97.40	0.00	

PEAK HR. FACTOR:	0.594	0.000	0.869	0.947	0.950

CONTROL: 1-Way Stop (NB)
COMMENT 1: 0
GPS: 34.882854, -117.091666

HOURS:

	FROM:		TO:	
AM	700	AM	900	AM
NOON	0	0	0	0
PM	400	PM	600	PM

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

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N-S STREET: Elks Ln
0
E-W STREET: Main St

DATE: 05/22/25
DAY: THURSDAY

LOCATION: Barstow
PROJECT# 25-1314-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	CARS ONLY												
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	3	0	0	0	0	81	0	0	110	0	194
4:15 PM	0	0	3	0	0	0	0	68	1	1	99	0	172
4:30 PM	0	0	4	0	0	0	0	88	0	1	101	0	194
4:45 PM	0	0	4	0	0	0	0	94	0	2	108	0	208
5:00 PM	0	0	8	0	0	0	0	71	0	0	122	0	201
5:15 PM	1	0	2	0	0	0	0	81	0	2	110	0	196
5:30 PM	0	0	0	0	0	0	0	71	0	0	88	0	159
5:45 PM	0	0	0	0	0	0	0	77	0	0	72	0	149
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	1	0	24	0	0	0	0	631	1	6	810	0	1473
Approach %	4.00	0.00	96.00	####	####	####	0.00	99.84	0.16	0.74	99.26	0.00	
App/Depart	25	/	0	0	/	7	632	/	655	816	/	811	

PM Peak Hr Begins at: 430 PM

PEAK													
Volumes	1	0	18	0	0	0	0	334	0	5	441	0	799
Approach %	5.26	0.00	94.74	####	####	####	0.00	100.00	0.00	1.12	98.88	0.00	
PEAK HR. FACTOR:		0.594			0.000			0.888			0.914		0.960

CONTROL: 1-Way Stop (NB)
COMMENT 1: 0
GPS: 34.882854, -117.091666

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

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N-S STREET: Elks Ln
0
E-W STREET: Main St

DATE: 05/22/25
DAY: THURSDAY

LOCATION: Barstow
PROJECT# 25-1314-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
HEAVY VEHICLES ONLY													
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	0	0	0	0	0	1	0	1	1	0	3
4:15 PM	0	0	0	0	0	0	0	1	0	4	2	0	7
4:30 PM	0	0	0	0	0	0	0	4	0	7	2	0	13
4:45 PM	0	0	0	0	0	0	0	5	0	0	4	0	9
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	1	0	0	3	0	4
5:30 PM	0	0	0	0	0	0	0	2	0	0	3	0	5
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	0	0	0	0	15	0	12	15	0	42
Approach %	####	####	####	####	####	####	0.00	100.00	0.00	44.44	55.56	0.00	
App/Depart	0	/	0	0	/	12	15	/	15	27	/	15	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	0	0	0	0	0	0	0	11	0	12	9	0	32
Approach %	####	####	####	####	####	####	0.00	100.00	0.00	57.14	42.86	0.00	

PEAK HR. FACTOR:	0.000	0.000	0.550	0.583	0.615

CONTROL: 1-Way Stop (NB)
COMMENT 1: 0
GPS: 34.882854, -117.091666

HOURS:

	FROM:		TO:	
AM	700	AM	900	AM
NOON	0	0	0	0
PM	400	PM	600	PM

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

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Pedestrian & Bicycle Study

N-S STREET: Elks Ln
E-W STREET: Main St

Date: 05/22/25
Day: THURSDAY

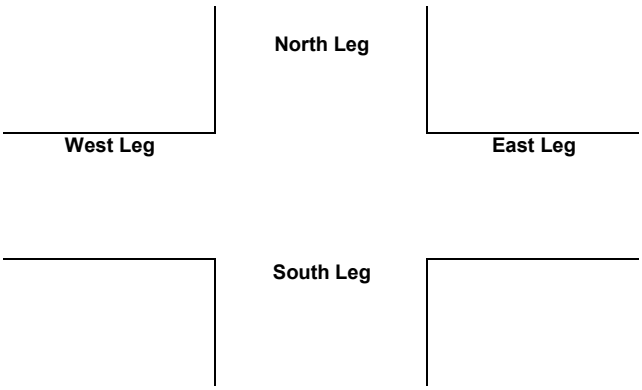
City: Barstow
Project #: 25-1314-006

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

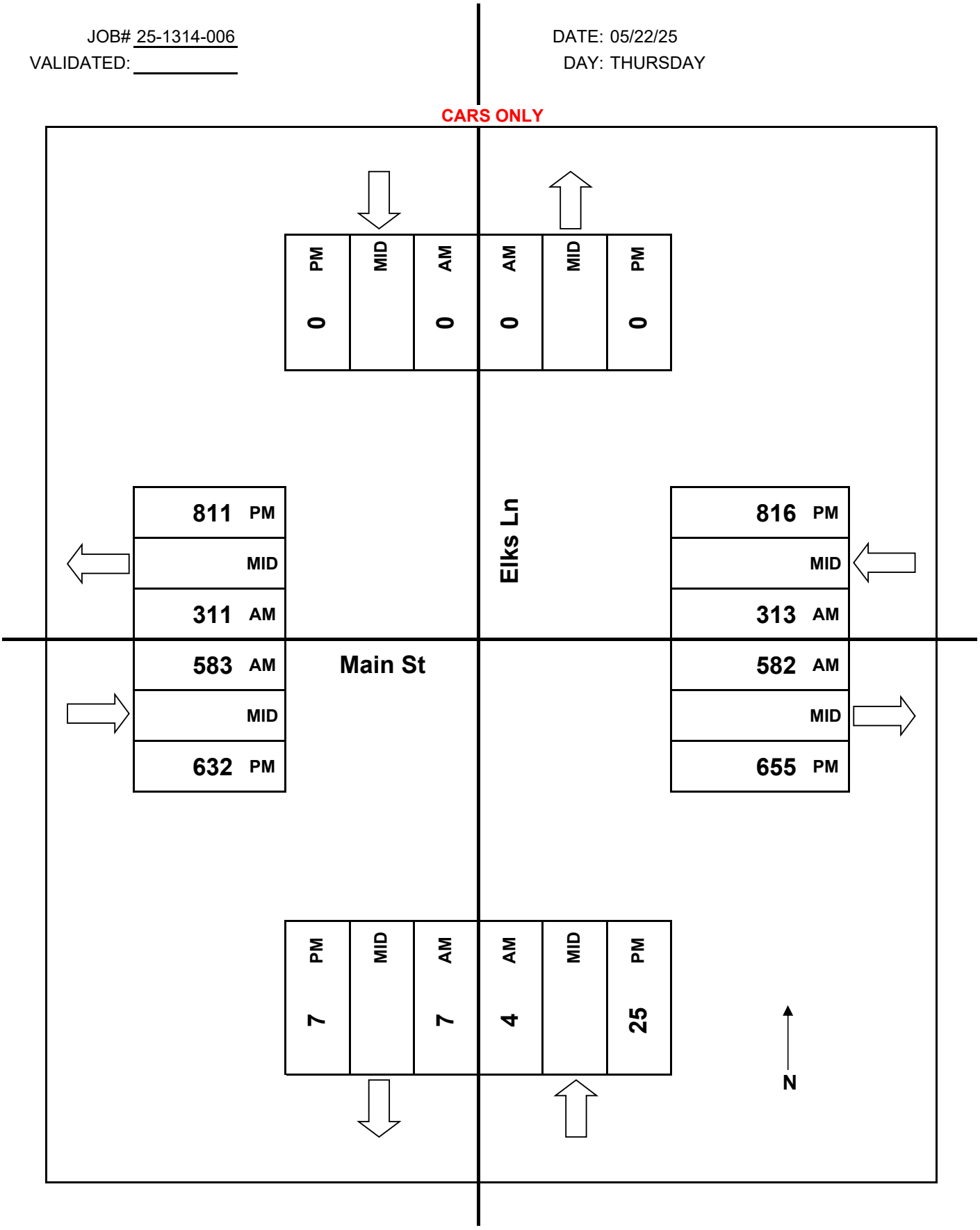
	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	1	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	1	0	0
5:45 PM	0	0	0	0
TOTAL	**0**	**2**	**0**	**0**



JOB# 25-1314-006
VALIDATED: _____

DATE: 05/22/25
DAY: THURSDAY

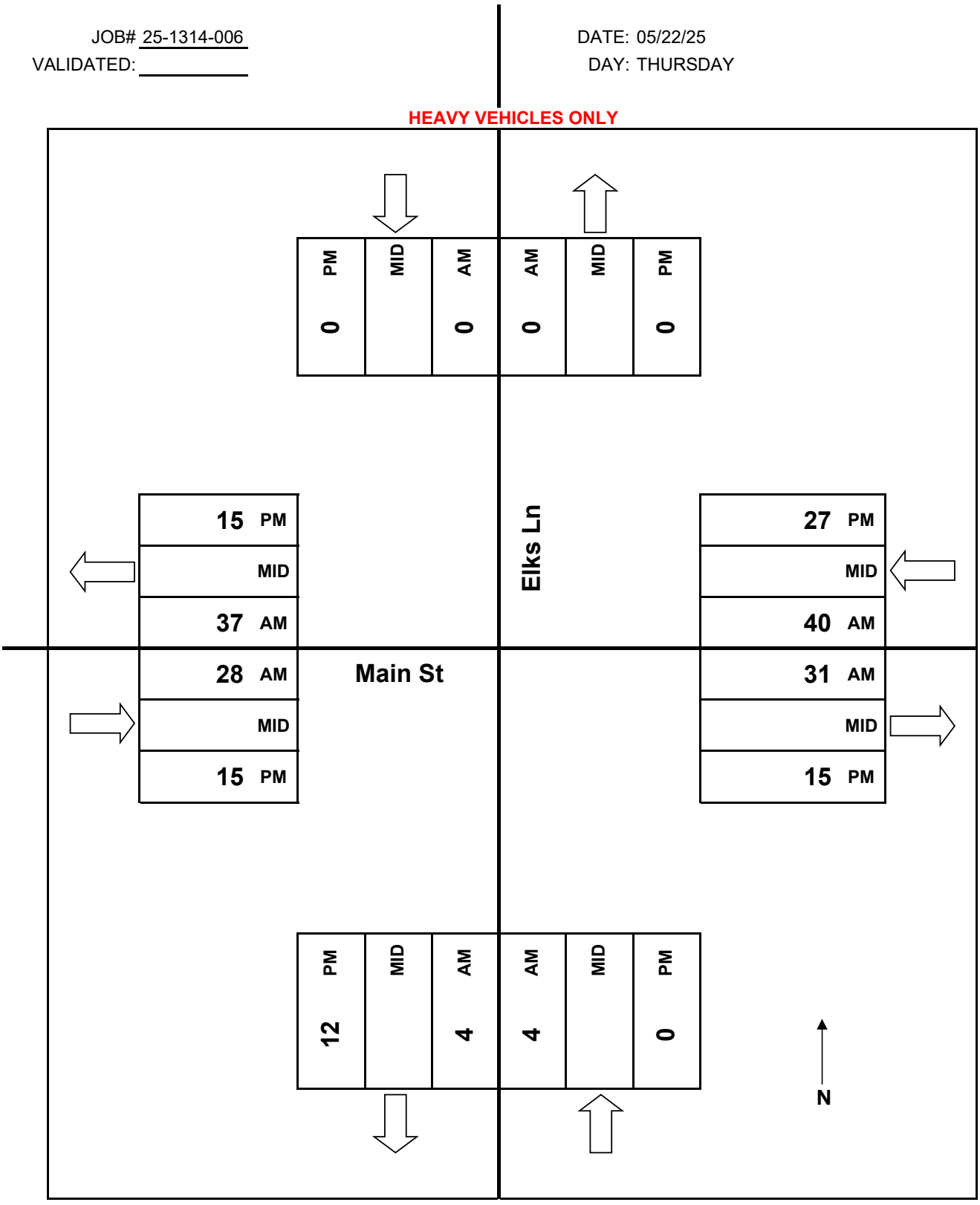
CARS ONLY



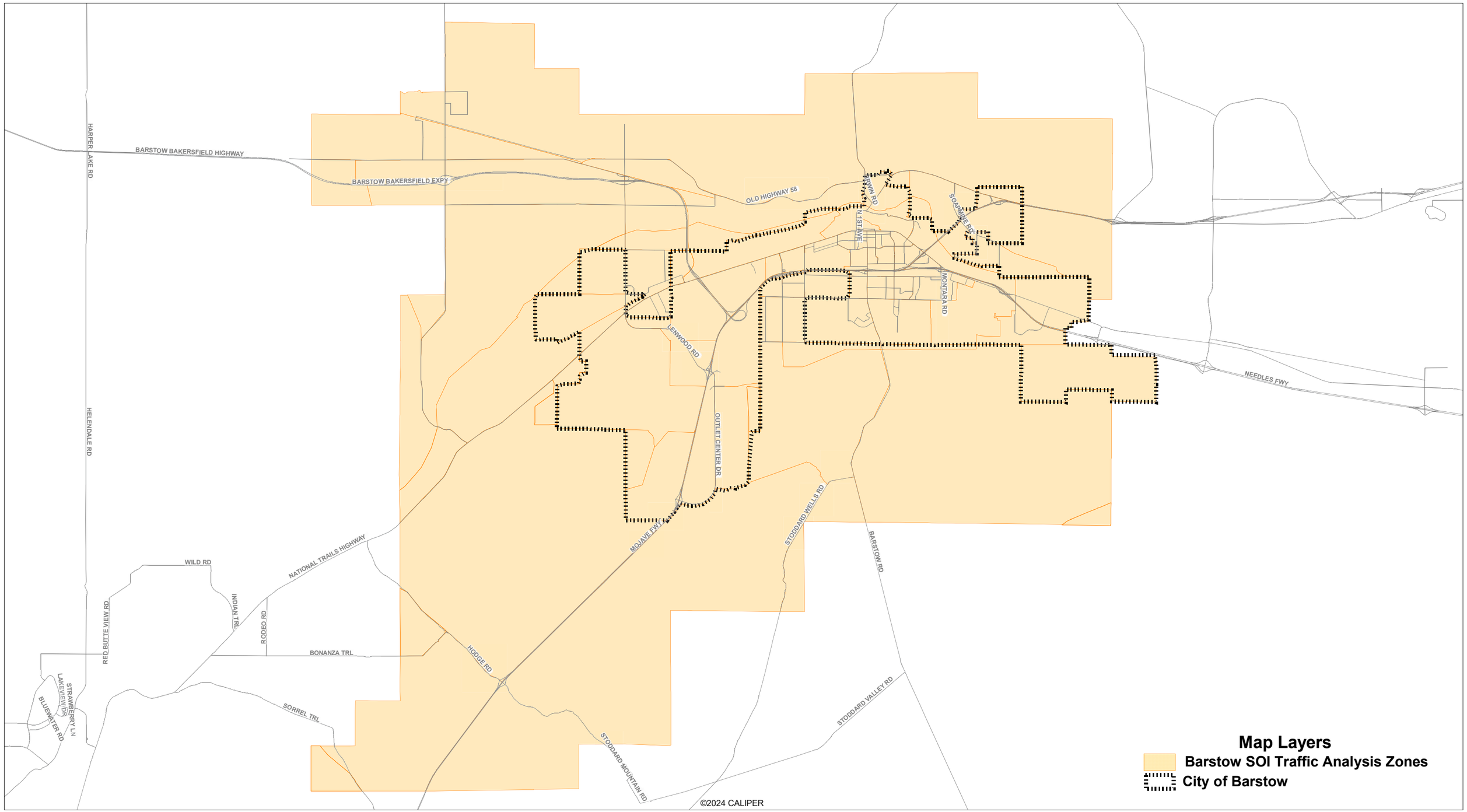
JOB# 25-1314-006
VALIDATED: _____

DATE: 05/22/25
DAY: THURSDAY

HEAVY VEHICLES ONLY



Appendix D: SBTAM+ Data and Plots


HARPER LAKE RD
BARSTOW BAKERSFIELD HIGHWAY
BARSTOW BAKERSFIELD EXPY
OLD HIGHWAY 58
IRWIN RD
N 1ST AVE
SOARING VIEW RD
MONTARA RD
LENWOOD RD
OUTLET CENTER DR
NEEDLES FWY
HELENDALE RD
MOJAVE FWY
STODDARD WELLS RD
BARSTOW RD
NATIONAL TRAILS HIGHWAY
WILD RD
INDIAN TRL
RODEO RD
RED BUTTE VIEW RD
BONANZA TRL
HODGE RD
SORREL TRL
STRAWBERRY LN
LAKEVIEW DR
BLUEWATER RD
STODDARD MOUNTAIN RD
STODDARD VALLEY RD
©2024 CALIPER
Map Layers
Barstow SOI Traffic Analysis Zones
City of Barstow

Base Year 2023 SBTAM+ Data

Segment #	Roadway	Segment	ID[1]	Total_Flow	Total_PCE_Flow	AB_LHDT	BA_LHDT	AB_MHDT	BA_MHDT	AB_HHDT	BA_HHDT	Auto%	LHDT%	MHDT%	HHDT%	Values Derived from Model Output[2] PC	LHDT Sum	MHDT Sum	HHDT Sum
1	Main Street	Hinkley Road to Country Club Drive	2782847	4969.505517	5809.341551	66.335784	66.084671	32.179125	31.968543	256.074124	255.949918	85.74%	2.66%	1.29%	10.30%	4,261	132	64	512
2	Main Street	Country Club Drive to Lenwood Road	122089	5377.690858	6221.00638	67.19356	66.942447	32.474109	32.263527	256.96407	256.839864	86.75%	2.49%	1.20%	9.55%	4,665	134	65	514
3	Main Street	Lenwood Road to County/City Boundary	2782871	3271.694459	3340.10358	12.673911	15.166498	11.602599	13.352272	15.585892	16.133817	97.42%	0.85%	0.76%	0.97%	3,187	28	25	32
4	Main Street	County/City Boundary to SR 58 Eastbound Ramps	2782871	3271.694459	3340.10358	12.673911	15.166498	11.602599	13.352272	15.585892	16.133817	97.42%	0.85%	0.76%	0.97%	3,187	28	25	32
5	Main Street[3]	SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Main Street	SR 58 Westbound Ramps to L Street	99984	4906.466378	5009.554652	20.091582	20.177928	18.328746	18.317212	24.212245	24.24405	97.44%	0.82%	0.75%	0.99%	4,781	40	37	48
7	Main Street	L Street to 1st Street	128574	9466.258796	10079.34611	69.50728	68.481159	64.118804	62.363153	169.66942	169.297117	93.63%	1.46%	1.34%	3.58%	8,863	138	126	339
8	Main Street	1st Street to Barstow Road	2701760	3504.553797	3555.848559	15.18596	14.059339	14.42373	12.922369	10.137492	9.09459	97.84%	0.83%	0.78%	0.55%	3,429	29	27	19
9	Barstow Road	Main Street to I-15 Southbound Ramps	2782946	9343.724315	9603.601798	30.051021	28.803841	21.504962	20.762655	74.625463	72.766014	97.34%	0.63%	0.45%	1.58%	9,095	59	42	147
10	Barstow Road	I-15 Southbound Ramps to I-15 Northbound Ramps	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	Barstow Road	I-15 Northbound ramps to Rimrock Road	122516	6747.18511	7043.350456	51.260969	50.866225	19.021414	18.713045	84.222169	80.217803	95.49%	1.51%	0.56%	2.44%	6,443	102	38	164
12	Lenwood Road	SR 58 Westbound Ramps to Community Boulevard	2767887	1578.802784	1628.899388	5.34723	7.733075	3.807284	6.11089	13.456573	14.019044	96.80%	0.83%	0.63%	1.74%	1,528	13	10	27
13	Lenwood Road	Community Boulevard to Agate Road	2752559	2129.019751	2179.010085	8.542476	5.947816	5.938787	4.091513	19.308657	7.776741	97.58%	0.68%	0.47%	1.27%	2,077	14	10	27
14	Lenwood Road	Agate Road to Jasper Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	Lenwood Road	Jasper Road to Main Street	2752569	5335.595495	5457.608681	16.276985	13.723429	10.935568	9.106314	40.084488	28.576926	97.78%	0.56%	0.38%	1.29%	5,217	30	20	69
16	Lenwood Road	Main Street to High Desert Road	2782873	10163.63223	11180.02618	76.947254	79.305011	39.753642	41.428143	303.906142	315.378778	91.57%	1.54%	0.80%	6.09%	9,307	156	81	619
17	Lenwood Road	High Desert Road to I-15 Southbound Off Ramp	2782856	13435.65445	14618.296	107.581456	109.936214	69.542508	71.215809	343.268524	354.736201	92.14%	1.62%	1.05%	5.20%	12,379	218	141	698
18	Lenwood Road	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Hinkley Road	SR 58 Westbound Ramp to Project Driveway	2778340	33.230398	33.456857	0.070211	0.070225	0.036019	0.035987	0.049451	0.049432	99.06%	0.42%	0.22%	0.30%	33	0	0	0
20	Hinkley Road	Project Driveway to Main Street	2782843	187.642067	224.130857	2.230735	2.239572	1.894477	1.900931	11.049964	11.116698	83.78%	2.38%	2.02%	11.81%	157	4	4	22

Footnotes:

1. SBTAM+ Link IDs were determined from the City proposed General Plan for overlapping study segments. For study segments which do not overlap with the City proposed General Plan study area, link IDs were determined by reviewing SBTAM+ data and selecting link IDs at representative locations within the study segments.
2. AB and BA columns represent directional traffic flow volumes. The ADT values used in this Level of Service Assessment are bidirectional, and were therefore determined by summing the AB and BA flows for each fleet mix. Passenger Car values were determined by subtracting the total non-PCE light, medium, and heavy heavy-duty truck flows from the total flow for each link.
3. Rows highlighted in orange represent roadway segments between freeway ramps or between counted segments. ADT volumes for these segments are determined by taking the average of the adjacent study segments on either side, therefore SBTAM+ link-level data is not used.

Abbreviations:
SBTAM+ = San Bernardino Traffic Analysis Model Plus
PCE = Passenger Car Equivalent
LHDT = Light Heavy-Duty Truck
MHDT = Medium Heavy-Duty Truck
HHDT = Heavy Heavy-Duty Truck

Horizon Year 2048 SBTAM+ Data

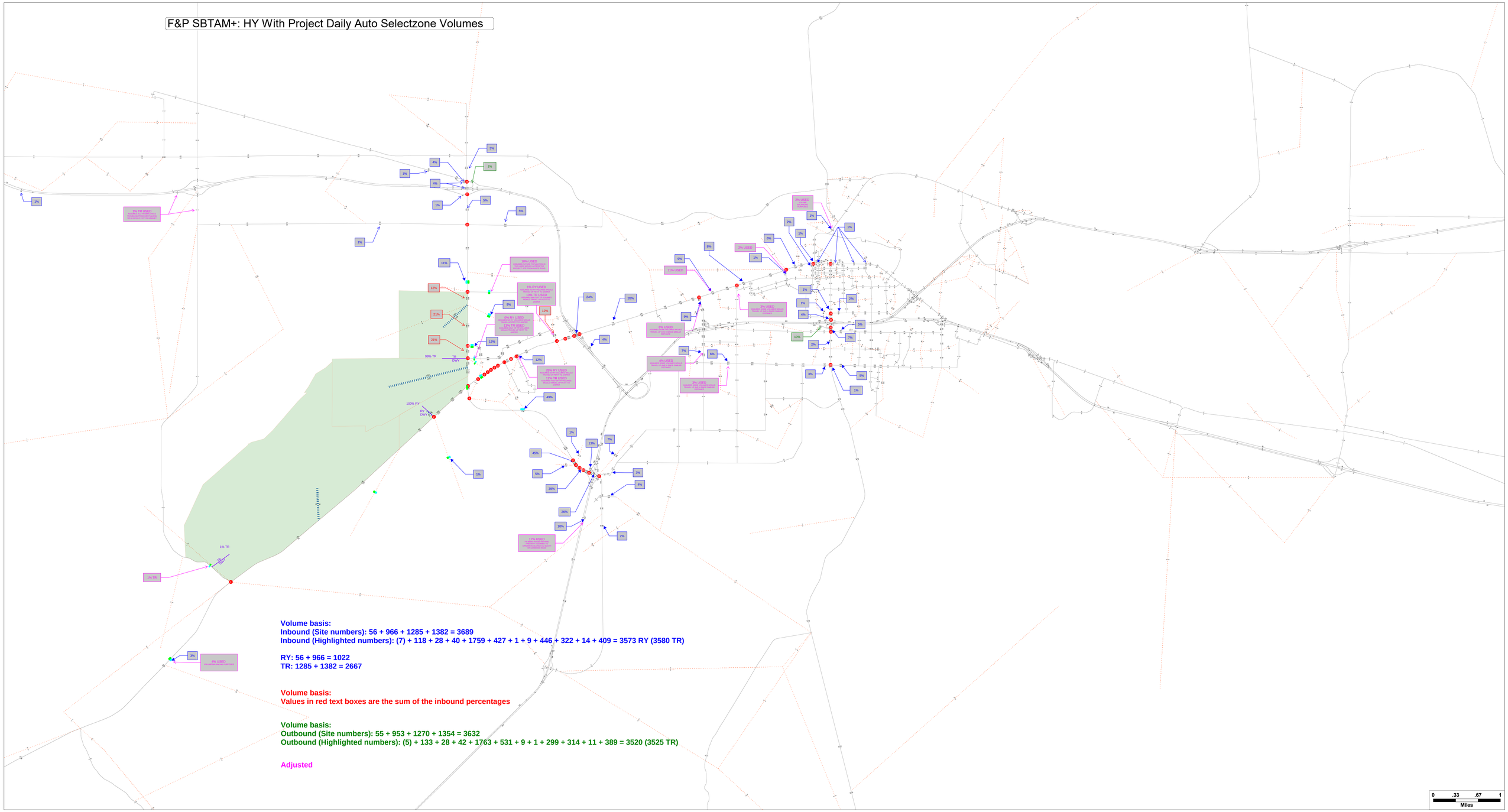
Segment #	Roadway	Segment	ID[1]	Total_Flow	Total_PCE_Flow	AB_LHDT	BA_LHDT	AB_MHDT	BA_MHDT	AB_HHDT	BA_HHDT	Auto%	LHDT%	MHDT%	HHDT%	Values Derived from Model Output[2] PC	LHDT Sum	MHDT Sum	HHDT Sum
1	Main Street	Hinkley Road to Country Club Drive	2772276	12564.3016	17178.58885	201.468214	206.912059	144.710121	145.089683	1428.372359	1469.543155	71.38%	3.25%	2.31%	23.06%	8,968	408	290	2,898
2	Main Street	Country Club Drive to Lenwood Road	122089	13025.29154	17642.99604	202.262099	207.705944	144.998958	145.37852	1429.256384	1470.42718	72.36%	3.15%	2.23%	22.26%	9,425	410	290	2,900
3	Main Street	Lenwood Road to County/City Boundary	2773626	3476.619349	3833.445606	51.071008	50.312252	56.479627	55.935344	92.745366	87.390497	88.67%	2.92%	3.23%	5.18%	3,083	101	112	180
4	Main Street	County/City Boundary to SR 58 Eastbound Ramps	2773626	3476.619349	3833.445606	51.071008	50.312252	56.479627	55.935344	92.745366	87.390497	88.67%	2.92%	3.23%	5.18%	3,083	101	112	180
5	Main Street	SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Main Street	SR 58 Westbound Ramps to L Street	99984	6633.752138	7284.793559	91.736794	90.710292	105.921875	105.262229	166.382911	160.760584	89.13%	2.75%	3.18%	4.93%	5,913	182	211	327
7	Main Street	L Street to 1st Street	128574	10831.78451	11554.3951	81.573532	77.441367	74.350468	70.554311	202.698362	198.937458	93.49%	1.47%	1.34%	3.71%	10,126	159	145	402
8	Main Street	1st Street to Barstow Road	2773989	4311.113476	4374.632647	12.429667	12.610287	9.001003	9.1994	15.702783	15.56854	98.27%	0.58%	0.42%	0.73%	4,237	25	18	31
9	Barstow Road	Main Street to I-15 Southbound Ramps	2771919	13264.05654	13601.27953	43.854985	41.775362	32.390849	30.10024	93.485141	93.373754	97.47%	0.65%	0.47%	1.41%	12,929	86	62	187
10	Barstow Road	I-15 Southbound Ramps to I-15 Northbound Ramps	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	Barstow Road	I-15 Northbound ramps to Rimrock Road	122516	17109.41339	18047.22917	110.55047	120.992856	71.528379	51.208269	279.113975	258.875662	94.78%	1.35%	0.72%	3.14%	16,217	232	123	538
12	Lenwood Road	SR 58 Westbound Ramps to Community Boulevard	2768948	2288.845868	2373.570739	11.077325	11.540812	8.698706	8.551675	26.731123	19.478369	96.24%	0.99%	0.75%	2.02%	2,203	23	17	46
13	Lenwood Road	Community Boulevard to Agate Road	2752559	3135.241161	3272.176671	25.830741	16.91	25.381853	17.159546	44.7794	23.782325	95.09%	1.36%	1.36%	2.19%	2,981	43	43	69
14	Lenwood Road	Agate Road to Jasper Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	Lenwood Road	Jasper Road to Main Street	2752569	11274.36604	13946.23261	283.675809	275.279792	329.105474	321.378344	736.464751	716.160573	76.39%	4.96%	5.77%	12.88%	8,612	559	650	1,453
16	Lenwood Road	Main Street to High Desert Road	2773778	24152.21084	31415.70934	297.909886	303.747103	251.180849	249.85762	2252.443828	2302.544283	76.57%	2.49%	2.07%	18.86%	18,495	602	501	4,555
17	Lenwood Road	High Desert Road to I-15 Southbound Off Ramp	2773107	29589.40316	37070.70847	334.431216	340.267586	286.82706	285.503456	2305.861196	2355.959079	80.03%	2.28%	1.93%	15.76%	23,681	675	572	4,662
18	Lenwood Road	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Hinkley Road	SR 58 Westbound Ramp to Project Driveway	2772275	29.219881	29.781834	0.100018	0.087598	0.071714	0.063739	0.154769	0.137192	97.90%	0.64%	0.46%	1.00%	29	0	0	0
20	Hinkley Road	Project Driveway to Main Street	2773865	147.843476	176.299385	1.936229	1.968011	1.72331	1.759192	8.432441	8.596483	83.49%	2.64%	2.36%	11.52%	123	4	3	17

Footnotes:

1. SBTAM+ Link IDs were determined from the City proposed General Plan for overlapping study segments. For study segments which do not overlap with the City proposed General Plan study area, link IDs were determined by reviewing SBTAM+ data and selecting link IDs at representative locations within the study segments.
2. AB and BA columns represent directional traffic flow volumes. The ADT values used in this Level of Service Assessment are bidirectional, and were therefore determined by summing the AB and BA flows for each fleet mix. Passenger Car values were determined by subtracting the total non-PCE light, medium, and heavy heavy-duty truck flows from the total flow for each link.
3. Rows highlighted in orange represent roadway segments between freeway ramps or between counted segments. ADT volumes for these segments are determined by taking the average of the adjacent study segments on either side, therefore SBTAM+ link-level data is not used.

Abbreviations:
SBTAM+ = San Bernardino Traffic Analysis Model Plus
PCE = Passenger Car Equivalent
LHDT = Light Heavy-Duty Truck
MHDT = Medium Heavy-Duty Truck
HHDT = Heavy Heavy-Duty Truck

F&P SBTAM+: HY With Project Daily Auto Selectzone Volumes



Volume basis:
Inbound (Site numbers): 56 + 966 + 1285 + 1382 = 3689
Inbound (Highlighted numbers): (7) + 118 + 28 + 40 + 1759 + 427 + 1 + 9 + 446 + 322 + 14 + 409 = 3573 RY (3580 TR)

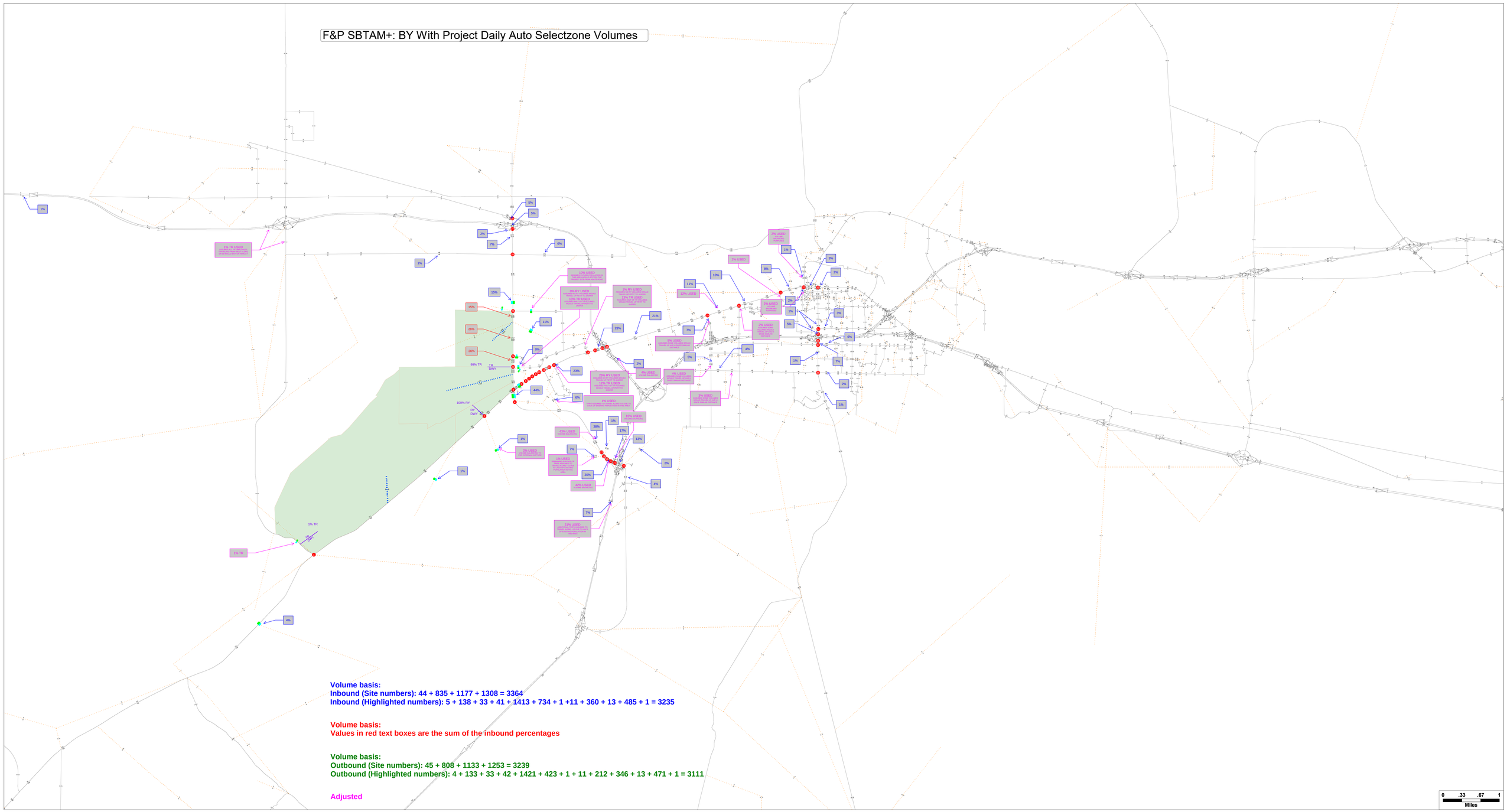
RY: 56 + 966 = 1022
TR: 1285 + 1382 = 2667

Volume basis:
Values in red text boxes are the sum of the inbound percentages

Volume basis:
Outbound (Site numbers): 55 + 953 + 1270 + 1354 = 3632
Outbound (Highlighted numbers): (5) + 133 + 28 + 42 + 1763 + 531 + 9 + 1 + 299 + 314 + 11 + 389 = 3520 (3525 TR)

Adjusted

F&P SBTAM+: BY With Project Daily Auto Selectzone Volumes



Volume basis:
Inbound (Site numbers): 44 + 835 + 1177 + 1308 = 3364
Inbound (Highlighted numbers): 5 + 138 + 33 + 41 + 1413 + 734 + 1 +11 + 360 + 13 + 485 + 1 = 3235

Volume basis:
Values in red text boxes are the sum of the inbound percentages

Volume basis:
Outbound (Site numbers): 45 + 808 + 1133 + 1253 = 3239
Outbound (Highlighted numbers): 4 + 133 + 33 + 42 + 1421 + 423 + 1 + 11 + 212 + 346 + 13 + 471 + 1 = 3111

Adjusted

Appendix E: Traffic Volume Growth Calculations

Roadway Segment ADT Development

			Count ADTs [1]		Count ADTs 2023 [2]								No BIG SBTAM ADTs [3]											Plus BIG SBTAM+ ADTs										
	YEAR:				2023	Existing Fleet Mix						2023	2023	2048	2023	2023 No BIG Baseline SBTAM+ Fleet Mix									2023	2048	2048 Plus BIG SBTAM+ Fleet Mix									2048
	PCE Rate:								1	1.5	2	3								1	1.5	2	3								1	1.5	2	3	
Segment #	Roadway	Segment	Count Year	ADT Count	2021 to 2023 CAGR Assumption	ADT Count [Non-PCE]	PCE 1 (Class #1-3) [Percentage]	PCE 1.5 (Class #4-5) [Percentage]	PCE 2 (Class #6) [Percentage]	PCE 3 (Class #7-13) [Percentage]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	ADT Count [PCE]	SBTAM+ Segment Unique ID	SBTAM+ Segment Unique ID	2023 No BIG SBTAM+ ADT [Non-PCE]	PCE 1 (Class #1-3) [Percentage]	PCE 1.5 (Class #4-5) [Percentage]	PCE 2 (Class #6) [Percentage]	PCE 3 (Class #7-13) [Percentage]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	2023 No BIG SBTAM ADT [PCE]	2048 Plus BIG SBTAM+ ADT [Non-PCE]	PCE 1 (Class #1-3) [Percentage]	PCE 1.5 (Class #4-5) [Percentage]	PCE 2 (Class #6) [Percentage]	PCE 3 (Class #7-13) [Percentage]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	2048 Plus BIG SBTAM+ ADT [PCE]
1	Main Street	Hinkley Road to Country Club Drive	2021	3,610	0.0%	3,610	93.5%	4.6%	0.9%	1.0%	3,376	166	32	36	3,800	2782847	2772276	4,970	86%	3%	1%	10%	4,261	132	64	512	6,124	12,564	28%	8%	6%	58%	8,968	408	290	2,898	18,854
2	Main Street	Country Club Drive to Lenwood Road	2021	3,610	0.0%	3,610	93.5%	4.6%	0.9%	1.0%	3,376	166	32	36	3,800	122089	122089	5,378	87%	2%	1%	10%	4,665	134	65	514	6,537	13,025	33%	8%	5%	54%	9,425	410	290	2,900	19,320
3	Main Street	Lenwood Road to County/City Boundary	2023	9,642	0.0%	9,650	92.6%	4.6%	1.1%	1.8%	8,926	444	106	174	10,330	2782871	2773626	3,272	97%	1%	1%	1%	3,187	28	25	32	3,374	3,477	88%	3%	3%	6%	3,083	101	112	180	4,000
4	Main Street	County/City Boundary to SR 58 Eastbound Ramps	2023	9,642	0.0%	9,650	92.6%	4.6%	1.1%	1.8%	8,926	444	106	174	10,330	2782871	2773626	3,272	97%	1%	1%	1%	3,187	28	25	32	3,374	3,477	88%	3%	3%	6%	3,083	101	112	180	4,000
5	Main Street[4]	SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	2021	8,316	0.0%	8,320	90.8%	4.6%	1.2%	3.4%	7,556	383	102	279	9,180	N/A	N/A	4,089	97%	1%	1%	1%	3,984	34	31	40	4,217	5,055	86%	3%	4%	6%	4,498	142	162	254	5,797
6	Main Street	SR 58 Westbound Ramps to L Street	2023	6,990	0.0%	6,990	88.5%	4.6%	1.4%	5.5%	6,186	322	98	384	8,020	99984	99984	4,906	97%	1%	1%	1%	4,781	40	37	48	5,060	6,634	85%	4%	4%	7%	5,913	182	211	327	7,590
7	Main Street	L Street to 1st Street	2021	12,794	0.0%	12,800	85.4%	13.4%	0.5%	0.7%	10,931	1,715	64	90	13,910	128574	128574	9,466	94%	1%	1%	4%	8,863	138	126	339	10,340	10,832	93%	2%	2%	4%	10,126	159	145	402	11,859
8	Main Street	1st Street to Barstow Road	2023	12,188	0.0%	12,190	88.6%	10.0%	0.8%	0.6%	10,800	1,219	98	73	13,050	2701760	2773989	3,505	98%	1%	1%	1%	3,429	29	27	19	3,585	4,311	98%	1%	1%	1%	4,237	25	18	31	4,404
9	Barstow Road	Main Street to I-15 Southbound Ramps	2023	11,062	0.0%	11,070	90.8%	8.5%	0.3%	0.4%	10,052	941	33	44	11,670	2782946	2771919	9,344	97%	1%	0%	2%	9,095	59	42	147	9,710	13,264	96%	1%	1%	2%	12,929	86	62	187	13,743
10	Barstow Road	I-15 Southbound Ramps to I-15 Northbound Ramps	2021	11,099	0.0%	11,100	90.6%	7.2%	0.5%	1.7%	10,062	799	61	184	11,940	N/A	N/A	8,045	97%	1%	0%	2%	7,769	80	40	156	8,437	15,187	92%	2%	1%	4%	14,573	159	93	362	16,084
11	Barstow Road	I-15 Northbound ramps to Rimrock Road	2021	11,136	0.0%	11,140	90.5%	5.9%	0.8%	2.9%	10,071	657	89	323	12,210	122516	122516	6,747	95%	2%	1%	2%	6,443	102	38	164	7,165	17,109	87%	3%	2%	8%	16,217	232	123	538	18,424
12	Lenwood Road	SR 58 Westbound Ramps to Community Boulevard	2021	1,289	0.0%	1,290	78.7%	10.6%	0.0%	10.8%	1,014	137	0	139	1,640	2767887	2768948	1,579	97%	1%	1%	2%	1,528	13	10	27	1,650	2,289	95%	1%	1%	3%	2,203	23	17	46	2,410
13	Lenwood Road	Community Boulevard to Agate Road	2021	1,289	0.0%	1,290	78.7%	10.6%	0.0%	10.8%	1,014	137	0	139	1,640	2752559	2752559	2,129	98%	1%	0%	1%	2,077	14	10	27	2,200	3,135	93%	2%	2%	3%	2,981	43	43	69	3,336
14	Lenwood Road	Agate Road to Jasper Road	2021	3,829	0.0%	3,830	82.3%	11.9%	0.3%	5.7%	3,240	489	16	86	4,270	N/A	N/A	3,732	98%	1%	0%	1%	3,647	22	15	48	3,854	7,205	62%	8%	9%	20%	5,797	301	347	761	9,226
15	Lenwood Road	Jasper Road to Main Street	2021	6,368	0.0%	6,370	85.9%	13.2%	0.5%	0.5%	5,465	841	32	32	6,890	2752569	2752569	5,336	98%	1%	0%	1%	5,217	30	20	69	5,508	11,274	50%	10%	12%	27%	8,612	559	650	1,453	15,110
16	Lenwood Road	Main Street to High Desert Road	2023	3,608	0.0%	3,610	82.8%	10.5%	0.5%	6.2%	2,989	379	18	224	4,270	2782873	2773778	10,164	92%	2%	1%	6%	9,307	156	81	619	11,562	24,152	44%	6%	5%	45%	18,495	602	501	4,555	34,064
17	Lenwood Road	High Desert Road to I-15 Southbound Off Ramp	2023	10,581	0.0%	10,590	87.6%	8.4%	0.9%	3.1%	9,277	890	95	328	11,790	2782856	2773107	13,436	92%	2%	1%	5%	12,379	218	141	698	15,081	29,589	56%	5%	4%	35%	23,681	675	572	4,662	39,823
18	Lenwood Road[5]	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	2021	8,972	0.0%	8,980	89.5%	7.0%	0.6%	2.9%	8,040	626	51	264	9,880	N/A	N/A	10,262	94%	1%	1%	4%	9,624	151	115	373	11,200	22,435	70%	4%	3%	23%	19,332	396	335	2,372	27,712
19	Hinkley Road	SR 58 Westbound Ramp to Project Driveway	2021	353	0.0%	360	84.7%	11.3%	1.1%	2.8%	305	41	4	10	410	2778340	2772275	33	99%	0%	0%	0%	33	0	0	0	34	29	98%	1%	0%	1%	29	0	0	0	30
20	Hinkley Road	Project Driveway to Main Street	2021	353	0.0%	360	84.7%	11.3%	1.1%	2.8%	305	41	4	10	410	2782843	2773865	188	84%	2%	2%	12%	157	4	4	22	238	148	87%	2%	2%	9%	123	4	3	17	187
21	Proposed Hinkley Rd	East of Jiggs Road	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
22	Proposed Hinkley Rd	East of Jiggs Road to West of B Street	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
23	Proposed Hinkley Rd	West of B Street	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
24	Proposed Hinkley Rd	Between B Street and C Street	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
25	Proposed Hinkley Rd	C Street to Lenwood Road	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
26		C St	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
27		F St	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0

Footnotes:

1. Count roadway segment Average Daily Traffic Volumes (ADTs) refer to volumes from traffic counts taken between 2021 and 2023.
2. No growth factors were applied to counts taken before 2023, aligning the City's proposed General Plan assumptions, which did not project 2021 data forward due to observed negative growth. Passenger Car Equivalent (PCE) ADT volumes are developed using 2023 SBTAM+ fleet mix volumes.
3. No BIG San Bernardino Transportation Analysis Model Plus (SBTAM+) ADTs are taken from SBTAM+ model runs which exclude all BIG model inputs.
4. In order to take into consideration both the growth reflected in the SBTAM model and existing traffic volume data, Horizon Year 2048 Plus BIG volumes were calculated using:
   a) Traffic counts representing Existing No BIG Baseline conditions with 2023 as the initial year, and
   b) Existing No BIG Baseline volumes plus the numerical difference between 2050 Horizon Year With BIG and 2023 SBTAM+ volumes.
5. Horizon Year 2048 No BIG Baseline volumes were developed by subtracting the Horizon Year 2048 BIG volumes from the Horizon Year 2048 Plus BIG volumes described in Footnote 4.
6. Final, No BIG Baseline ADT volumes for Opening Year 2028 and Interim Year 2033 were calculated by interpolating between Horizon Year 2048 No BIG Baseline and Existing (2023) Conditions.
7. [redacted] represent roadway segments between freeway ramps or counted segments. ADT volumes for these segments are determined by taking the average of the adjacent study segments on either side.
8. Roadway Segment 18 is bounded by only one study segment (Segment 17, on the north side). To determine the average using adjacent segments, roadway segment A1 from the Roadway Segment Count PCE Conversion sheet was used on the south side.

Roadway Segment ADT Development

			2023 Baseline to 2048 Plus BIG SBTAM+ Growth					HY 2048 Plus BIG [4]									HY 2048 BIG Trips					HY 2048 No BIG Baseline [5]								IY 2033 No BIG Baseline [6]							
		YEAR:	2023-2048	2023 Baseline to 2048 Plus BIG SBTAM+ Growth				2023-2048	2048	2048 Plus BIG Fleet Mix							2048	2048	HY 2048 BIG Fleet Mix				2048	2048	HY 2048 No BIG Baseline Fleet Mix							2048	2033	IY 2033 No BIG Baseline Fleet Mix							2033
		PCE Rate:		1	1.5	2	3			1	1.5	2	3	1	1.5	2	3								1	1.5	2	3	1	1.5	2	3								
Segment #	Roadway	Segment	2023 Base to 2048 Plus BIG SBTAM+ ADT Growth [Non-PCE]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	2023 Base to 2048 Plus BIG SBTAM+ ADT Growth [PCE]	HY 2048 Plus BIG ADT [Non-PCE]	PCE 1 (Class #1-3) [Percentage]	PCE 1.5 (Class #4-5) [Percentage]	PCE 2 (Class #6) [Percentage]	PCE 3 (Class #7-13) [Percentage]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	HY 2048 Plus BIG ADT [PCE]	HY 2048 BIG ADT [Non-PCE]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	HY 2048 BIG ADT [PCE]	HY 2048 No BIG Baseline ADT [Non-PCE]	PCE 1 (Class #1-3) [Percent-Adj]	PCE 1.5 (Class #4-5) [Percent-Adj]	PCE 2 (Class #6) [Percent-Adj]	PCE 3 (Class #7-13) [Percent-Adj]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	HY 2048 No BIG Baseline ADT [PCE]	IY 2033 No BIG Baseline ADT [Non-PCE]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	IY 2033 No BIG Baseline ADT [PCE]
1	Main Street	Hinkley Road to Country Club Drive	7,595	4,707	276	226	2,386	12,730	11,300	72%	4%	2%	21%	8,179	442	258	2,422	16,630	518	518	0	0	0	518	10,790	48%	4%	3%	45%	7,668	442	258	2,422	16,112	6,482	5,091	277	123	991	8,726
2	Main Street	Country Club Drive to Lenwood Road	7,648	4,760	276	226	2,386	12,783	11,300	72%	4%	2%	21%	8,179	442	258	2,422	16,630	3,370	2,740	0	315	315	4,315	7,880	43%	5%	0%	51%	5,332	442	0	2,107	12,315	5,319	4,157	277	20	865	7,208
3	Main Street	Lenwood Road to County/City Boundary	205	0	74	87	148	730	10,000	90%	5%	2%	3%	8,967	518	193	322	11,100	1,902	1,832	0	35	35	2,007	8,101	78%	9%	3%	9%	7,138	518	158	287	9,093	9,031	8,210	474	127	220	9,835
4	Main Street	County/City Boundary to SR 58 Eastbound Ramps	205	0	74	87	148	730	10,000	89.7%	5.2%	1.9%	3.2%	8,967	518	193	322	11,100	1,902	1,832	0	35	35	2,007	8,101	78%	9%	3%	9%	7,138	518	158	287	9,093	9,031	8,210	474	127	220	9,835
5	Main Street[7]	SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	966	566	108	131	214	1,632	9,400	87.1%	5.2%	2.5%	5.2%	8,183	491	233	493	10,870	3,177	3,307	0	35	35	3,282	6,229	67%	10%	5%	18%	5,082	491	198	458	7,588	7,484	6,565	427	141	351	8,541
6	Main Street	SR 58 Westbound Ramps to L Street	1,727	1,132	142	175	279	2,530	8,800	84.1%	5.3%	3.1%	7.5%	7,401	464	273	663	10,640	2,589	2,589	0	0	0	2,589	6,221	60%	9%	7%	25%	4,822	464	273	663	8,051	6,683	5,640	379	168	496	8,033
7	Main Street	L Street to 1st Street	1,366	1,263	21	18	63	1,520	14,200	86%	12%	1%	1%	12,229	1,736	82	153	15,460	1,424	1,424	0	0	0	1,424	12,780	77%	19%	1%	3%	10,809	1,736	82	153	14,036	12,793	10,881	1,724	72	116	13,959
8	Main Street	1st Street to Barstow Road	807	808	0	0	12	844	13,100	89%	9%	1%	1%	11,698	1,219	98	85	13,980	777	777	0	0	0	777	12,325	83%	14%	1%	2%	10,923	1,219	98	85	13,203	12,245	10,850	1,219	98	78	13,109
9	Barstow Road	Main Street to I-15 Southbound Ramps	3,920	3,834	27	20	39	4,033	15,000	93%	6%	0%	1%	13,896	968	53	83	15,710	518	518	0	0	0	518	14,488	88%	10%	1%	2%	13,383	968	53	83	15,192	12,438	11,384	952	42	60	13,076
10	Barstow Road	I-15 Southbound Ramps to I-15 Northbound Ramps	7,142	6,804	78	53	207	7,648	18,300	92.4%	4.8%	0.6%	2.1%	16,918	877	114	391	19,640	712	712	0	0	0	712	17,594	86%	7%	1%	6%	16,212	877	114	391	18,928	13,698	12,517	831	83	267	14,731
11	Barstow Road	I-15 Northbound ramps to Rimrock Road	10,362	9,774	129	85	374	11,259	21,600	92%	4%	1%	3%	19,944	786	174	697	23,570	129	129	0	0	0	129	21,481	85%	5%	1%	9%	19,824	786	174	697	23,441	15,277	13,971	709	124	473	16,702
12	Lenwood Road	SR 58 Westbound Ramps to Community Boulevard	710	674	10	7	19	760	2,100	85%	7%	0%	8%	1,789	147	7	158	2,500	957	541	0	208	208	1,581	846	76%	24%	0%	0%	699	147	0	0	919	1,113	888	141	0	84	1,352
13	Lenwood Road	Community Boulevard to Agate Road	1,006	904	28	33	41	1,136	2,300	84%	7%	1%	8%	1,922	165	33	180	2,780	1,734	1,318	0	208	208	2,358	339	41%	59%	0%	0%	174	165	0	0	422	910	677	149	0	84	1,153
14	Lenwood Road	Agate Road to Jasper Road	3,473	2,150	279	331	713	5,370	7,400	74.0%	10.4%	4.7%	10.9%	5,436	768	347	799	9,680	3,028	2,612	0	208	208	3,652	4,323	47%	19%	5%	29%	2,825	768	139	591	6,028	4,028	3,073	601	66	288	4,971
15	Lenwood Road	Jasper Road to Main Street	5,939	3,395	529	630	1,384	9,602	12,400	72%	11%	5%	11%	8,952	1,370	662	1,416	16,580	8,235	7,521	0	357	357	9,306	4,166	20%	28%	8%	44%	1,431	1,370	305	1,059	7,274	5,489	3,851	1,053	142	443	7,044
16	Lenwood Road	Main Street to High Desert Road	13,989	9,188	445	420	3,936	22,503	17,600	69%	5%	2%	24%	12,179	824	438	4,160	26,770	6,787	6,343	0	222	222	7,453	10,814	30%	6%	2%	61%	5,836	824	216	3,938	19,317	6,492	4,126	558	98	1,710	10,289
17	Lenwood Road	High Desert Road to I-15 Southbound Off Ramp	16,354	11,301	457	432	3,964	24,742	26,800	77%	5%	2%	16%	20,635	1,347	527	4,292	36,590	5,493	5,049	0	222	222	6,159	21,313	51%	7%	2%	40%	15,592	1,347	305	4,070	30,431	14,880	11,803	1,073	179	1,825	19,246
18	Lenwood Road[8]	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	12,173	9,708	245	220	1,999	16,513	21,200	83.9%	4.1%	1.3%	10.7%	17,795	871	271	2,263	26,440	2,487	2,265	0	111	111	2,820	18,721	66%	6%	1%	27%	15,538	871	160	2,152	23,620	12,877	11,038	724	95	1,020	15,374
19	Hinkley Road	SR 58 Westbound Ramp to Project Driveway	0	0	0	0	0	1	400	86%	10%	1%	3%	345	41	4	10	450	106	106	0	0	0	106	299	71%	18%	2%	9%	244	41	4	10	344	336	278	42	5	11	384
20	Hinkley Road	Project Driveway to Main Street	0	0	0	0	0	0	400	86%	10%	1%	3%	345	41	4	10	450	0	0	0	0	0	0	406	78%	14%	2%	7%	351	41	4	10	450	379	324	41	4	10	424
21	Proposed Hinkley Rd	East of Jaggs Road	0	0	0	0	0	0	106	100.0%	0.0%	0.0%	0.0%	106	0	0	0	110	106	106	0	0	0	106	0					0	0	0	0	0	0	0	0	0	0	0
22	Proposed Hinkley Rd	East of Jaggs Road to West of B Street	0	0	0	0	0	0	4,370	97.2%	0.0%	1.4%	1.4%	4,248	0	61	61	4,560	4,370	4,248	0	61	61	4,553	0					0	0	0	0	0	0	0	0	0	0	0
23	Proposed Hinkley Rd	West of B Street	0	0	0	0	0	0	6,446	97.2%	0.0%	1.4%	1.4%	6,266	0	90	90	6,720	6,446	6,266	0	90	90	6,716	0					0	0	0	0	0	0	0	0	0	0	0
24	Proposed Hinkley Rd	Between B Street and C Street	0	0	0	0	0	0	7,864	97.2%	0.0%	1.4%	1.4%	7,646	0	109	109	8,200	7,864	7,646	0	109	109	8,191	0					0	0	0	0	0	0	0	0	0	0	0
25	Proposed Hinkley Rd	C Street to Lenwood Road	0	0	0	0	0	0	10,814	97.2%	0.0%	1.4%	1.4%	10,514	0	150	150	11,270	10,814	10,514	0	150	150	11,264	0					0	0	0	0	0	0	0	0	0	0	0
26	C St	North of Hinkley Road to F Street	0	0	0	0	0	0	2,947	97.3%	0.0%	1.4%	1.4%	2,867	0	40	40	3,070	2,947	2,867	0	40	40	3,067	0					0	0	0	0	0	0	0	0	0	0	0
27	F St	East of C Street	0	0	0	0	0	0	1,966	97.3%	0.0%	1.4%	1.4%	1,912	0	27	27	2,050	1,966	1,912	0	27	27	2,047	0					0	0	0	0	0	0	0	0	0	0	0

Footnotes:

1. Count roadway segment Average Daily Traffic Volumes (ADTs) refer to volumes from traffic counts taken between 2021 and 2023.
2. No growth factors were applied to counts taken before 2023, aligning the City's proposed General Plan assumptions, which did not project 2021 data forward due to observed negative growth. Passenger Car Equivalent (PCE) ADT volumes are developed using 2023 SBTAM+ fleet mix volumes.
3. No BIG San Bernardino Transportation Analysis Model Plus (SBTAM+) ADTs are taken from SBTAM+ model runs which exclude all BIG model inputs.
4. In order to take into consideration both the growth reflected in the SBTAM model and existing traffic volume data, Horizon Year 2048 Plus BIG volumes were calculated using:
   a) Traffic counts representing Existing No BIG Baseline conditions with 2023 as the initial year, and
   b) Existing No BIG Baseline volumes plus the numerical difference between 2050 Horizon Year With BIG and 2023 SBTAM+ volumes.
5. Horizon Year 2048 No BIG Baseline volumes were developed by subtracting the Horizon Year 2048 BIG volumes from the Horizon Year 2048 Plus BIG volumes described in Footnote 4.
6. Final, No BIG Baseline ADT volumes for Opening Year 2028 and Interim Year 2033 were calculated by interpolating between Horizon Year 2048 No BIG Baseline and Existing (2023) Conditions.
7. represent roadway segments between freeway ramps or counted segments. ADT volumes for these segments are determined by taking the average of the adjacent study segments on either side.
8. Roadway Segment 18 is bounded by only one study segment (Segment 17, on the north side). To determine the average using adjacent segments, roadway segment A1 from the Roadway Segment Count PCE Conversion sheet was used on the south side.

Roadway Segment ADT Development

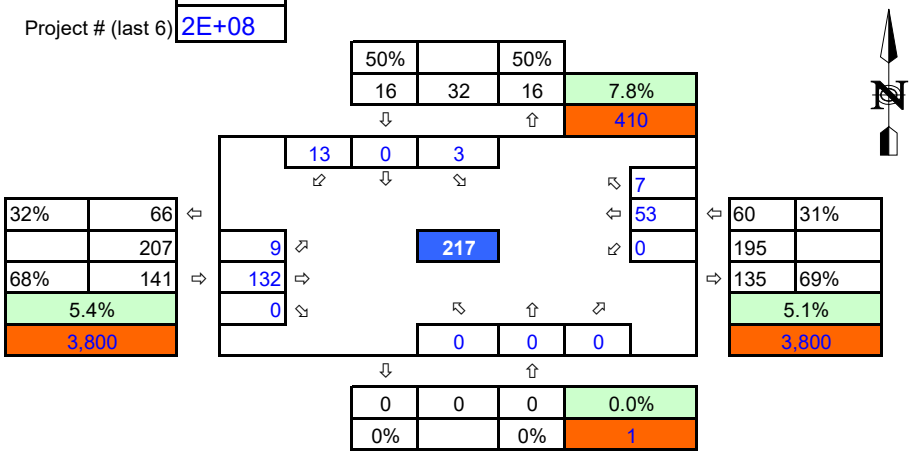
			IY 2033 BIG Trips					*IY 2033 Plus BIG*									*OY 2028 No BIG Baseline*[6]					*OY 2028 BIG Trips*					*OY 2028 Plus BIG*								
		YEAR:	*2033*	*IY 2033 BIG Fleet Mix*				*2033*	*2033*	*2033 Plus BIG Fleet Mix*							*2033*	*2028*	*OY 2028 No BIG Baseline Fleet Mix*				*2028*	*2028*	*OY 2028 BIG Fleet Mix*				*2028*	*2028*	*2028 Plus BIG Fleet Mix*						*2028*
		PCE Rate:							*1*	*1.5*	*2*	*3*	*1*	*1.5*	*2*	*3*			*1*	*1.5*	*2*	*3*			*1*	*1.5*	*2*	*3*			*1*	*1.5*	*2*	*3*			
Segment #	**Roadway**	**Segment**	**IY 2033 BIG ADT [Non-PCE]**	**PCE 1 (Class #1-3) [Non-PCE]**	**PCE 1.5 (Class #4-5) [Non-PCE]**	**PCE 2 (Class #6) [Non-PCE]**	**PCE 3 (Class #7-13) [Non-PCE]**	**IY 2033 BIG ADT [PCE]**	**IY 2033 Plus BIG ADT [Non-PCE]**	**PCE 1 (Class #1-3) [Percentage]**	**PCE 1.5 (Class #4-5) [Percentage]**	**PCE 2 (Class #6) [Percentage]**	**PCE 3 (Class #7-13) [Percentage]**	**PCE 1 (Class #1-3) [Non-PCE]**	**PCE 1.5 (Class #4-5) [Non-PCE]**	**PCE 2 (Class #6) [Non-PCE]**	**PCE 3 (Class #7-13) [Non-PCE]**	**IY 2033 Plus BIG ADT [PCE]**	**OY 2028 No BIG Baseline ADT [Non-PCE]**	**PCE 1 (Class #1-3) [Non-PCE]**	**PCE 1.5 (Class #4-5) [Non-PCE]**	**PCE 2 (Class #6) [Non-PCE]**	**PCE 3 (Class #7-13) [Non-PCE]**	**OY 2028 No BIG Baseline ADT [PCE]**	**OY 2028 BIG ADT [Non-PCE]**	**PCE 1 (Class #1-3) [Non-PCE]**	**PCE 1.5 (Class #4-5) [Non-PCE]**	**PCE 2 (Class #6) [Non-PCE]**	**PCE 3 (Class #7-13) [Non-PCE]**	**OY 2028 BIG ADT [PCE]**	**OY 2028 Plus BIG ADT [Non-PCE]**	**PCE 1 (Class #1-3) [Percentage]**	**PCE 1.5 (Class #4-5) [Percentage]**	**PCE 2 (Class #6) [Percentage]**	**PCE 3 (Class #7-13) [Percentage]**	**PCE 1 (Class #1-3) [Non-PCE]**	**PCE 1.5 (Class #4-5) [Non-PCE]**	**PCE 2 (Class #6) [Non-PCE]**	**PCE 3 (Class #7-13) [Non-PCE]**	**OY 2028 Plus BIG ADT [PCE]**
1	Main Street	Hinkley Road to Country Club Drive	452	452	0	0	0	452	6,934	80%	4%	2%	14%	5,543	277	123	991	9,178	5,046	4,235	222	78	514	6,263	350	350	0	0	0	350	5,396	85%	4%	1%	10%	4,585	222	78	514	6,613
2	Main Street	Country Club Drive to Lenwood Road	2,973	2,477	0	248	248	3,717	8,292	80%	3%	3%	13%	6,634	277	268	1,113	10,925	4,465	3,768	222	26	451	5,503	2,477	2,077	0	200	200	3,077	6,942	84%	3%	3%	9%	5,845	222	226	651	8,581
3	Main Street	Lenwood Road to County/City Boundary	1,661	1,605	0	28	28	1,745	10,692	92%	4%	1%	2%	9,815	474	155	248	11,580	9,341	8,569	459	117	197	10,083	1,304	1,260	0	22	22	1,370	10,645	92%	4%	1%	2%	9,829	459	139	219	11,452
4	Main Street	County/City Boundary to SR 58 Eastbound Ramps	1,661	1,605	0	28	28	1,745	10,692	92%	4%	1%	2%	9,815	474	155	248	11,580	9,341	8,569	459	117	197	10,083	1,304	1,260	0	22	22	1,370	10,645	92%	4%	1%	2%	9,829	459	139	219	11,452
5	Main Street	SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	2,766	2,710	0	28	28	2,850	10,250	90%	4%	2%	4%	9,275	427	169	379	11,391	7,902	7,062	405	122	315	8,859	2,139	2,095	0	22	22	2,205	10,041	91%	4%	1%	3%	9,157	405	144	337	11,062
6	Main Street	SR 58 Westbound Ramps to L Street	2,258	2,258	0	0	0	2,258	8,941	88%	4%	2%	6%	7,898	379	168	496	10,291	6,837	5,914	351	133	440	8,027	1,746	1,746	0	0	0	1,746	8,583	89%	4%	2%	5%	7,660	351	133	440	9,772
7	Main Street	L Street to 1st Street	1,186	1,186	0	0	0	1,186	13,979	86%	12%	1%	1%	12,067	1,724	72	116	15,145	12,797	10,907	1,720	68	103	13,932	873	873	0	0	0	873	13,670	86%	13%	0%	1%	11,780	1,720	68	103	14,804
8	Main Street	1st Street to Barstow Road	791	791	0	0	0	791	13,036	89%	9%	1%	1%	11,641	1,219	98	78	13,900	12,218	10,825	1,219	98	76	13,078	699	699	0	0	0	699	12,917	89%	9%	1%	1%	11,524	1,219	98	76	13,777
9	Barstow Road	Main Street to I-15 Southbound Ramps	509	509	0	0	0	509	12,947	92%	7%	0%	0%	11,893	952	42	60	13,585	11,754	10,719	947	38	52	12,372	437	437	0	0	0	437	12,191	91%	8%	0%	0%	11,156	947	38	52	12,807
10	Barstow Road	I-15 Southbound Ramps to I-15 Northbound Ramps	650	650	0	0	0	650	14,348	92%	6%	1%	2%	13,167	831	83	267	15,381	12,399	11,292	815	72	226	13,337	524	524	0	0	0	524	12,923	91%	6%	1%	2%	11,816	815	72	226	13,855
11	Barstow Road	I-15 Northbound ramps to Rimrock Road	113	113	0	0	0	113	15,390	92%	5%	1%	3%	14,084	709	124	473	16,815	13,209	12,022	683	107	398	14,455	88	88	0	0	0	88	13,297	91%	5%	1%	3%	12,110	683	107	398	14,542
12	Lenwood Road	SR 58 Westbound Ramps to Community Boulevard	914	586	0	164	164	1,406	2,027	73%	7%	8%	12%	1,474	141	164	248	2,758	1,202	952	139	0	112	1,497	806	542	0	132	132	1,202	2,008	74%	7%	7%	12%	1,494	139	132	244	2,698
13	Lenwood Road	Community Boulevard to Agate Road	1,648	1,320	0	164	164	2,140	2,558	78%	6%	6%	10%	1,997	149	164	248	3,293	1,100	847	143	0	112	1,398	1,417	1,153	0	132	132	1,813	2,517	79%	6%	5%	10%	2,000	143	132	244	3,209
14	Lenwood Road	Agate Road to Jasper Road	2,833	2,505	0	164	164	3,325	6,861	81%	9%	3%	7%	5,578	601	230	452	8,296	3,929	3,157	545	41	187	4,618	2,377	2,113	0	132	132	2,773	6,306	84%	9%	3%	5%	5,270	545	173	319	7,390
15	Lenwood Road	Jasper Road to Main Street	6,977	6,391	0	293	293	7,856	12,466	82%	8%	3%	6%	10,242	1,053	435	736	14,900	5,930	4,659	947	87	238	6,968	5,236	4,776	0	230	230	5,926	11,166	84%	8%	3%	4%	9,435	947	317	468	12,893
16	Lenwood Road	Main Street to High Desert Road	5,622	5,250	0	186	186	6,180	12,114	77%	5%	2%	16%	9,376	558	284	1,896	16,469	5,051	3,559	469	58	967	7,280	4,128	3,840	0	144	144	4,560	9,179	81%	5%	2%	12%	7,399	469	202	1,111	11,838
17	Lenwood Road	High Desert Road to I-15 Southbound Off Ramp	4,945	4,573	0	186	186	5,503	19,825	83%	5%	2%	10%	16,376	1,073	365	2,011	24,749	12,735	10,540	982	137	1,077	15,518	3,954	3,666	0	144	144	4,386	16,689	85%	6%	2%	7%	14,206	982	281	1,221	19,903
18	Lenwood Road[4]	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	2,106	1,920	0	93	93	2,385	14,983	86%	5%	1%	7%	12,958	724	188	1,113	17,759	10,929	9,540	675	73	642	12,625	1,584	1,440	0	72	72	1,800	12,513	88%	5%	1%	6%	10,980	675	145	714	14,424
19	Hinkley Road	SR 58 Westbound Ramp to Project Driveway	93	93	0	0	0	93	429	86%	10%	1%	3%	371	42	5	11	477	348	293	42	5	11	399	70	70	0	0	0	70	418	86%	10%	1%	3%	363	42	5	11	466
20	Hinkley Road	Project Driveway to Main Street	0	0	0	0	0	0	379	85%	11%	1%	3%	324	41	4	10	424	370	315	41	4	10	415	0	0	0	0	0	0	370	85%	11%	1%	3%	315	41	4	10	415
21	Proposed Hinkley Rd	East of Jiggs Road	93	93	0	0	0	93	93	100.0%	0.0%	0.0%	0.0%	93	0	0	0	93	0	0	0	0	0	0	70	70	0	0	0	70	70	100.0%	0.0%	0.0%	0.0%	70	0	0	0	70
22	Proposed Hinkley Rd	East of Jiggs Road to West of B Street	3,788	3,682	0	53	53	3,947	3,788	97.2%	0.0%	1.4%	1.4%	3,682	0	53	53	3,947	0	0	0	0	0	0	2,865	2,785	0	40	40	2,985	2,865	97.2%	0.0%	1.4%	1.4%	2,785	0	40	40	2,985
23	Proposed Hinkley Rd	West of B Street	5,587	5,431	0	78	78	5,821	5,587	97.2%	0.0%	1.4%	1.4%	5,431	0	78	78	5,821	0	0	0	0	0	0	4,226	4,108	0	59	59	4,403	4,226	97.2%	0.0%	1.4%	1.4%	4,108	0	59	59	4,403
24	Proposed Hinkley Rd	Between B Street and C Street	6,817	6,627	0	95	95	7,102	6,817	97.2%	0.0%	1.4%	1.4%	6,627	0	95	95	7,102	0	0	0	0	0	0	5,157	5,013	0	72	72	5,373	5,157	97.2%	0.0%	1.4%	1.4%	5,013	0	72	72	5,373
25	Proposed Hinkley Rd	C Street to Lenwood Road	9,370	9,112	0	129	129	9,757	9,370	97.2%	0.0%	1.4%	1.4%	9,112	0	129	129	9,757	0	0	0	0	0	0	7,089	6,893	0	98	98	7,383	7,089	97.2%	0.0%	1.4%	1.4%	6,893	0	98	98	7,383
26		C St	2,556	2,486	0	35	35	2,661	2,556	97.2%	0.0%	1.4%	1.4%	2,486	0	35	35	2,661	0	0	0	0	0	0	1,934	1,880	0	27	27	2,015	1,934	97.2%	0.0%	1.4%	1.4%	1,880	0	27	27	2,015
27		F St	1,705	1,657	0	24	24	1,777	1,705	97.2%	0.0%	1.4%	1.4%	1,657	0	24	24	1,777	0	0	0	0	0	0	1,290	1,254	0	18	18	1,344	1,290	97.2%	0.0%	1.4%	1.4%	1,254	0	18	18	1,344

Footnotes:

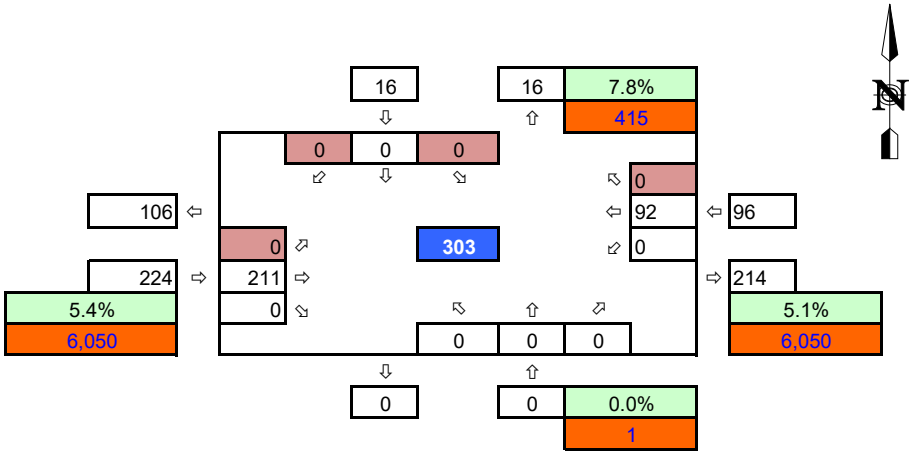
1. Count roadway segment Average Daily Traffic Volumes (ADTs) refer to volumes from traffic counts taken between 2021 and 2023.
2. No growth factors were applied to counts taken before 2023, aligning the City's proposed General Plan assumptions, which did not project 2021 data forward due to observed negative growth. Passenger Car Equivalent (PCE) ADT volumes are developed using 2023 SBTAM+ fleet mix volumes.
3. No BIG San Bernardino Transportation Analysis Model Plus (SBTAM+) ADTs are taken from SBTAM+ model runs which exclude all BIG model inputs.
4. In order to take into consideration both the growth reflected in the SBTAM model and existing traffic volume data, Horizon Year 2048 Plus BIG volumes were calculated using:
   a) Traffic counts representing Existing No BIG Baseline conditions with 2023 as the initial year, and
   b) Existing No BIG Baseline volumes plus the numerical difference between 2050 Horizon Year With BIG and 2023 SBTAM+ volumes.
5. Horizon Year 2048 No BIG Baseline volumes were developed by subtracting the Horizon Year 2048 BIG volumes from the Horizon Year 2048 Plus BIG volumes described in Footnote 4.
6. Final, No BIG Baseline ADT volumes for Opening Year 2028 and Interim Year 2033 were calculated by interpolating between Horizon Year 2048 No BIG Baseline and Existing (2023) Conditions.
7. : represent roadway segments between freeway ramps or counted segments. ADT volumes for these segments are determined by taking the average of the adjacent study segments on either side.
8. Roadway Segment 18 is bounded by only one study segment (Segment 17, on the north side). To determine the average using adjacent segments, roadway segment A1 from the Roadway Segment Count PCE Conversion sheet was used on the south side.

Int 1 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**
Intersection #:	1
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**



LEGEND

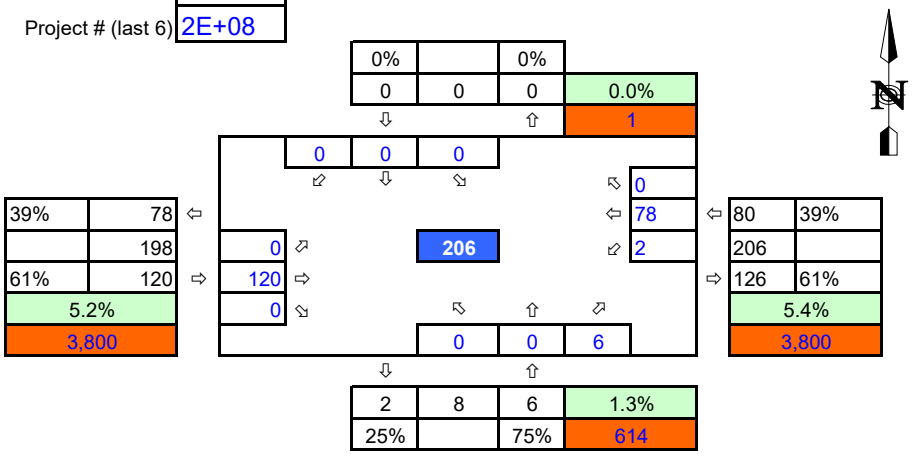
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

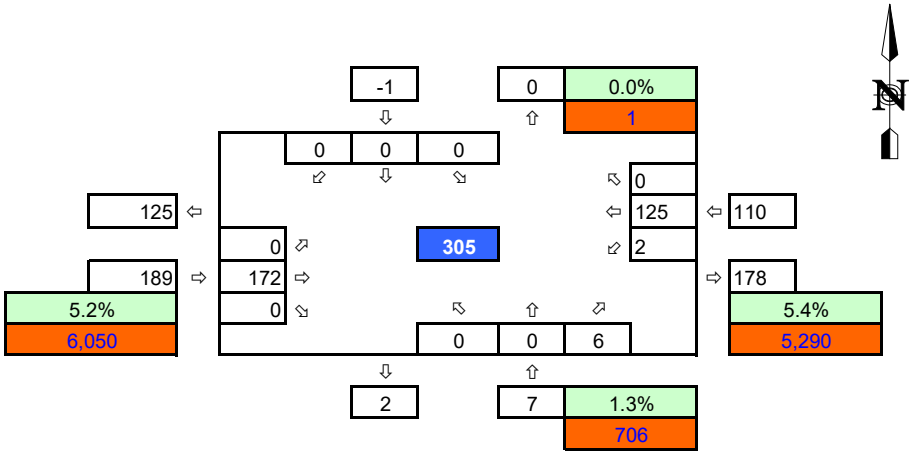
xx = predicted volume < baseline; volume manually increased.

Int 2 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**
Intersection #:	2
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**



LEGEND

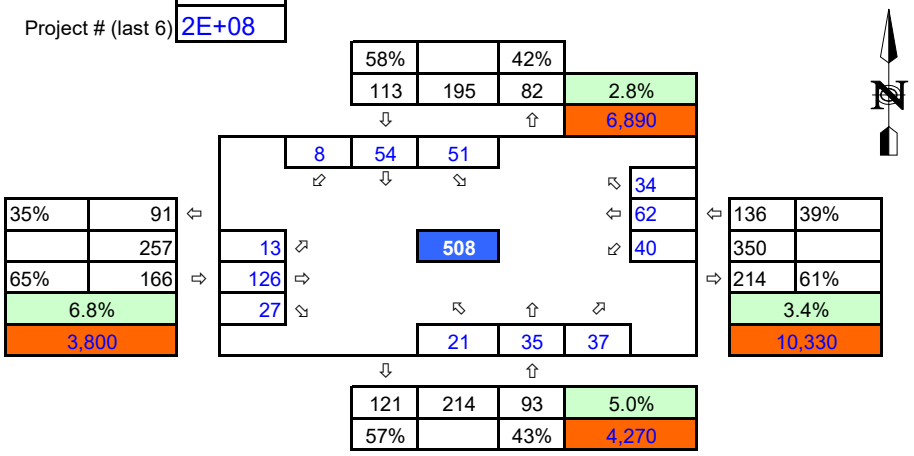
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

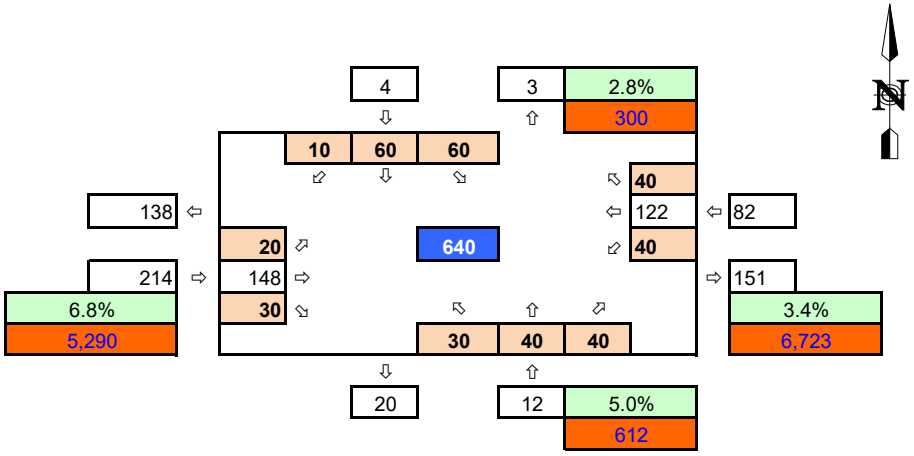
xx = predicted volume < baseline; volume manually increased.

Int 3 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**
Intersection #:	3
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**



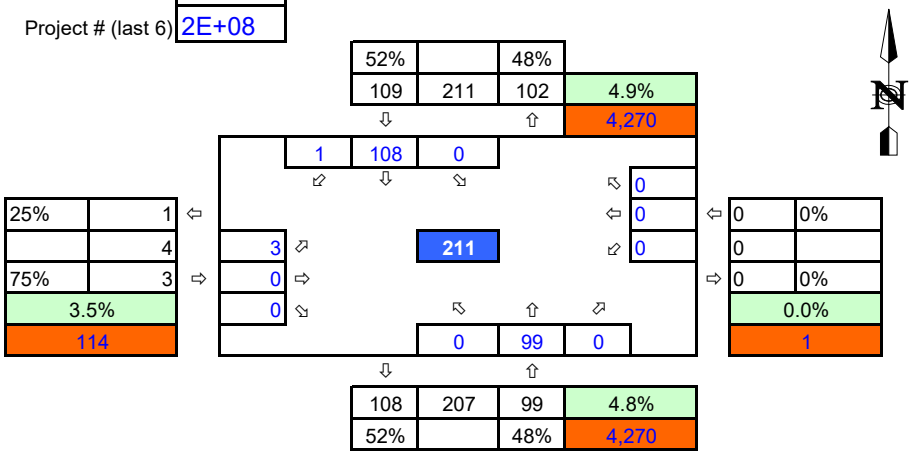
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

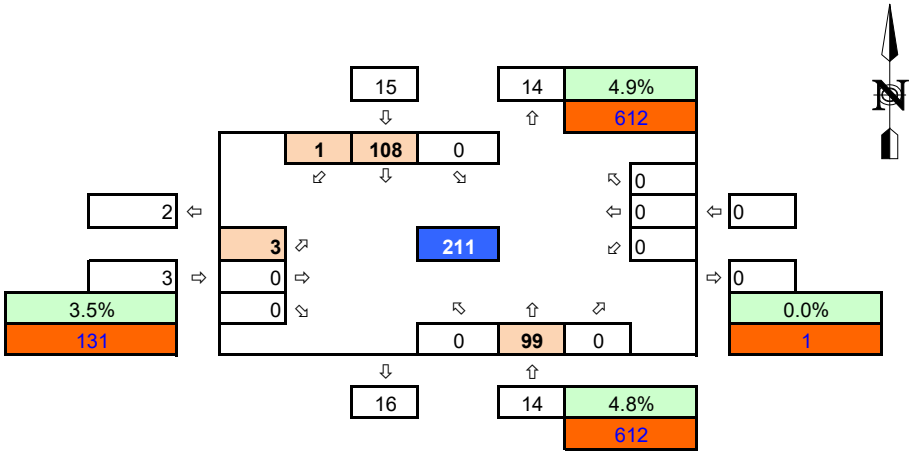
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 4 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**
Intersection #:	4
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**



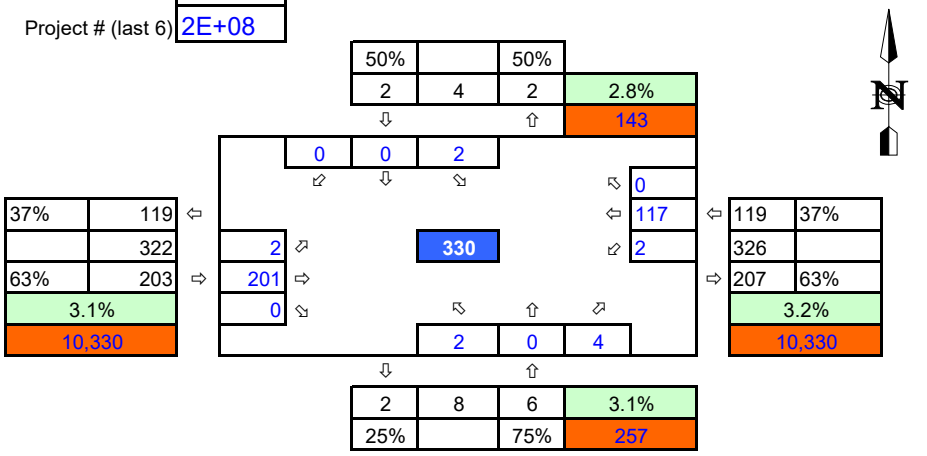
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

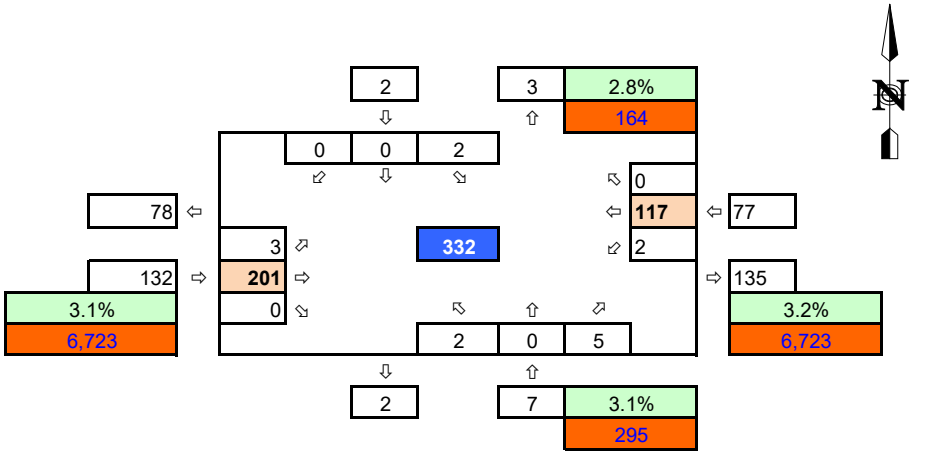
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 5 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**
Intersection #:	5
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**



LEGEND

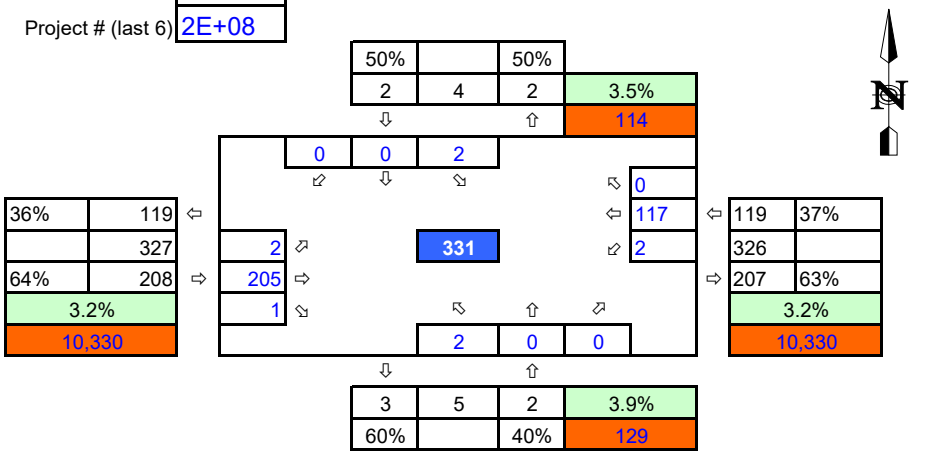
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

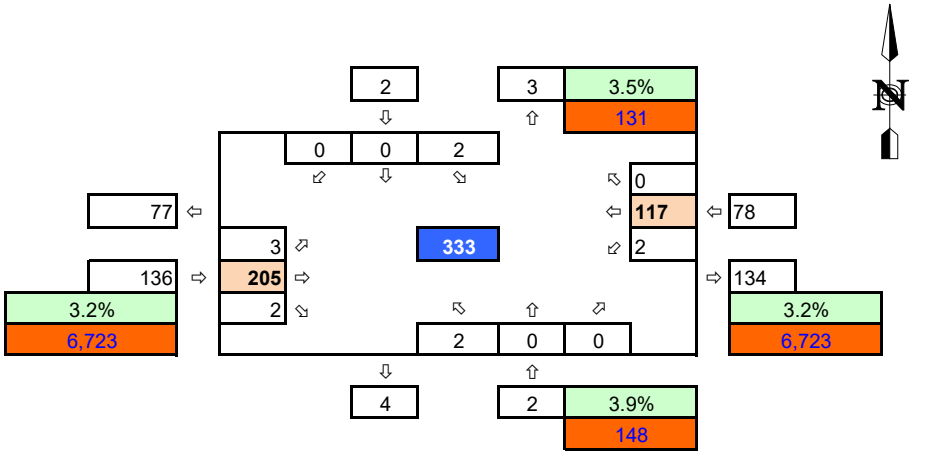
xx = predicted volume < baseline; volume manually increased.

Int 6 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**
Intersection #:	6
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**



LEGEND

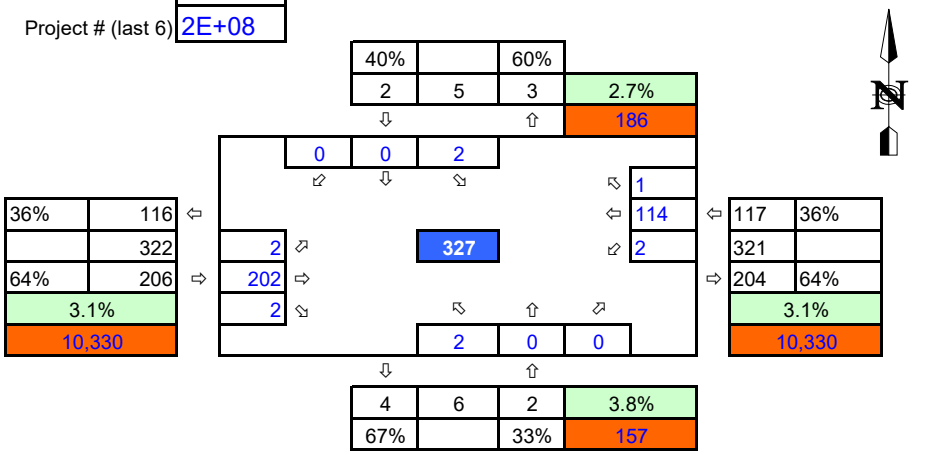
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

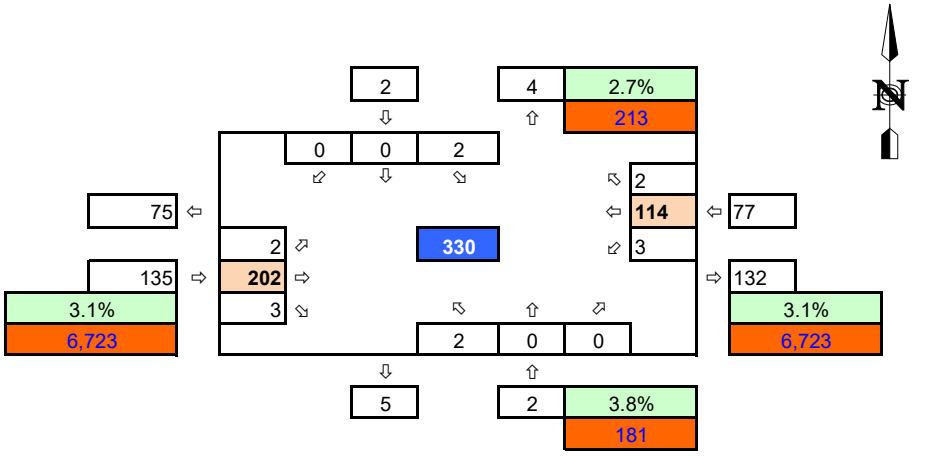
xx = predicted volume < baseline; volume manually increased.

Int 7 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**
Intersection #:	7
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**



LEGEND

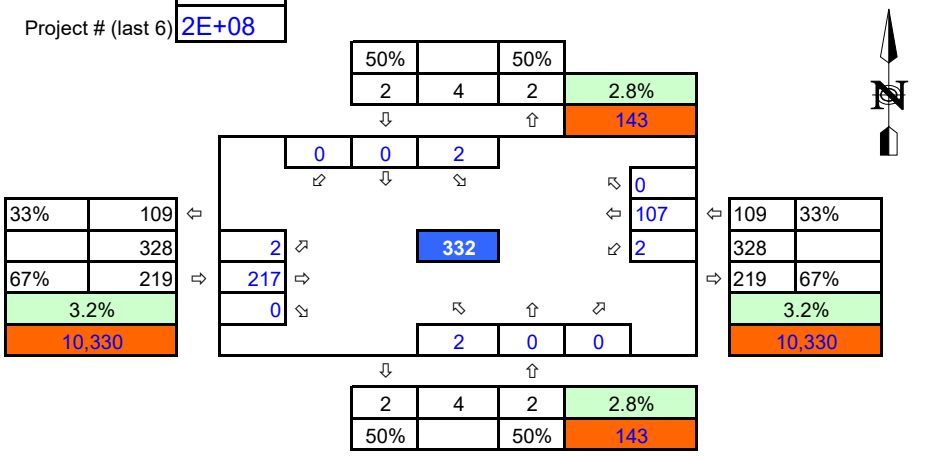
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

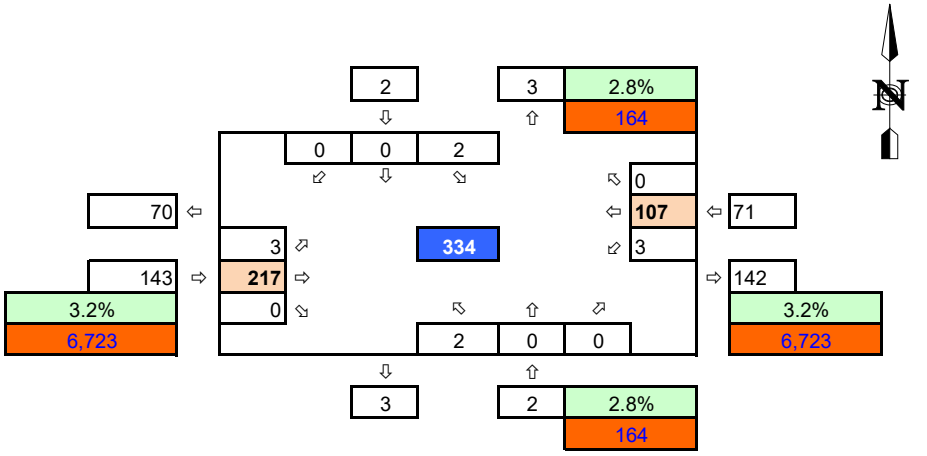
xx = predicted volume < baseline; volume manually increased.

Int 8 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**
Intersection #:	8
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**



LEGEND

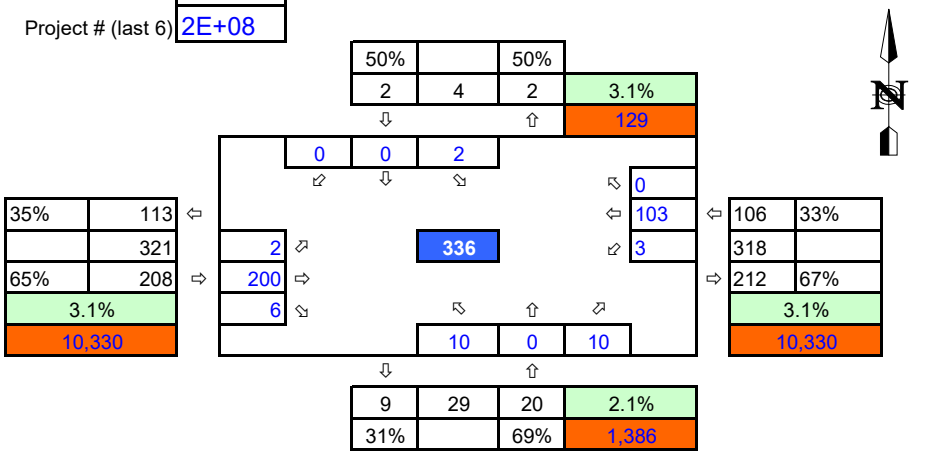
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

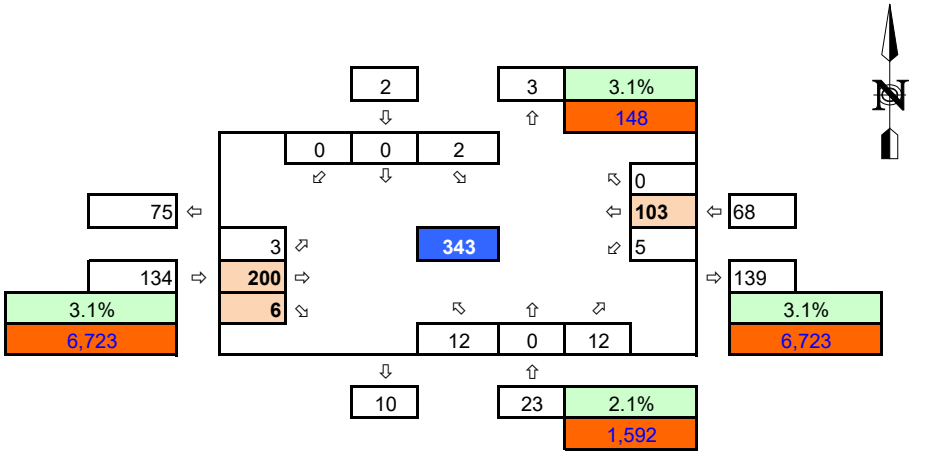
xx = predicted volume < baseline; volume manually increased.

Int 9 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**
Intersection #:	9
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**



LEGEND

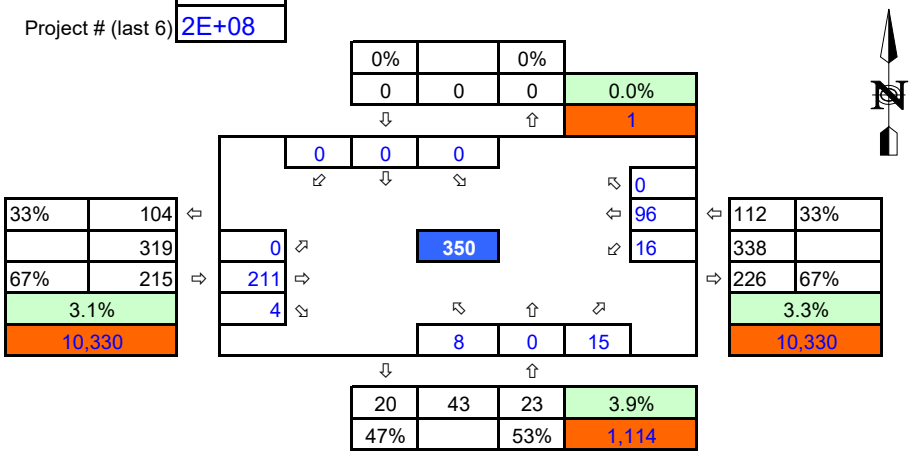
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

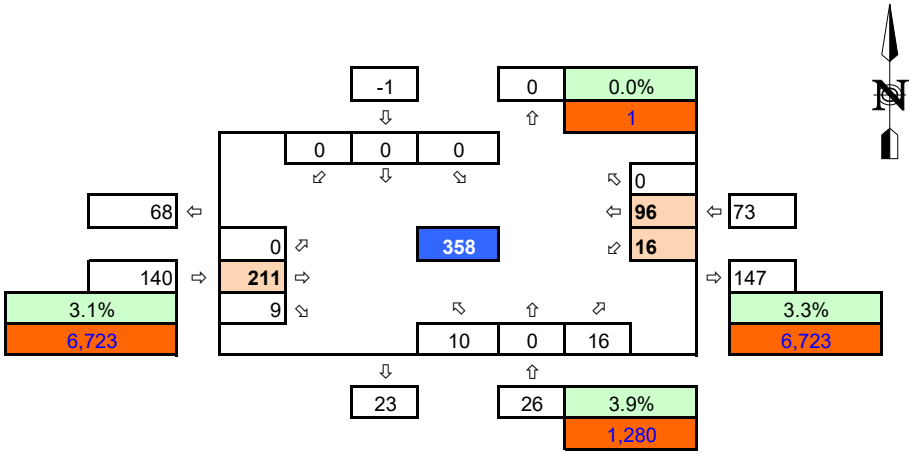
xx = predicted volume < baseline; volume manually increased.

Int 10 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**
Intersection #:	10
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**



LEGEND

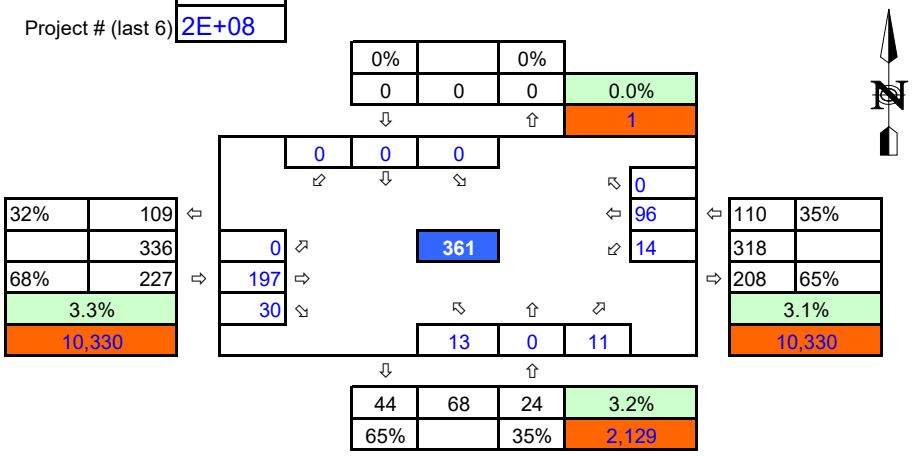
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

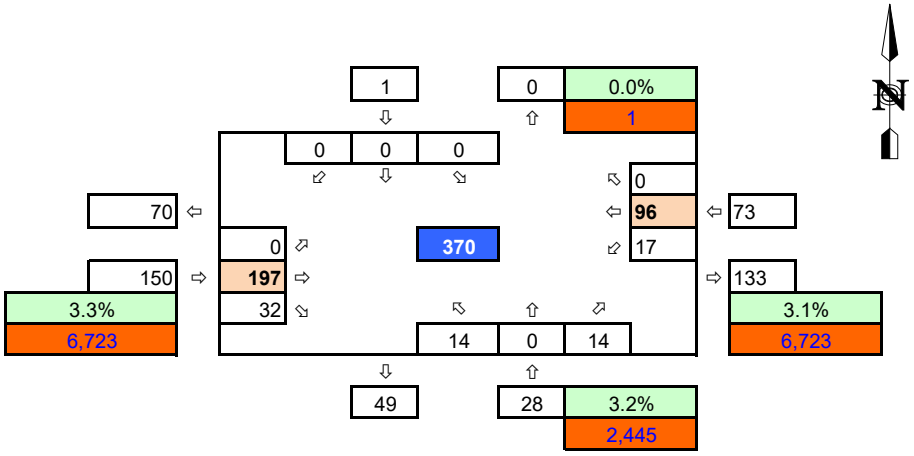
xx = predicted volume < baseline; volume manually increased.

Int 11 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**
Intersection #:	11
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**



LEGEND

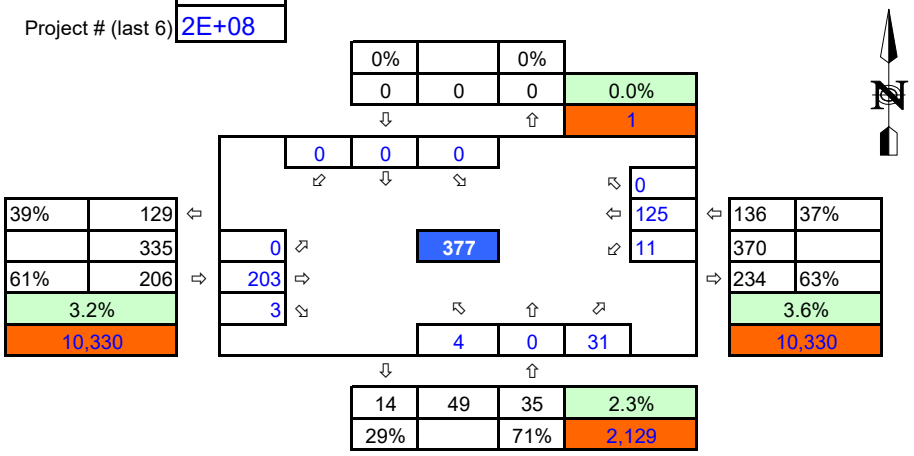
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

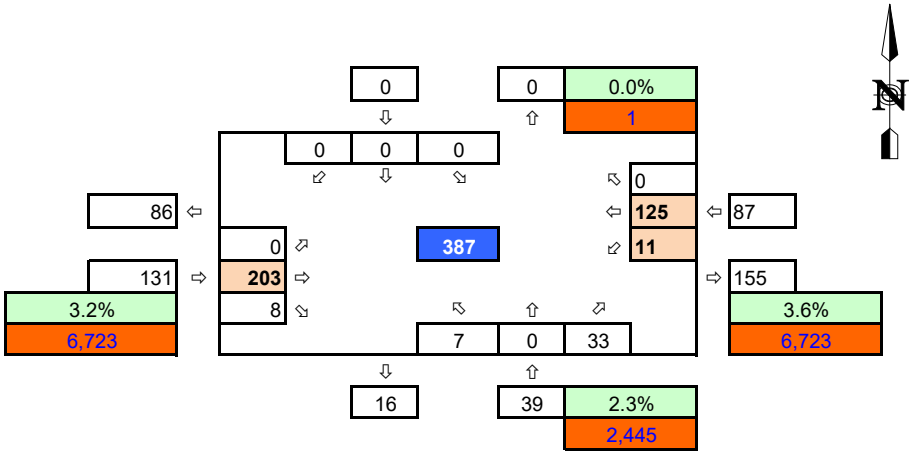
xx = predicted volume < baseline; volume manually increased.

Int 12 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**
Intersection #:	12
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**



LEGEND

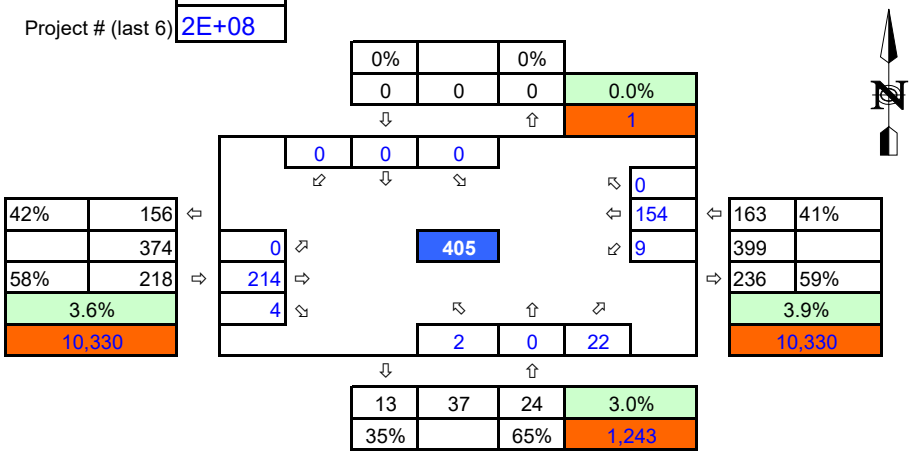
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

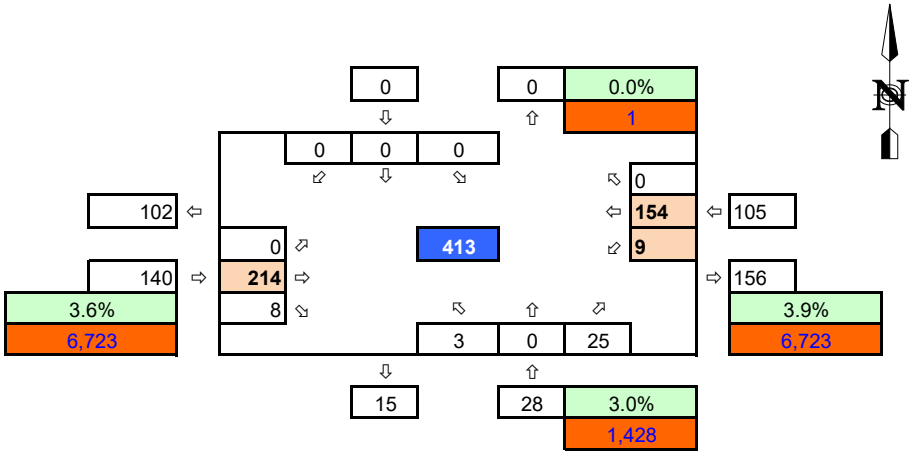
xx = predicted volume < baseline; volume manually increased.

Int 13 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**
Intersection #:	13
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**



LEGEND

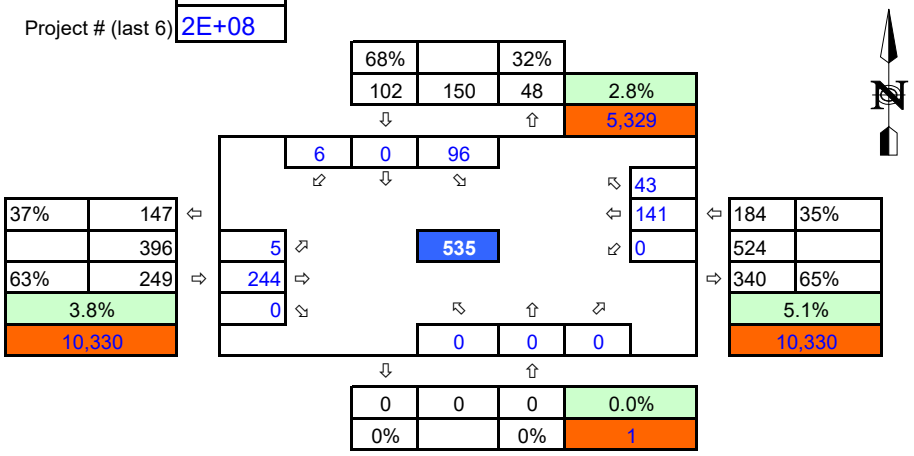
Existing K-Factor	xx%
ADT Volume	xx

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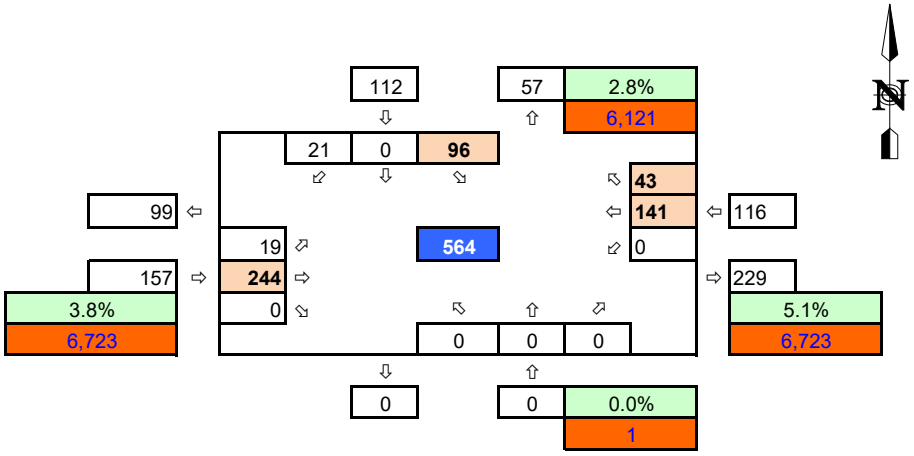
xx = predicted volume < baseline; volume manually increased.

Int 14 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**
Intersection #:	14
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**



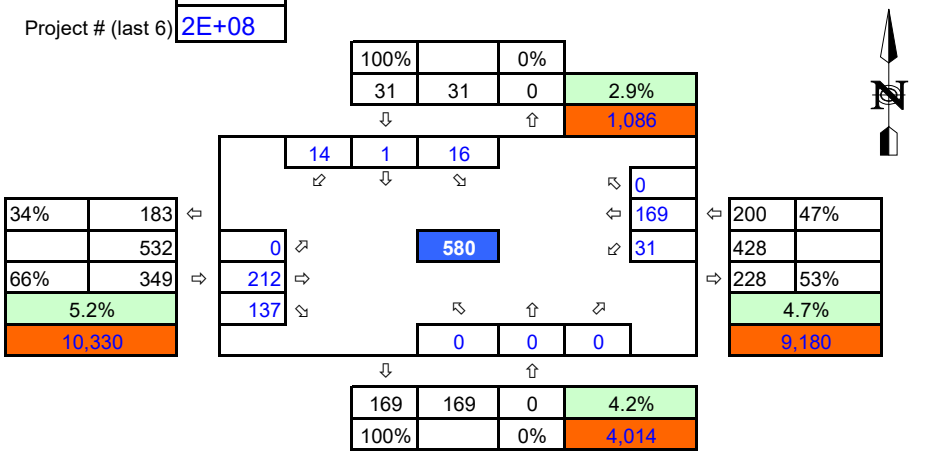
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

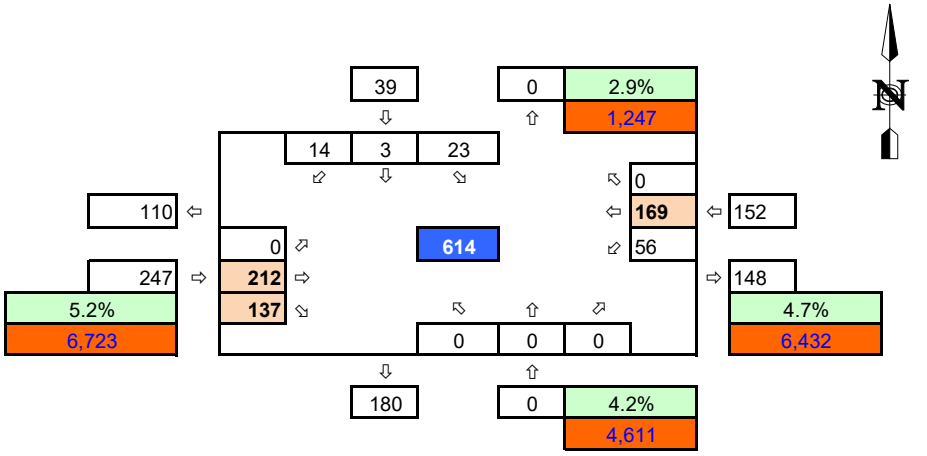
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 15 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**
Intersection #:	15
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**



LEGEND

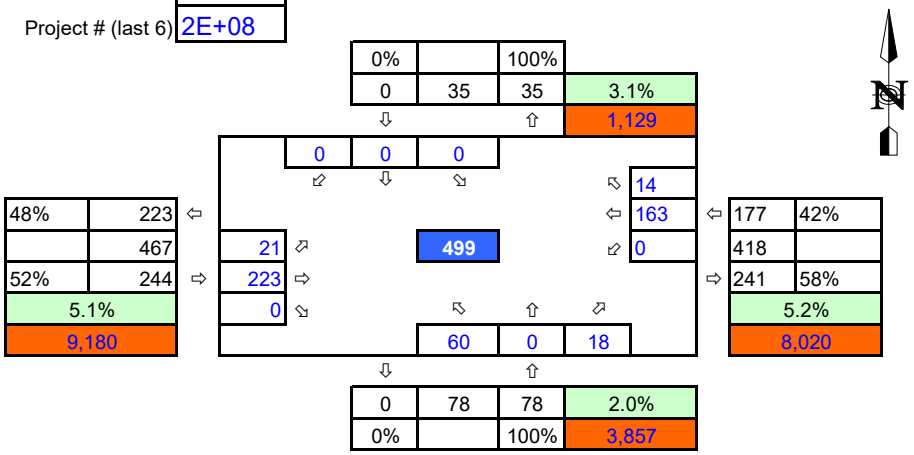
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

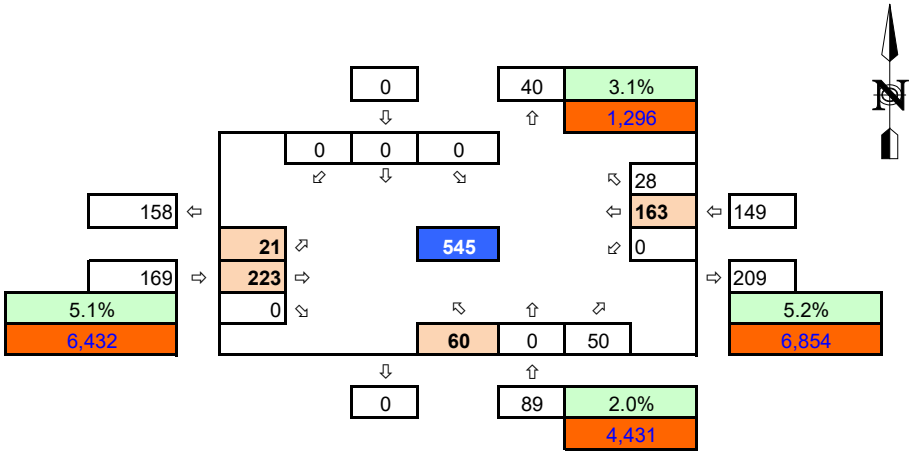
xx = predicted volume < baseline; volume manually increased.

Int 16 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**
Intersection #:	16
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**



LEGEND

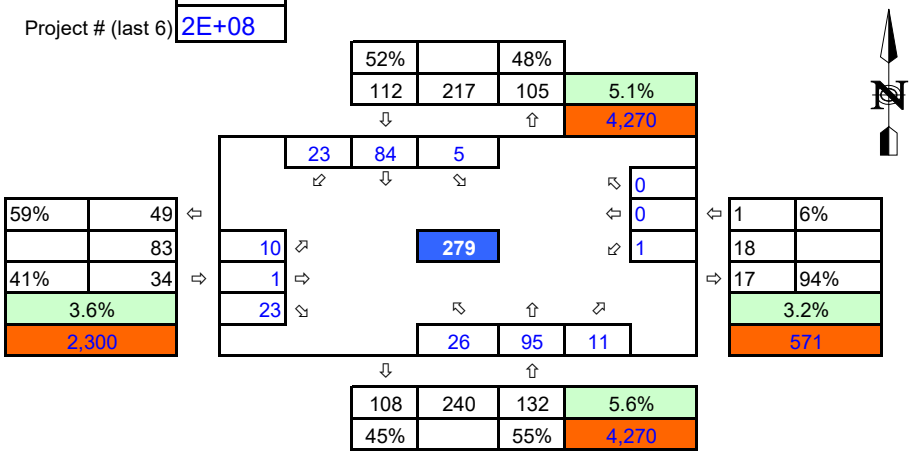
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

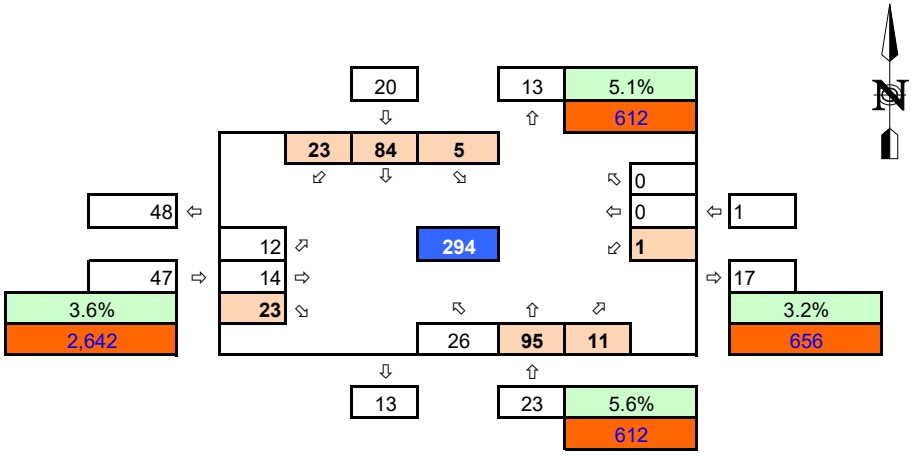
xx = predicted volume < baseline; volume manually increased.

Int 17 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**
Intersection #:	17
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**



LEGEND

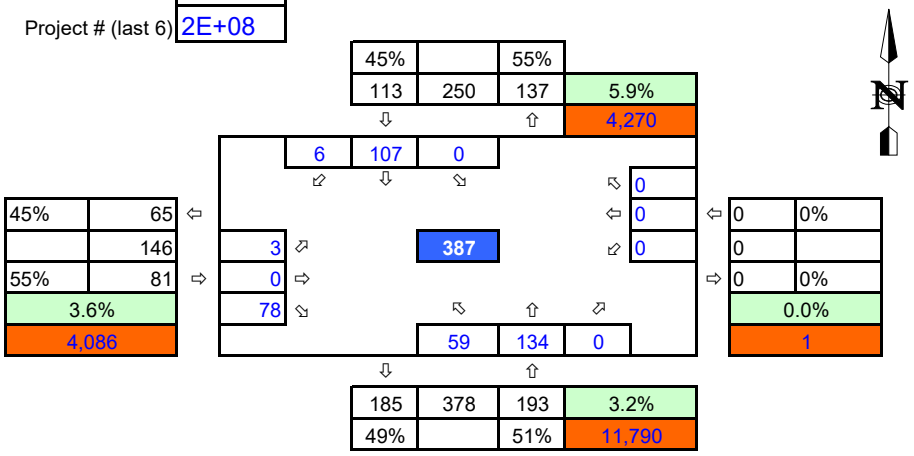
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

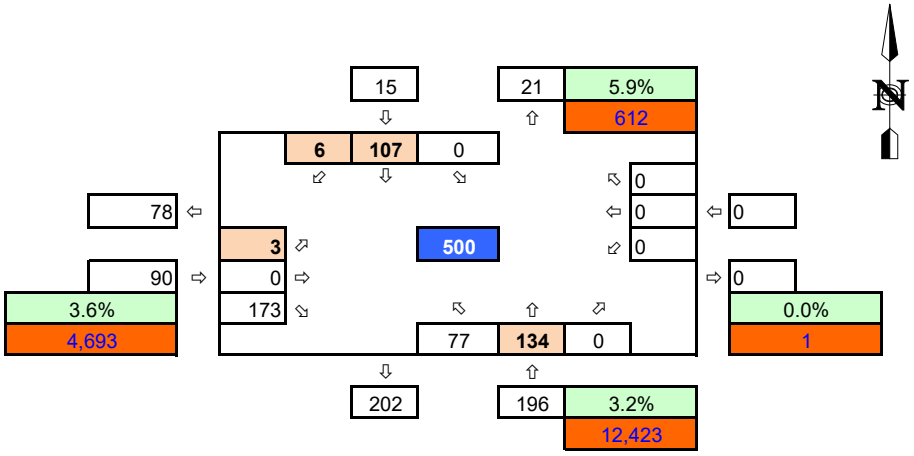
xx = predicted volume < baseline; volume manually increased.

Int 18 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**
Intersection #:	18
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**



LEGEND

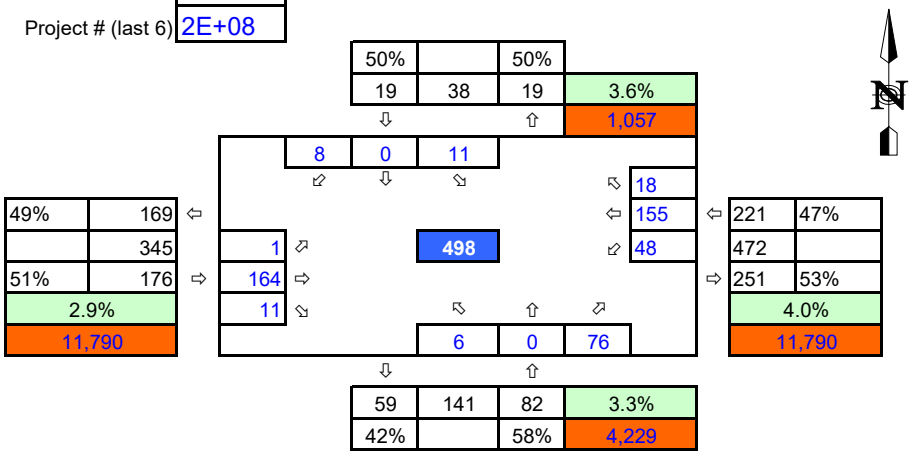
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

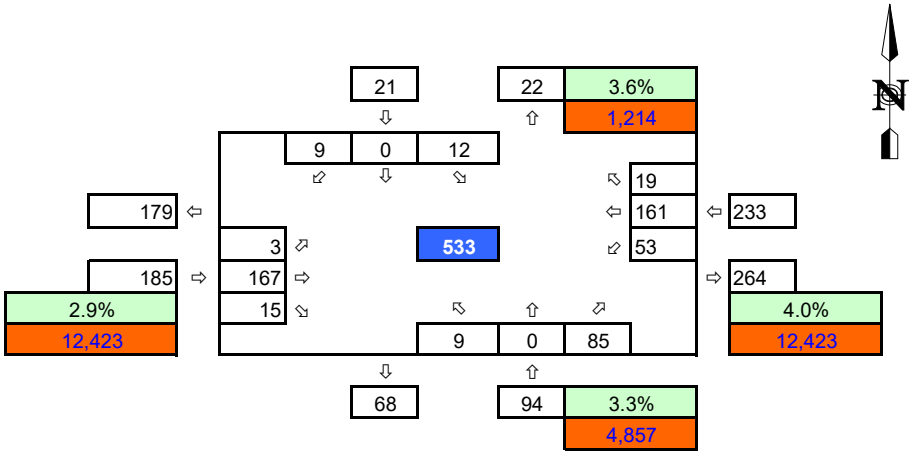
xx = predicted volume < baseline; volume manually increased.

Int 19 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**
Intersection #:	19
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**



LEGEND

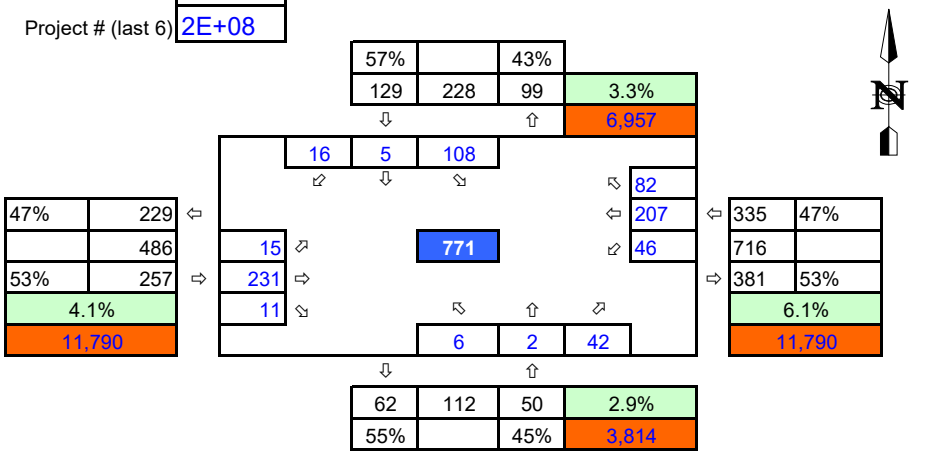
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

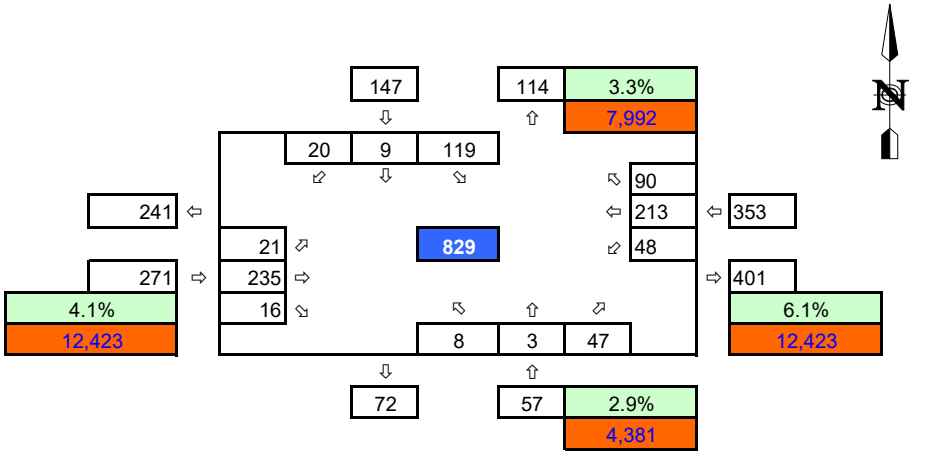
xx = predicted volume < baseline; volume manually increased.

Int 20 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**
Intersection #:	20
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**



LEGEND

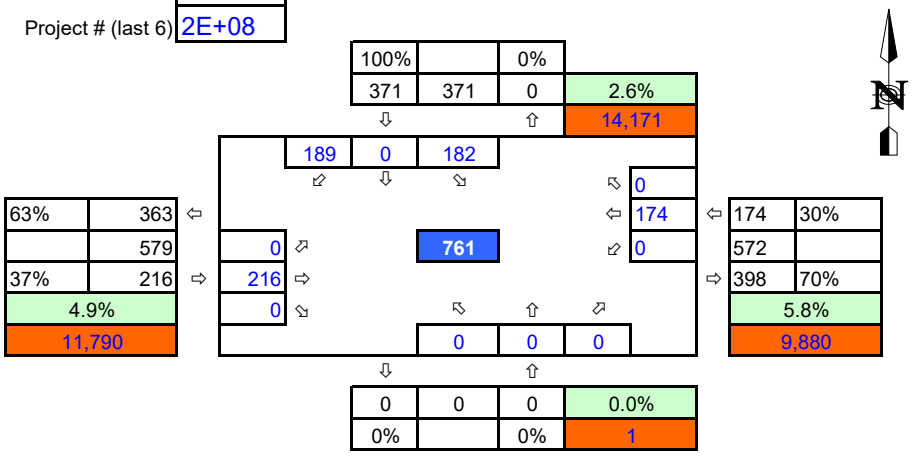
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

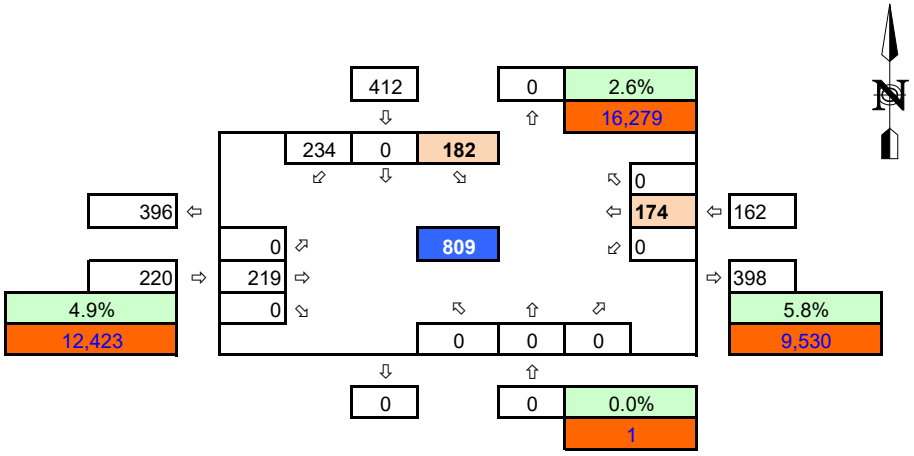
xx = predicted volume < baseline; volume manually increased.

Int 21 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	21
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**



LEGEND

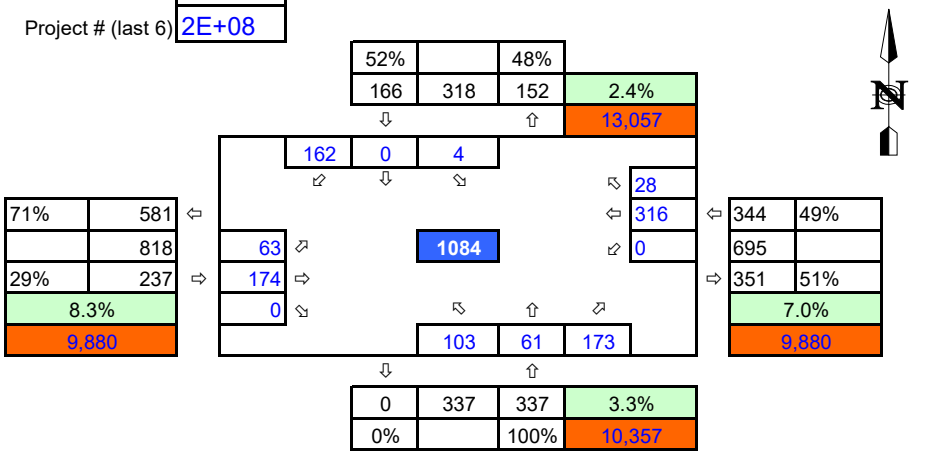
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

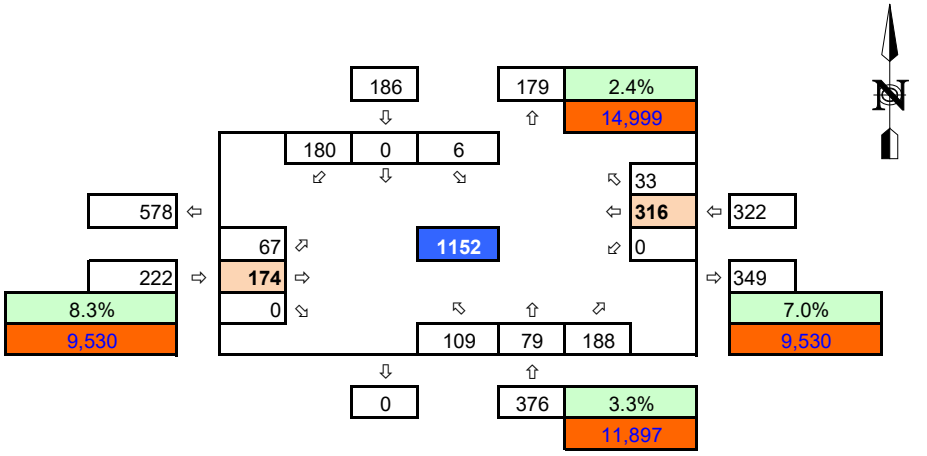
xx = predicted volume < baseline; volume manually increased.

Int 22 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	22
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**



LEGEND

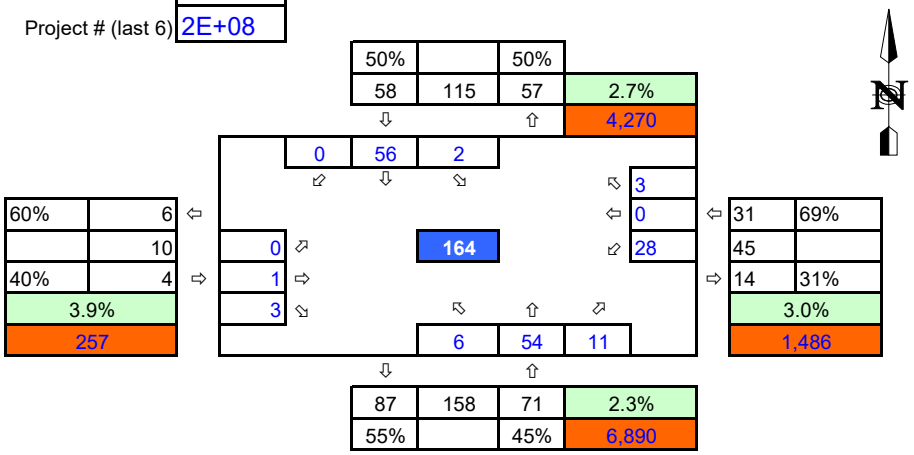
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

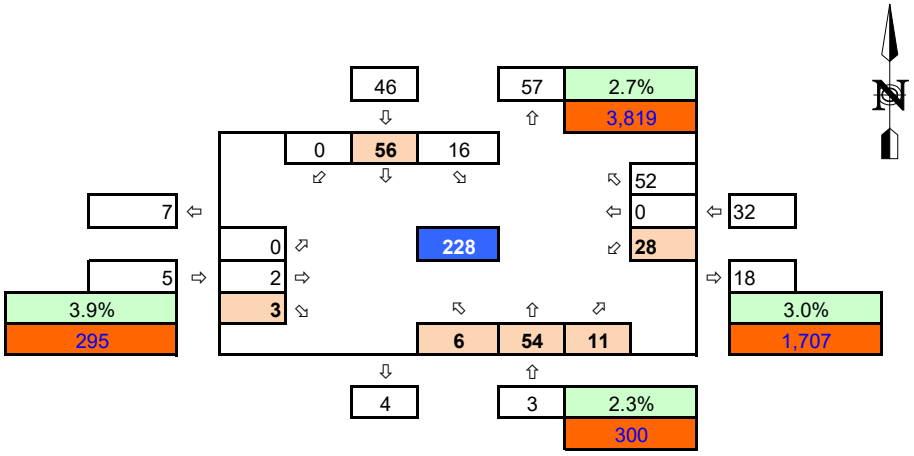
xx = predicted volume < baseline; volume manually increased.

Int 23 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**
Intersection #:	23
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**



LEGEND

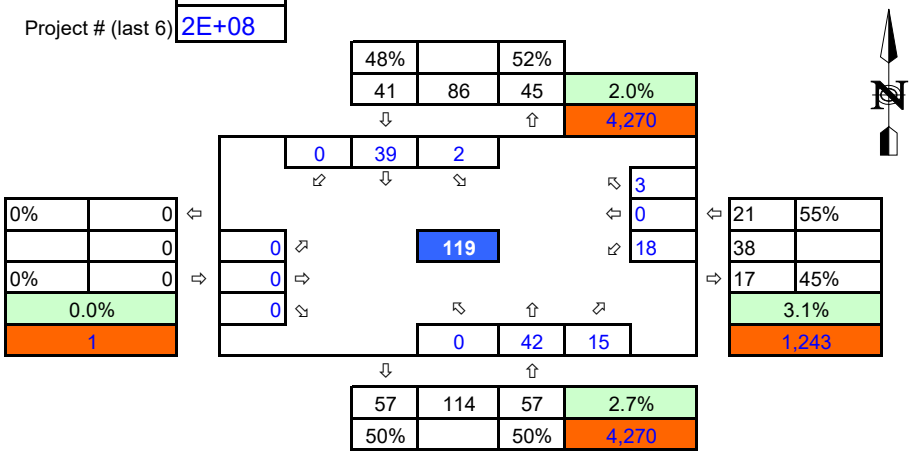
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

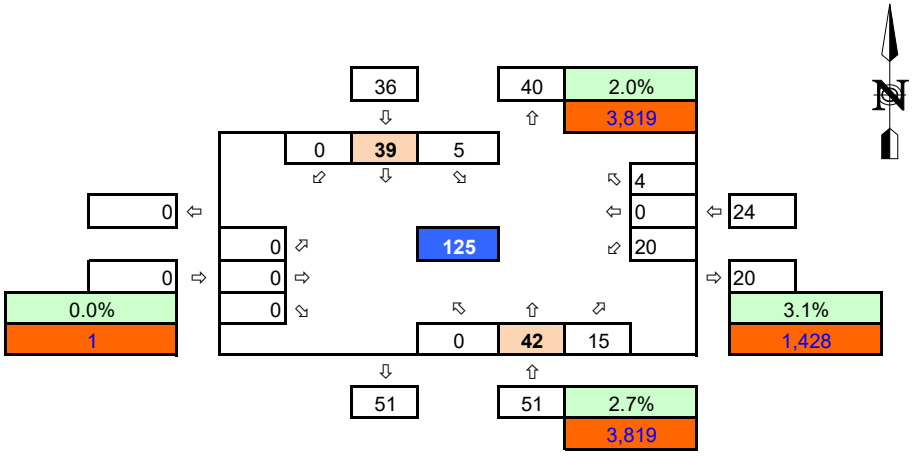
xx = predicted volume < baseline; volume manually increased.

Int 24 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**
Intersection #:	24
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**



LEGEND

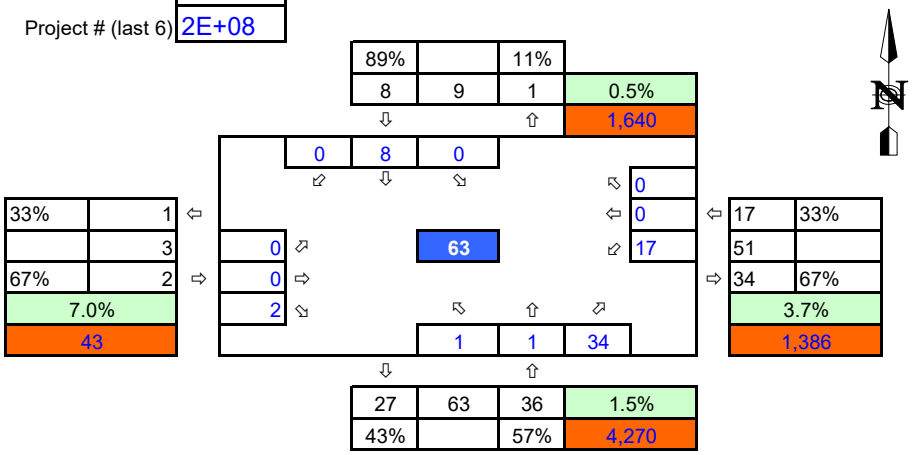
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

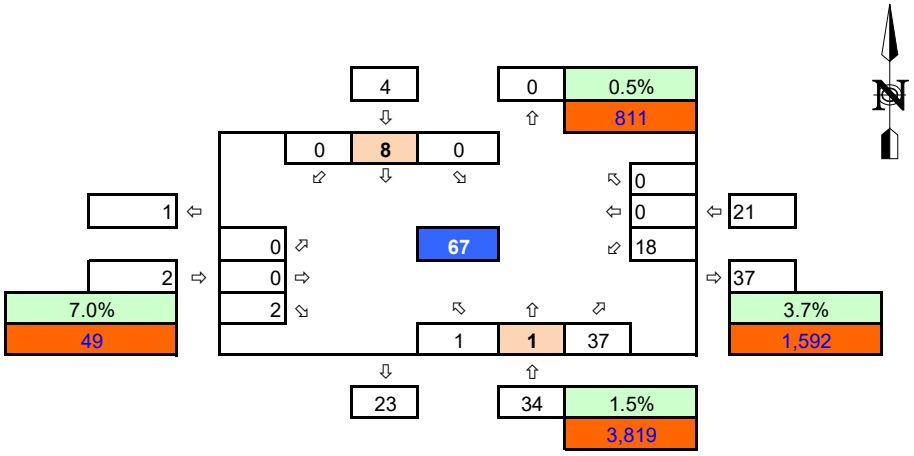
xx = predicted volume < baseline; volume manually increased.

Int 25 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**
Intersection #:	25
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**



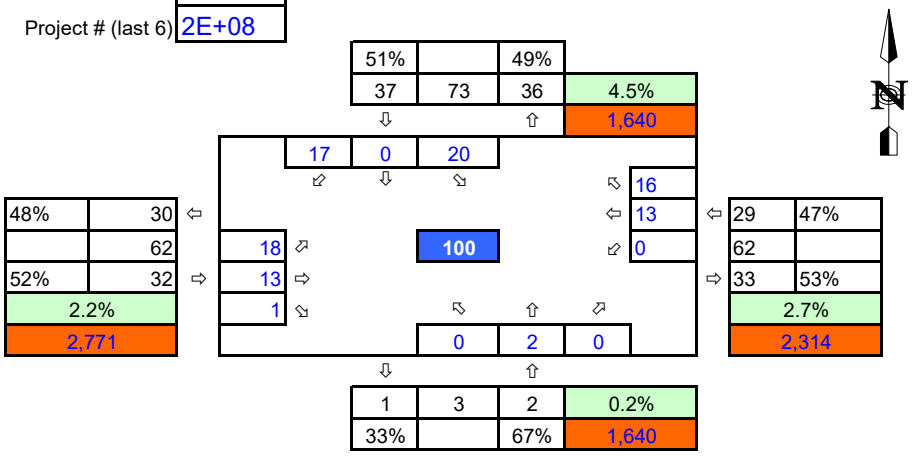
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

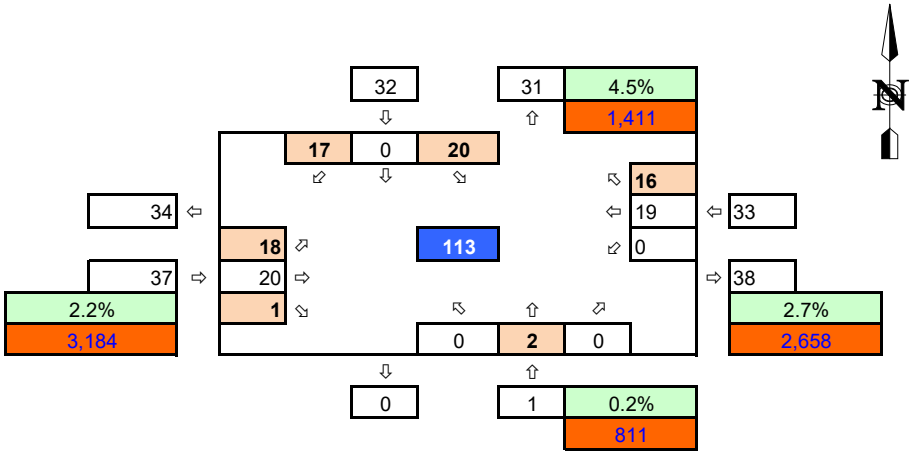
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 26 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**
Intersection #:	26
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**



LEGEND

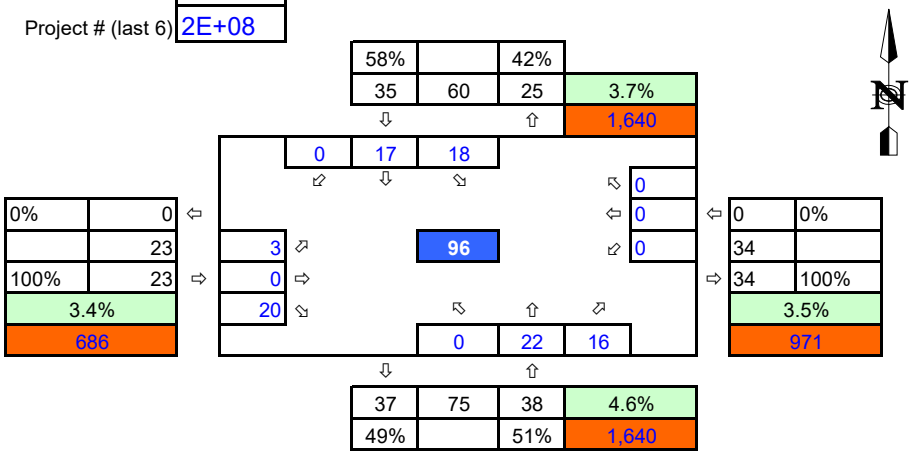
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

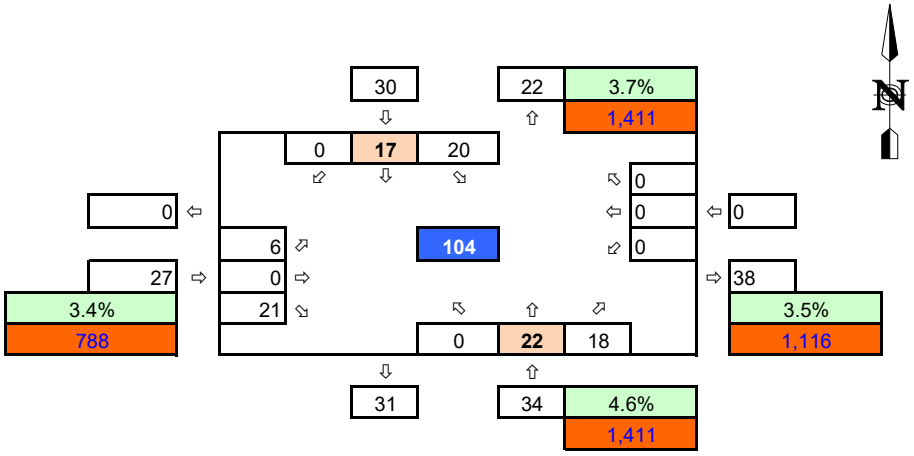
xx = predicted volume < baseline; volume manually increased.

Int 27 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**
Intersection #:	27
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**



LEGEND

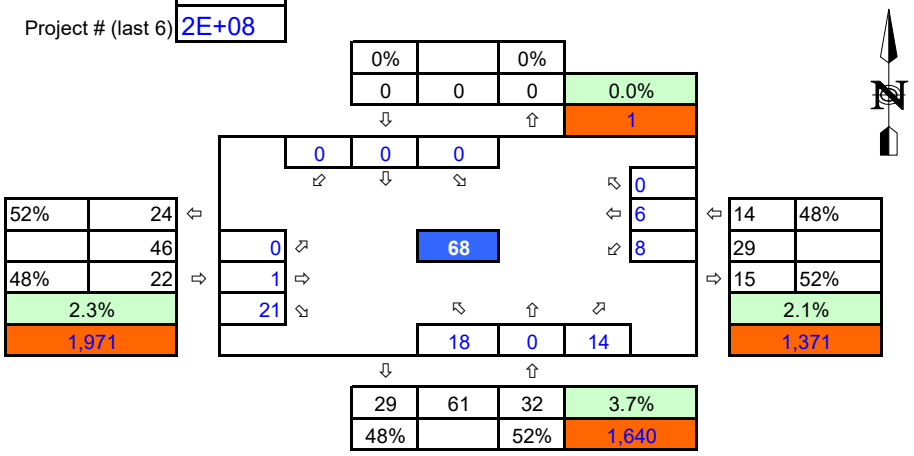
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

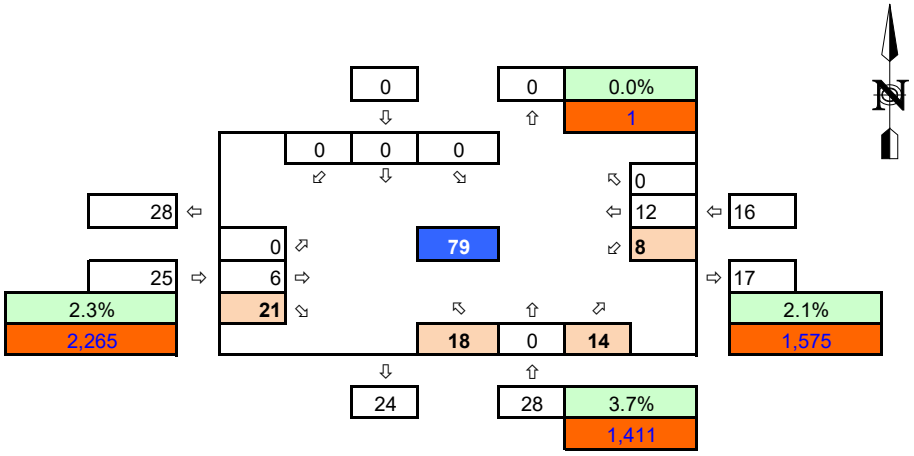
xx = predicted volume < baseline; volume manually increased.

Int 28 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**
Intersection #:	28
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**



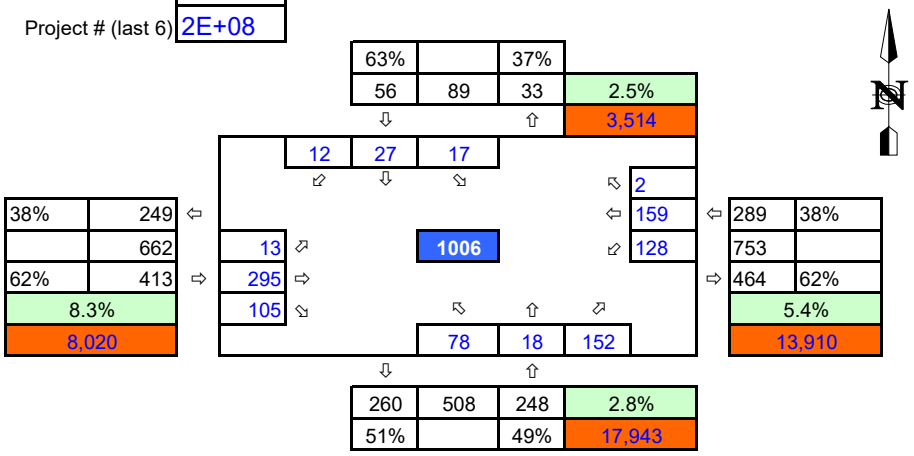
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

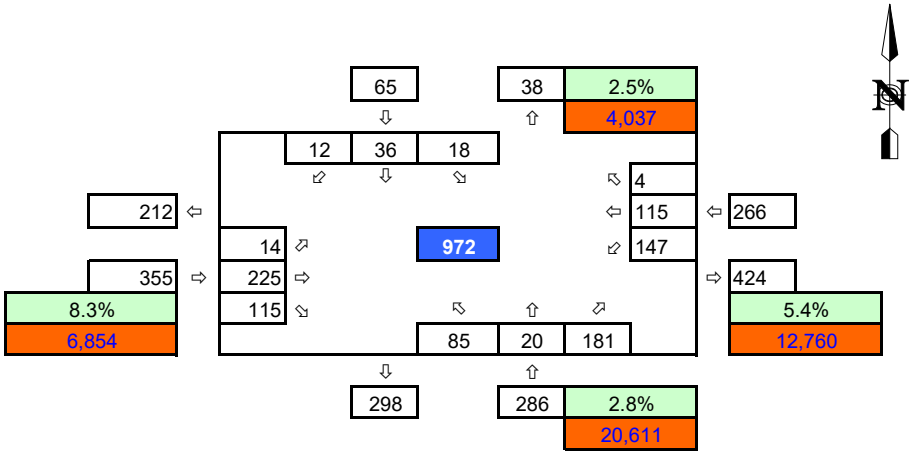
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 29 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**
Intersection #:	29
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**



LEGEND

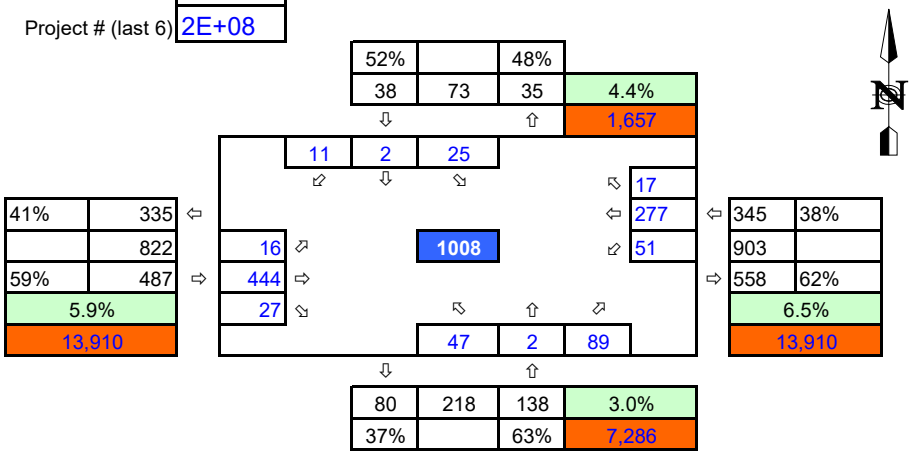
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

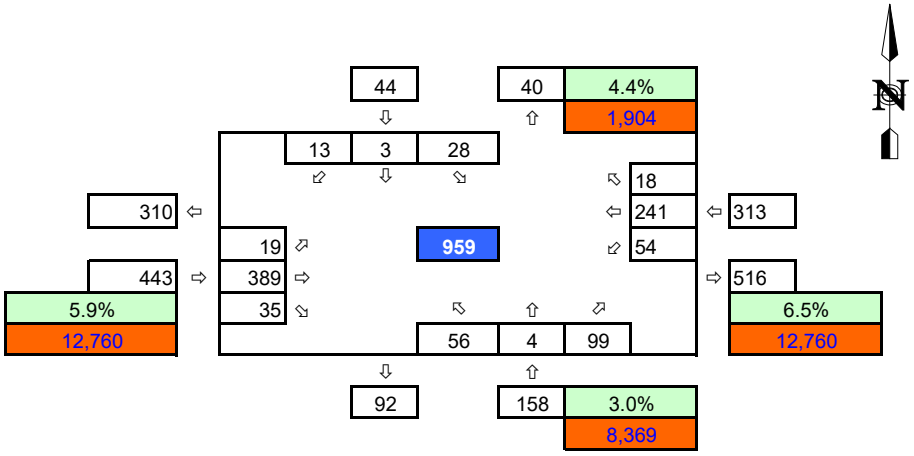
xx = predicted volume < baseline; volume manually increased.

Int 30 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**
Intersection #:	30
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**



LEGEND

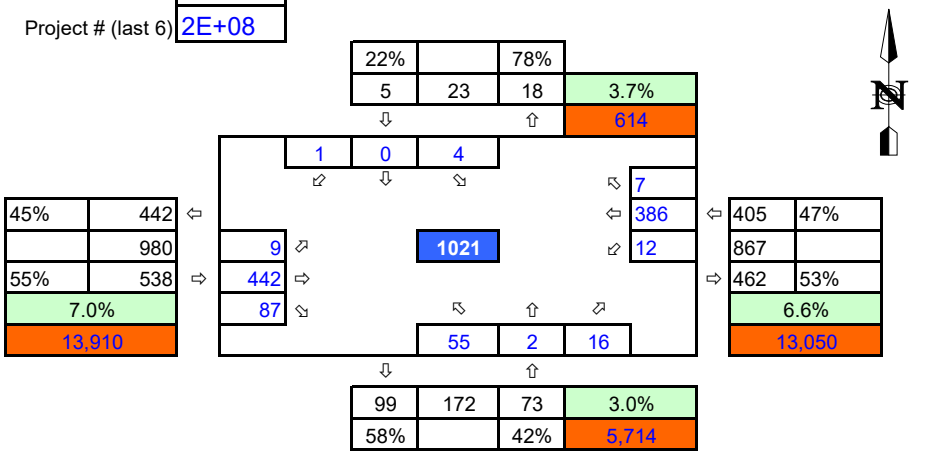
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

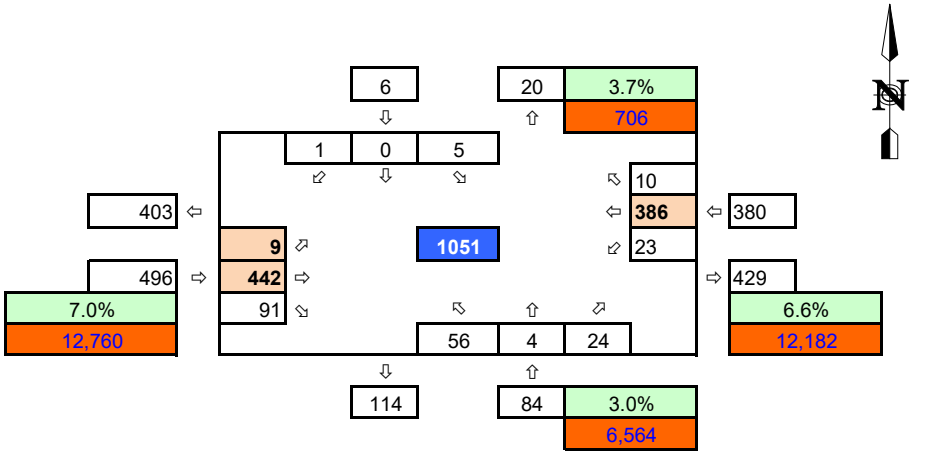
xx = predicted volume < baseline; volume manually increased.

Int 31 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**
Intersection #:	31
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**



LEGEND

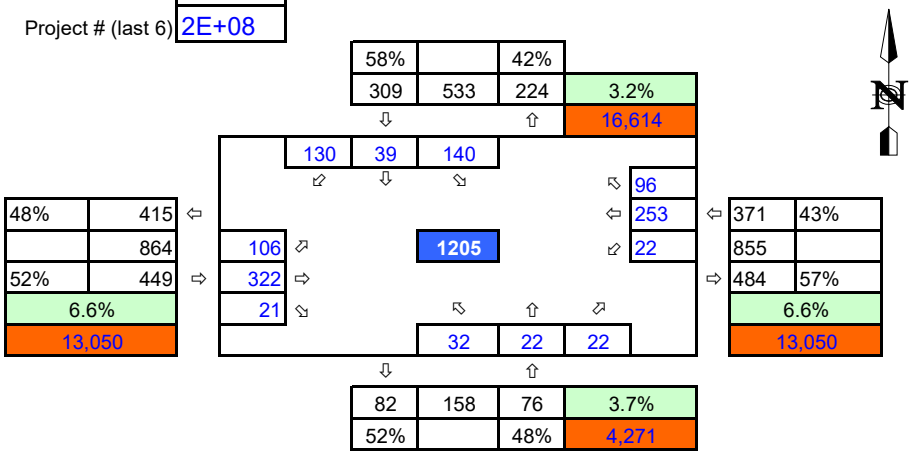
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

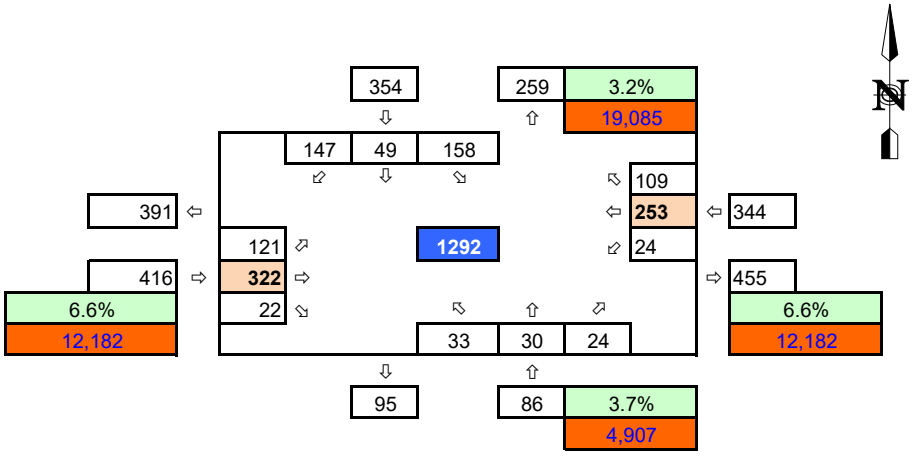
xx = predicted volume < baseline; volume manually increased.

Int 32 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**
Intersection #:	32
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**



LEGEND

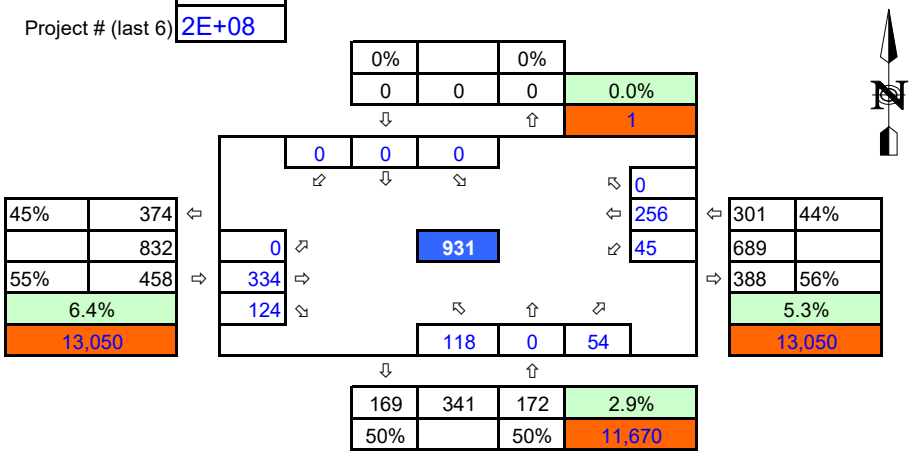
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

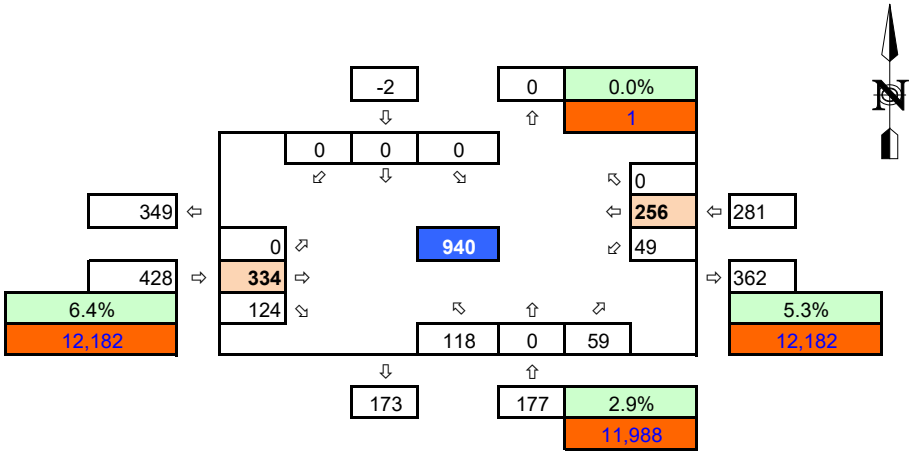
xx = predicted volume < baseline; volume manually increased.

Int 33 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**
Intersection #:	33
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**



LEGEND

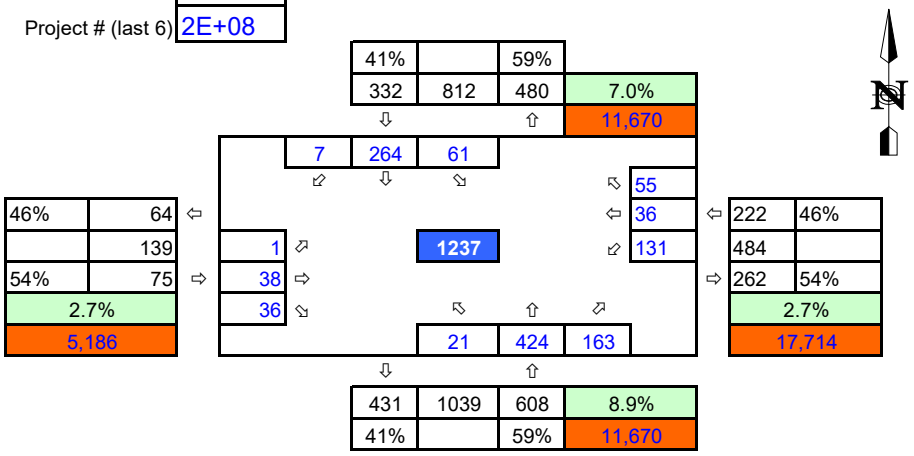
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

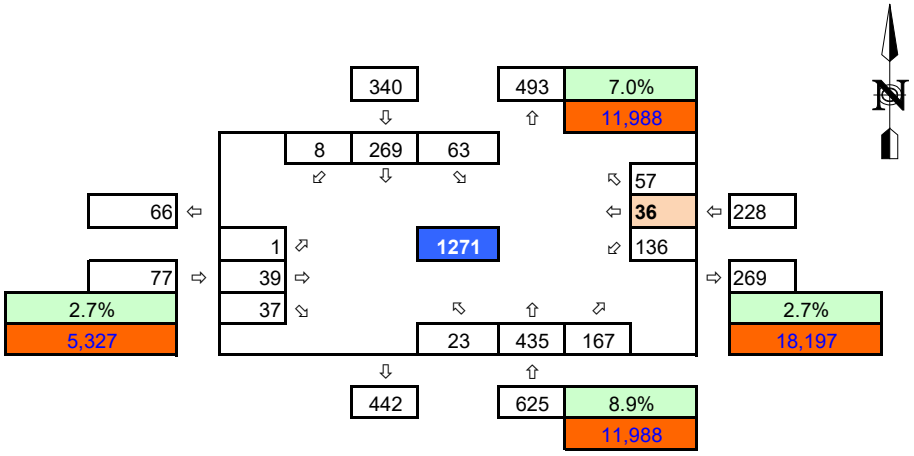
xx = predicted volume < baseline; volume manually increased.

Int 34 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**
Intersection #:	34
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**



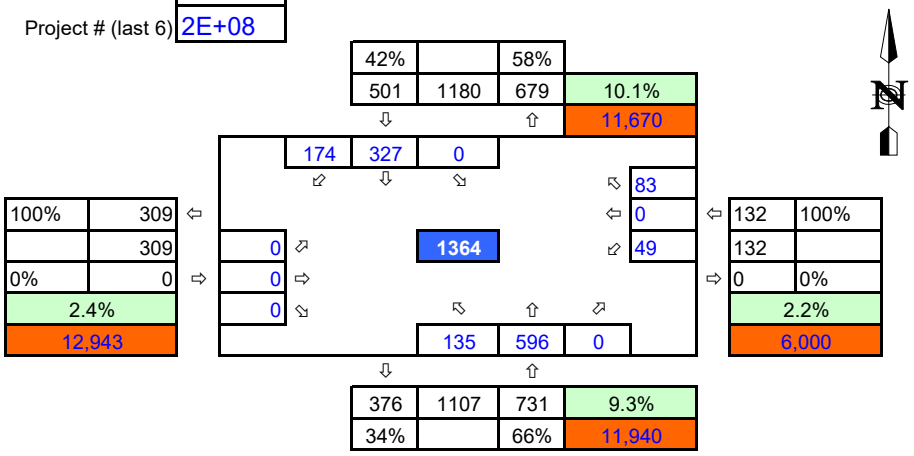
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

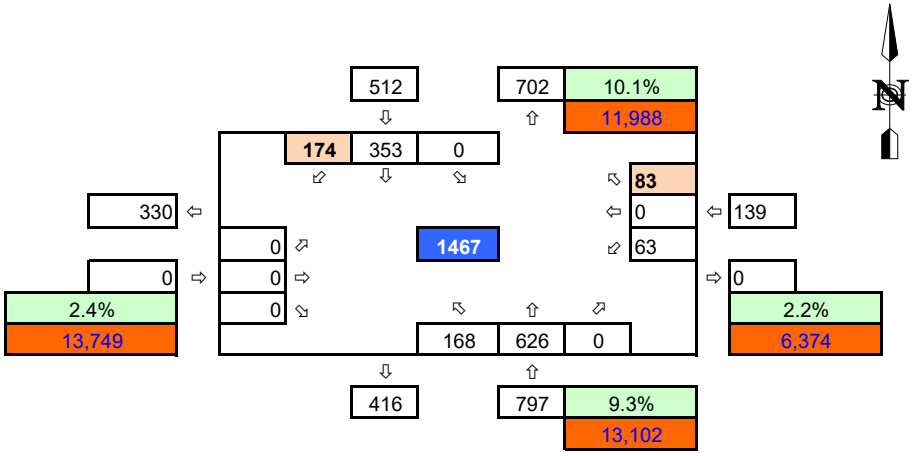
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 35 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**
Intersection #:	35
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**



LEGEND

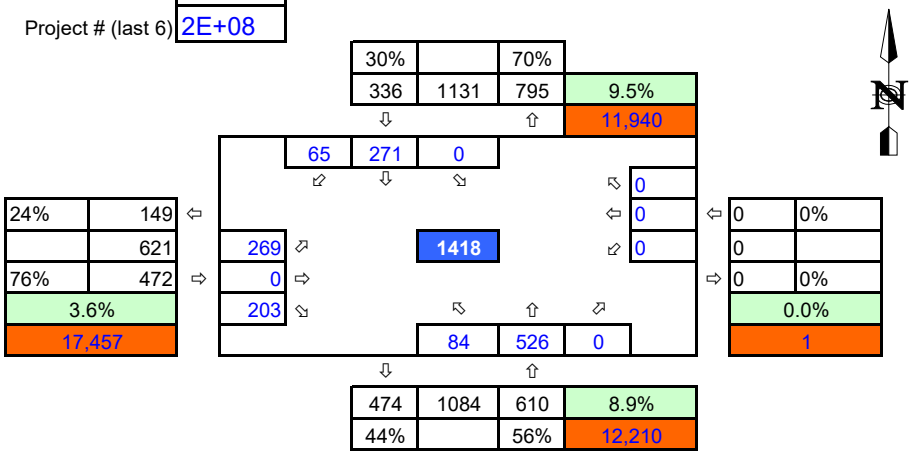
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

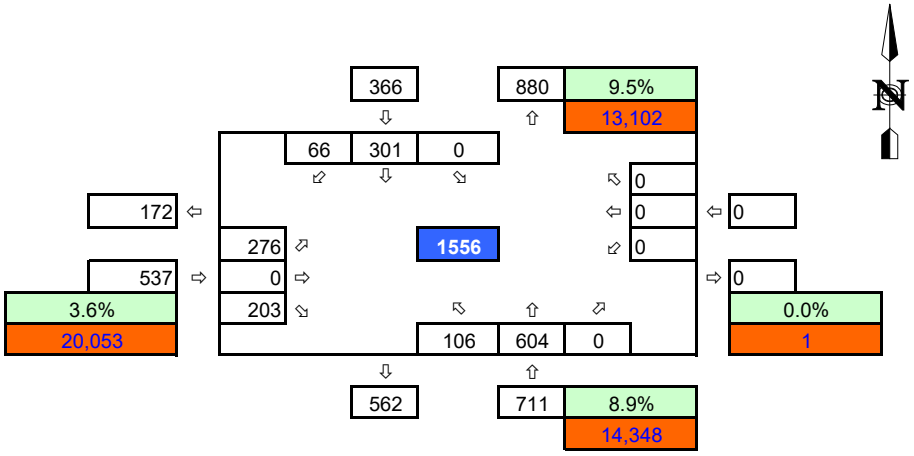
xx = predicted volume < baseline; volume manually increased.

Int 36 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**
Intersection #:	36
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**



LEGEND

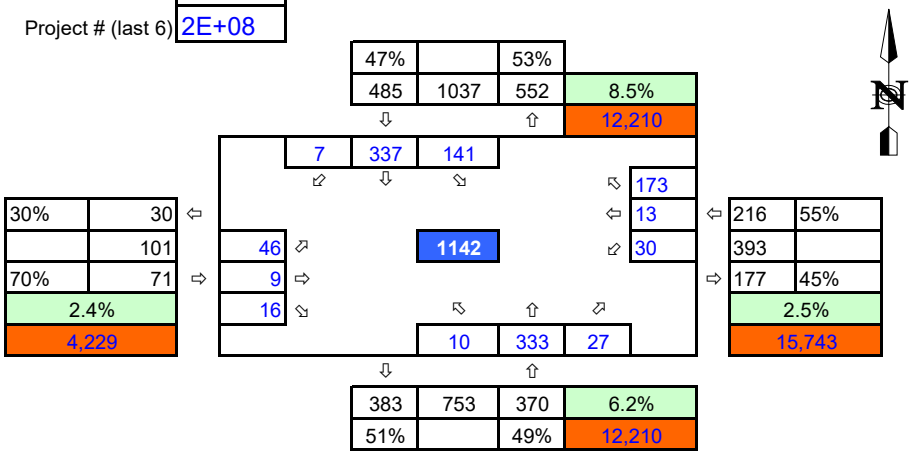
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

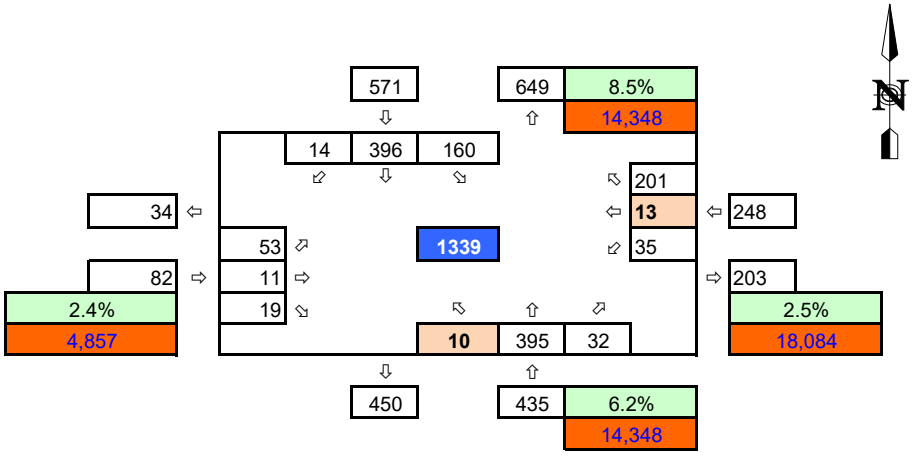
xx = predicted volume < baseline; volume manually increased.

Int 37 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**
Intersection #:	37
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**



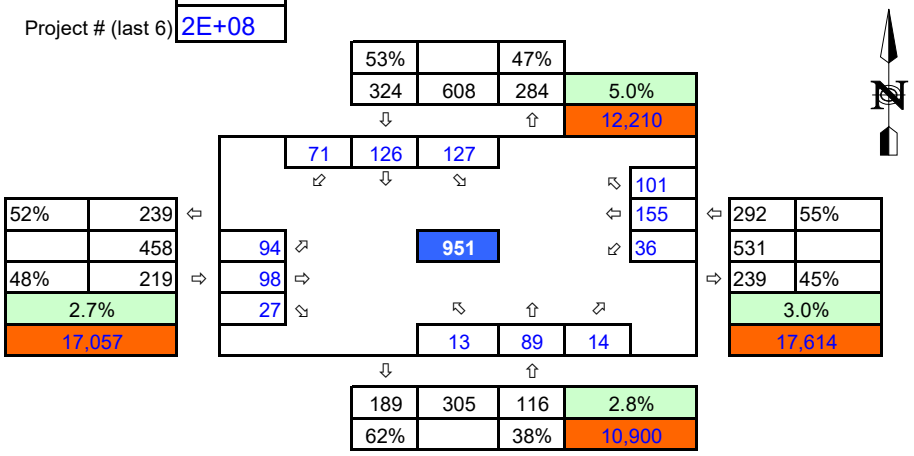
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

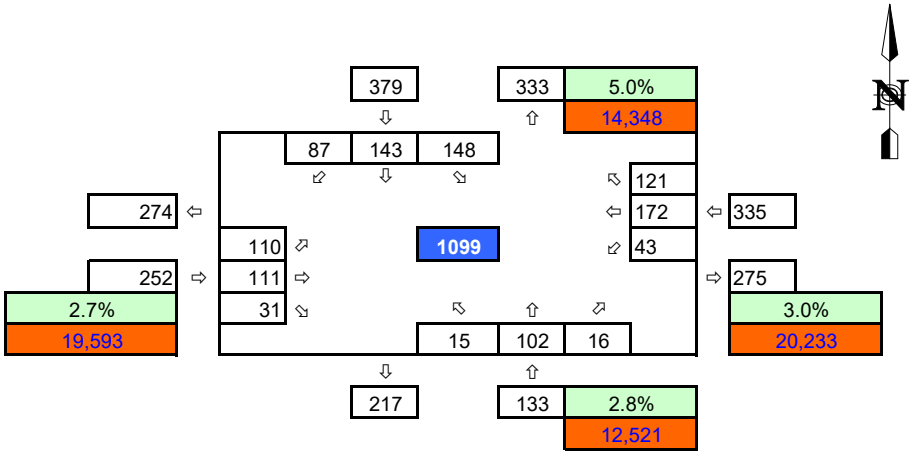
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 38 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**
Intersection #:	38
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**



LEGEND

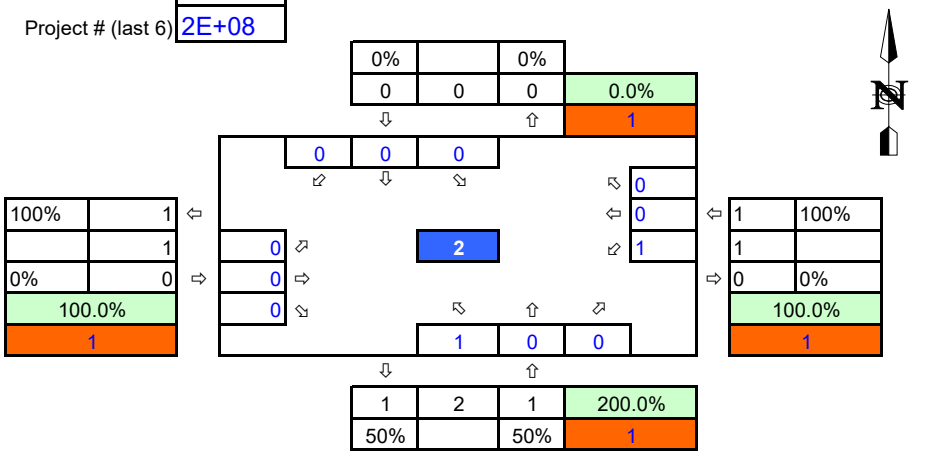
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

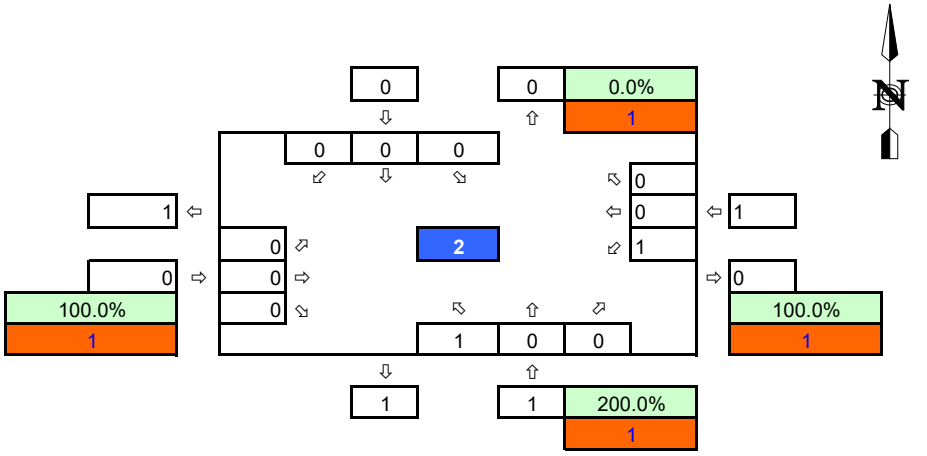
xx = predicted volume < baseline; volume manually increased.

Int 39 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	39
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**



LEGEND

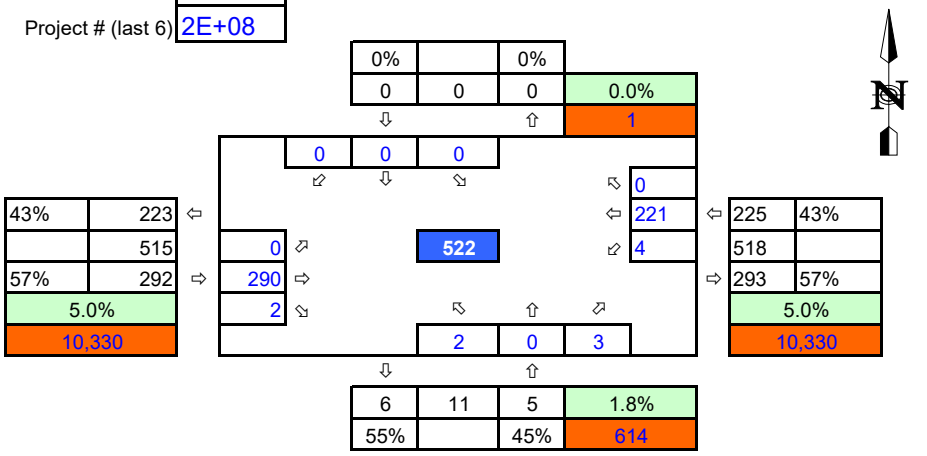
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

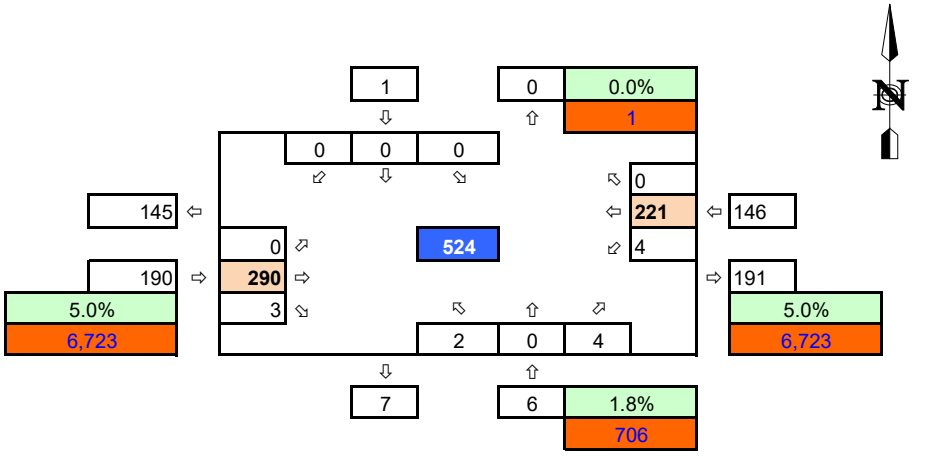
xx = predicted volume < baseline; volume manually increased.

Int 40 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**
Intersection #:	40
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**



LEGEND

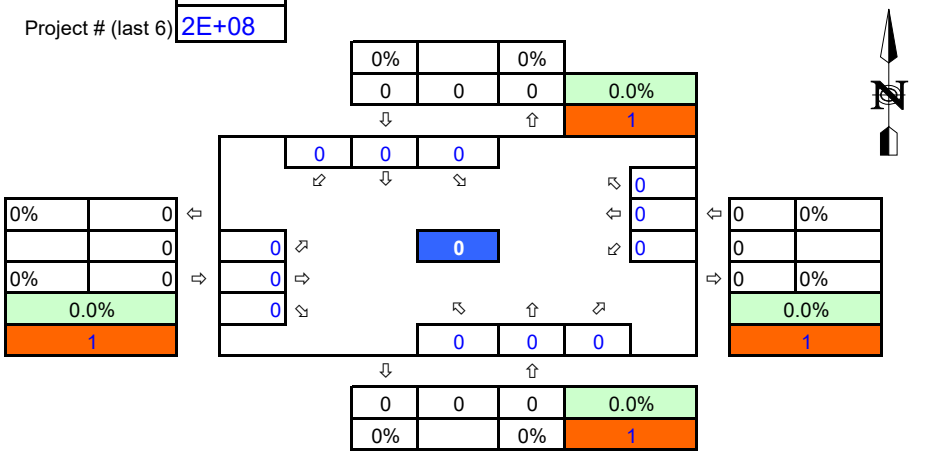
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

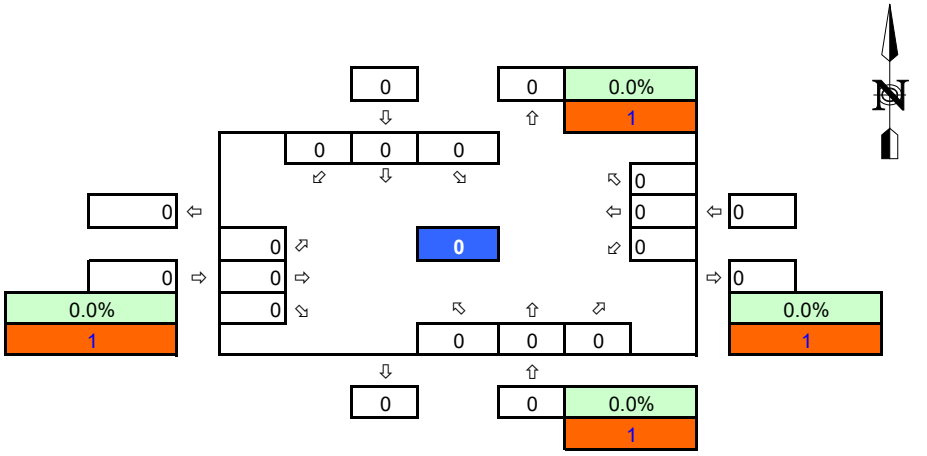
xx = predicted volume < baseline; volume manually increased.

Int 41 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**A St / Jiggs Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	41
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**A St / Jiggs Rd**
E/W Street:	**Hinkley Rd**



LEGEND

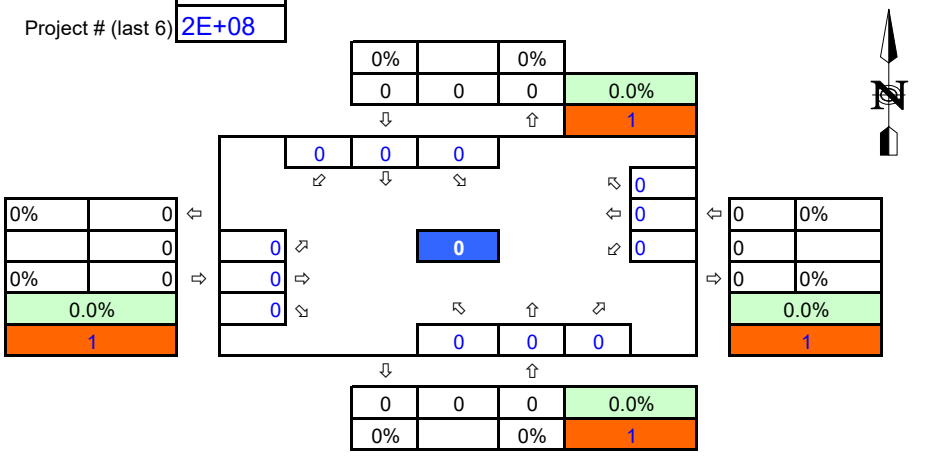
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

xx = predicted volume < baseline; volume manually increased.

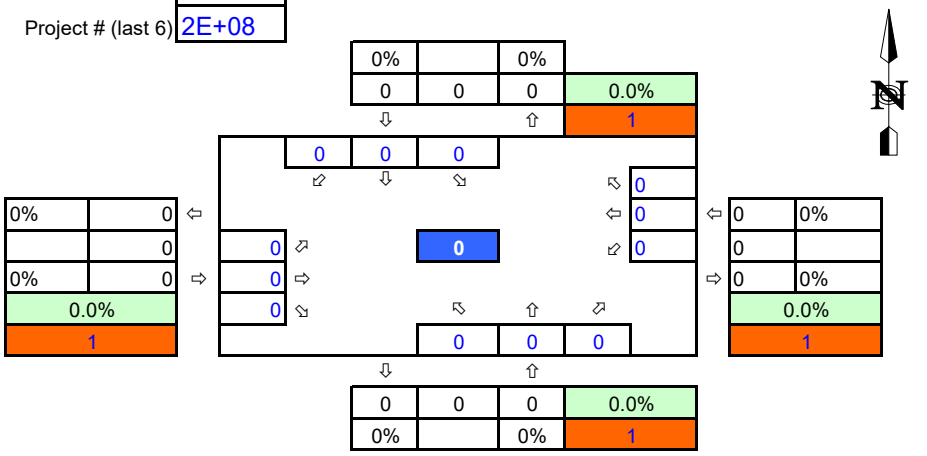
Int 42 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**B St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	42
Project # (last 6)	2E+08

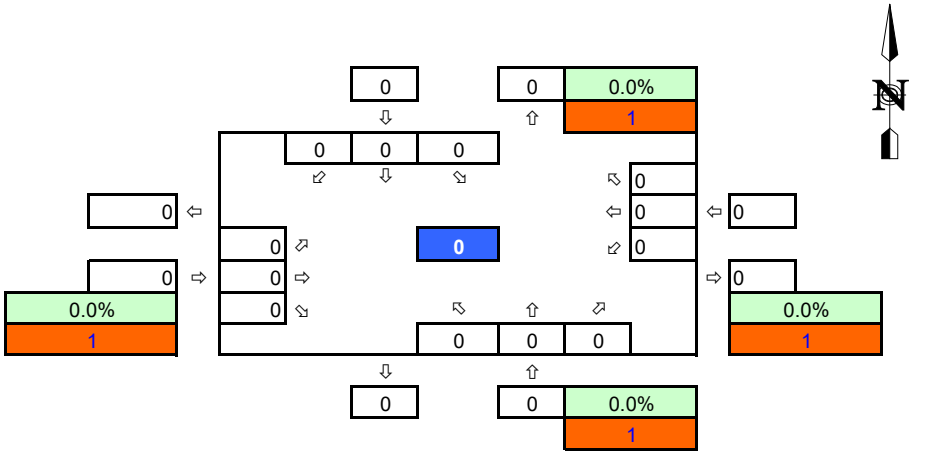

0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0
0% 0 0 0 0

Int 43 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**C St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	43
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**C St / 0**
E/W Street:	**Hinkley Rd**



LEGEND

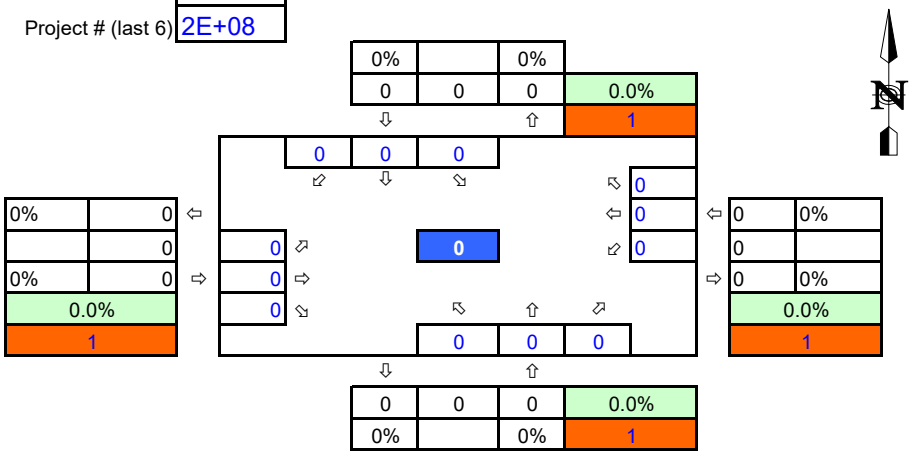
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

xx = predicted volume < baseline; volume manually increased.

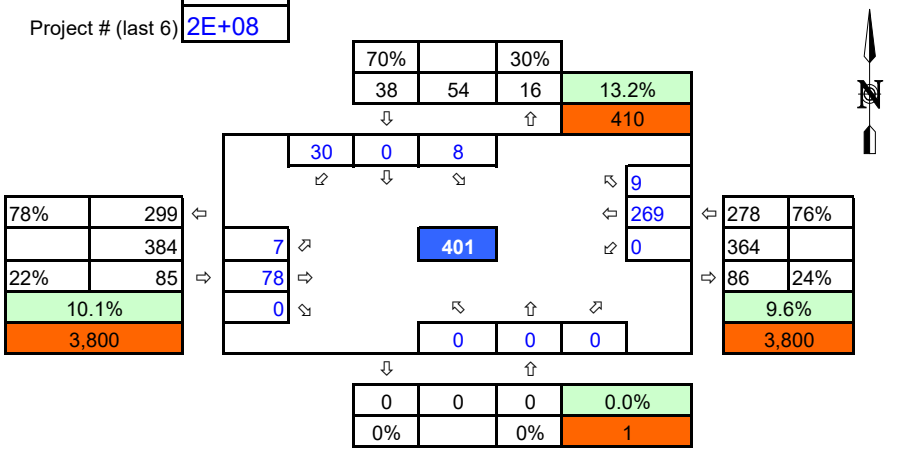
Int 44 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**C St**
E/W Street:	**0 / F St**
Intersection #:	44
Project # (last 6)	2E+08

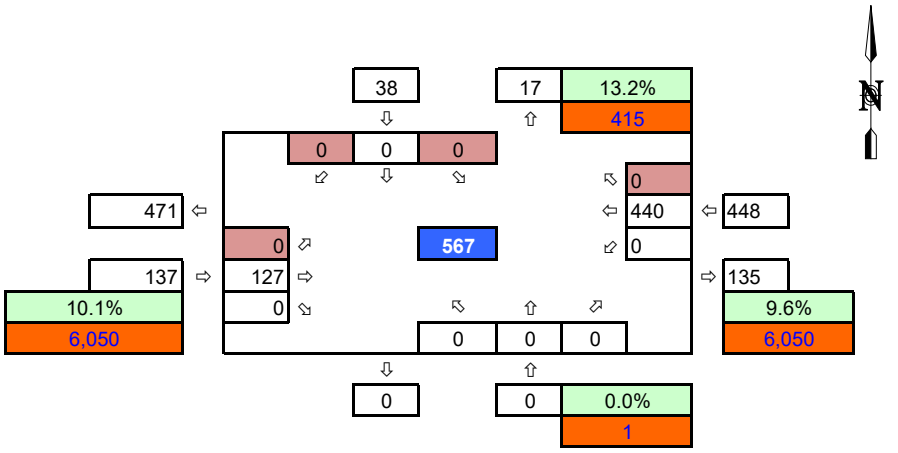

0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0
0% 0 0 0 0% 0 0 0 0

Int 1 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**
Intersection #:	1
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**



LEGEND

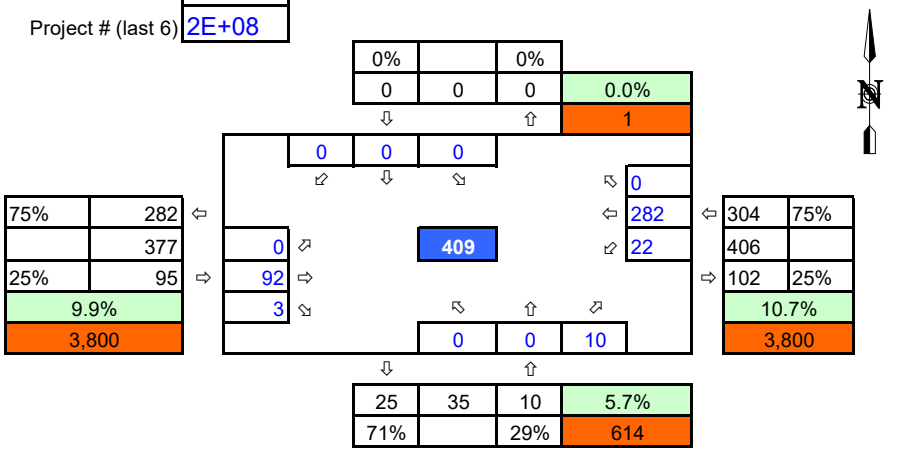
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

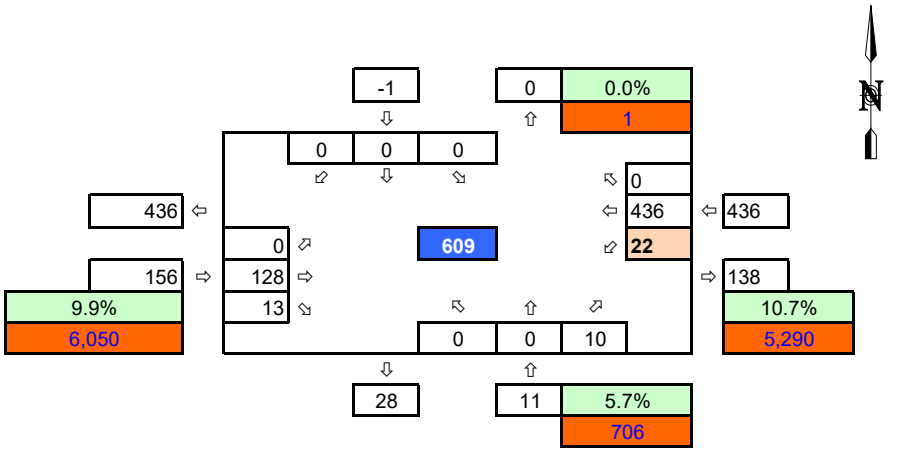
xx = predicted volume < baseline; volume manually increased.

Int 2 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**
Intersection #:	2
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**



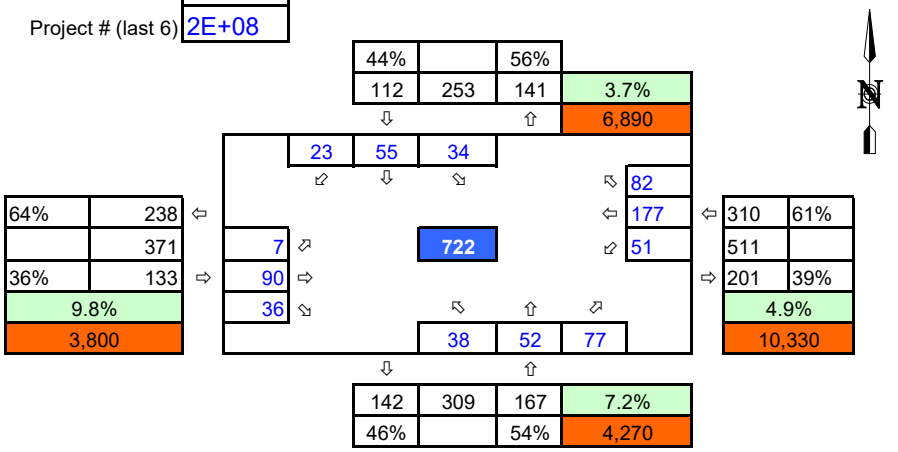
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

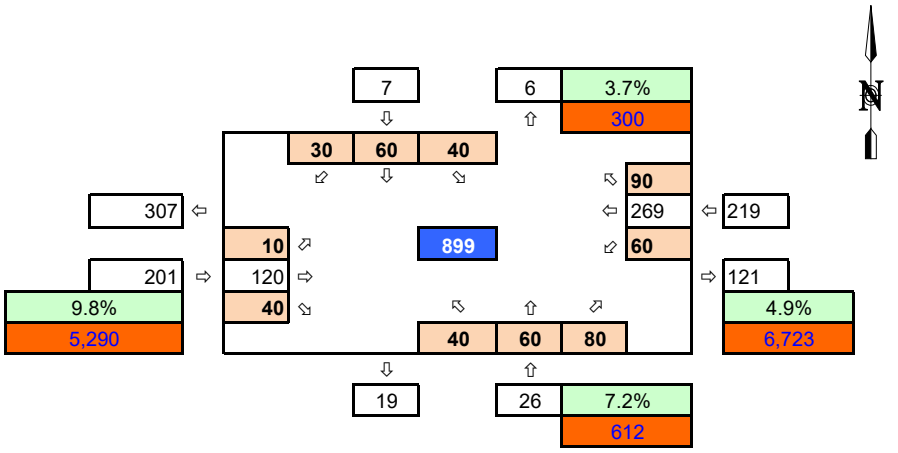
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 3 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**
Intersection #:	3
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**



LEGEND

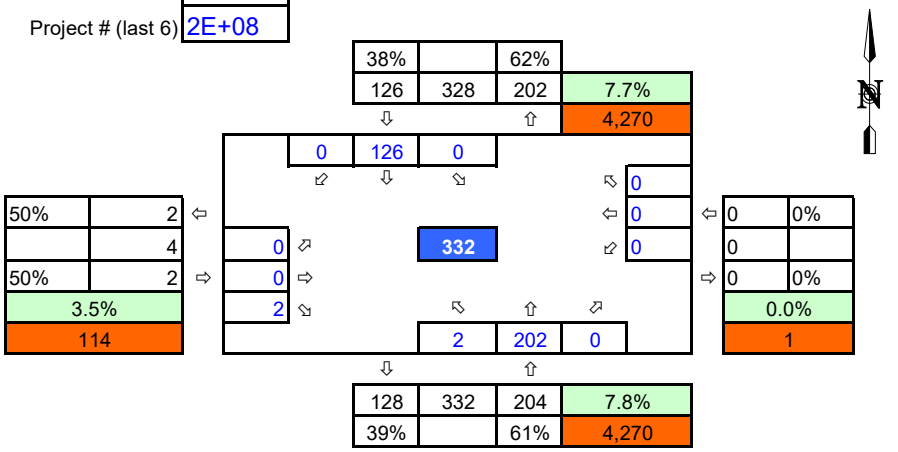
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

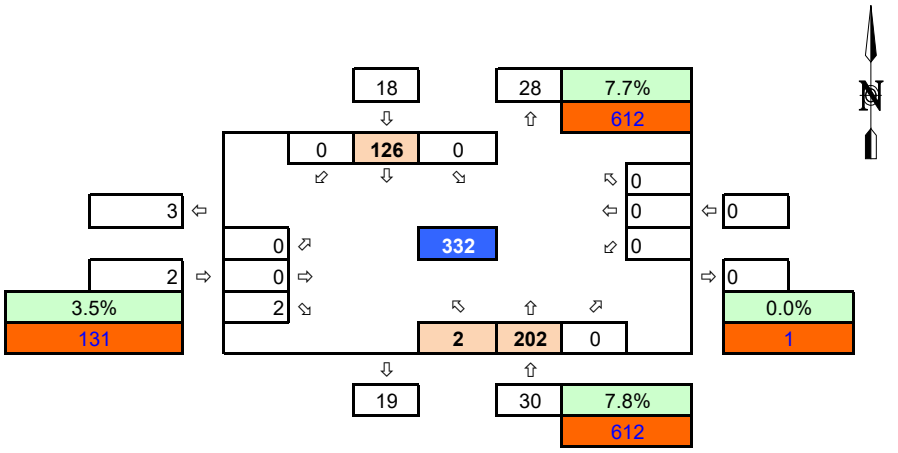
xx = predicted volume < baseline; volume manually increased.

Int 4 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**
Intersection #:	4
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**



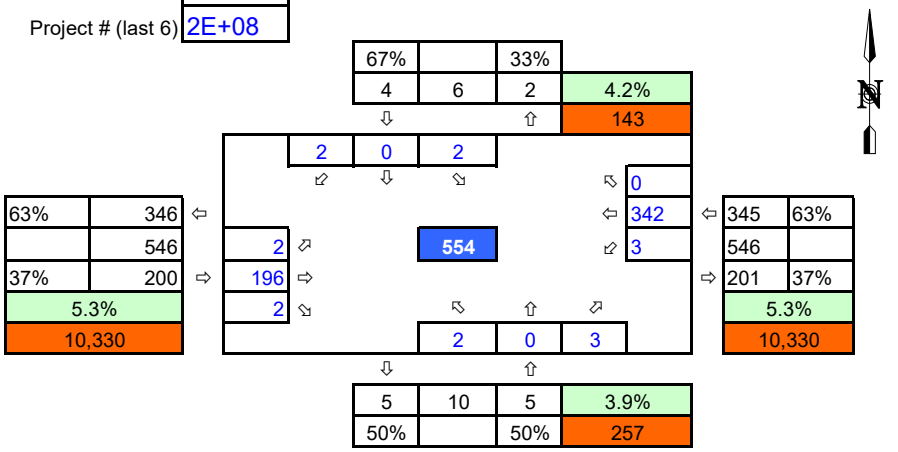
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

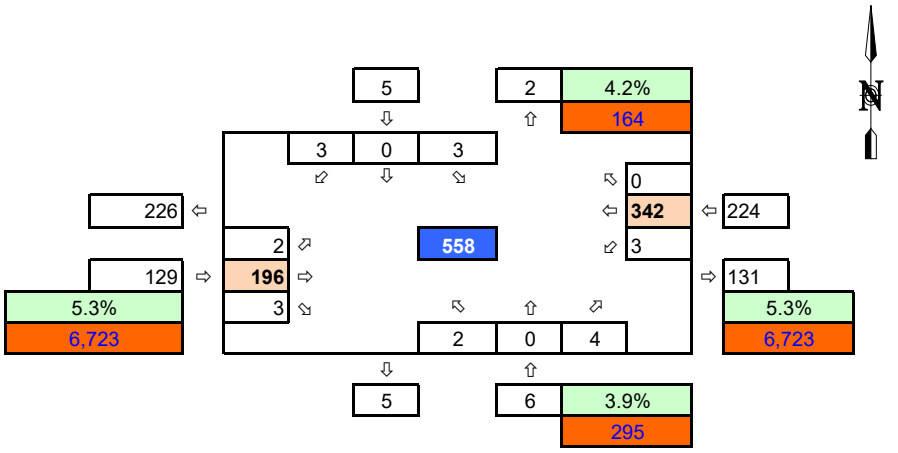
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 5 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**
Intersection #:	5
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**



LEGEND

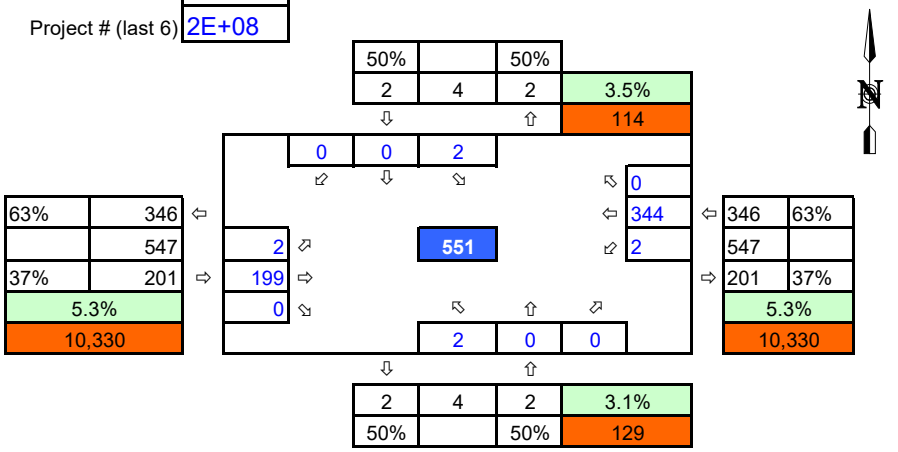
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

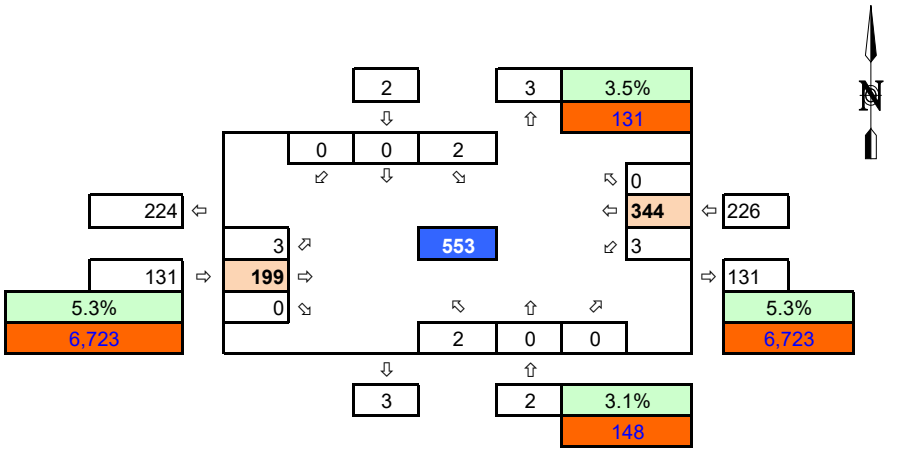
xx = predicted volume < baseline; volume manually increased.

Int 6 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**
Intersection #:	6
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**



LEGEND

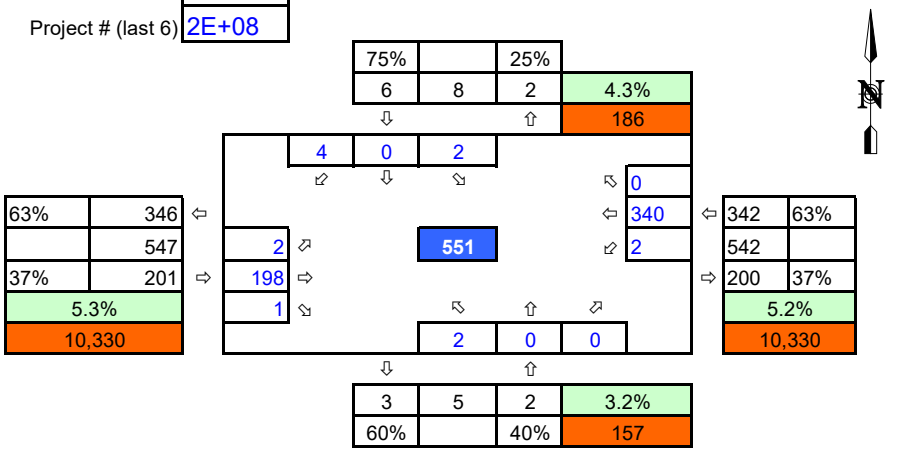
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

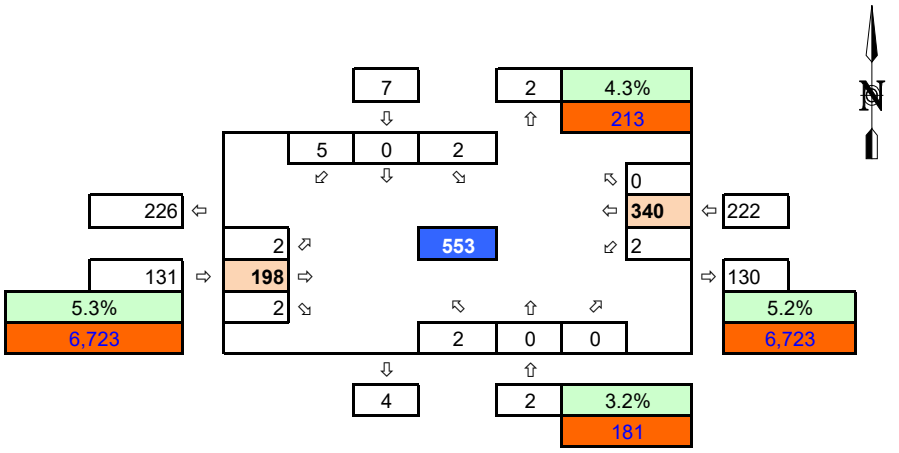
xx = predicted volume < baseline; volume manually increased.

Int 7 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**
Intersection #:	7
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**



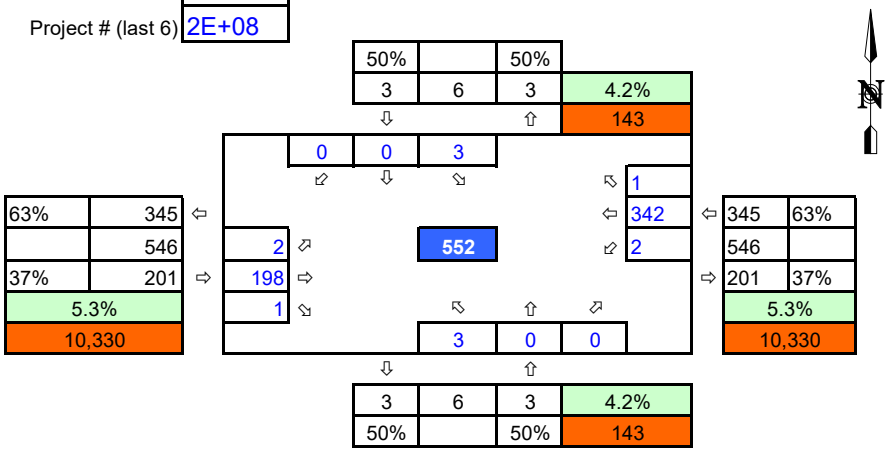
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

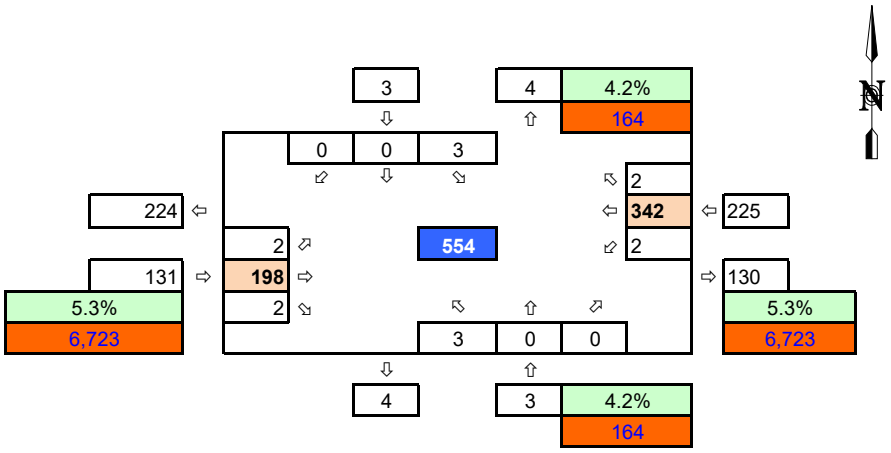
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 8 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**
Intersection #:	8
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**



LEGEND

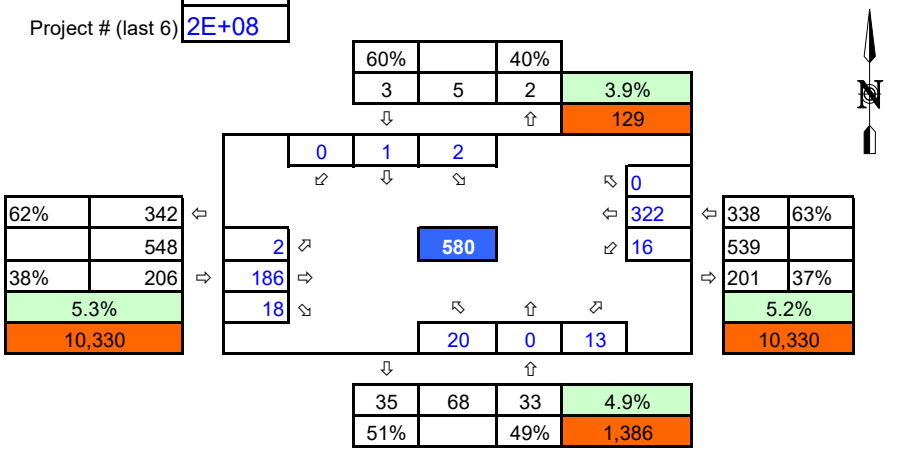
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

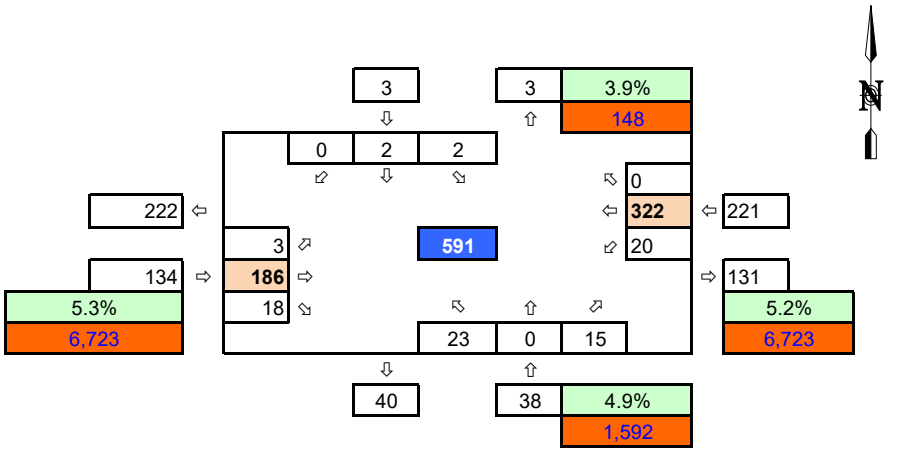
xx = predicted volume < baseline; volume manually increased.

Int 9 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**
Intersection #:	9
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**



LEGEND

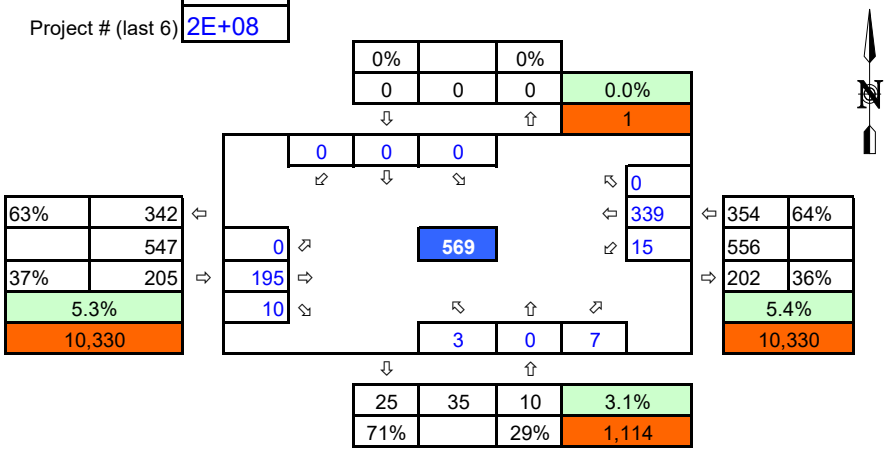
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

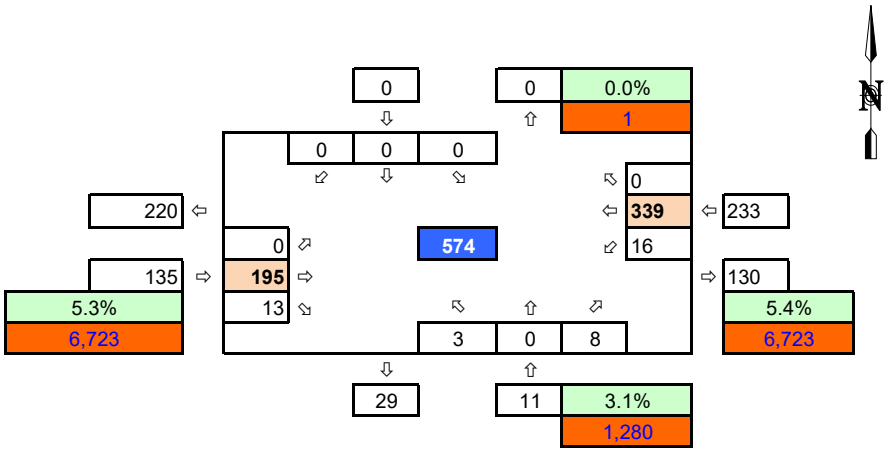
xx = predicted volume < baseline; volume manually increased.

Int 10 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**
Intersection #:	10
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**



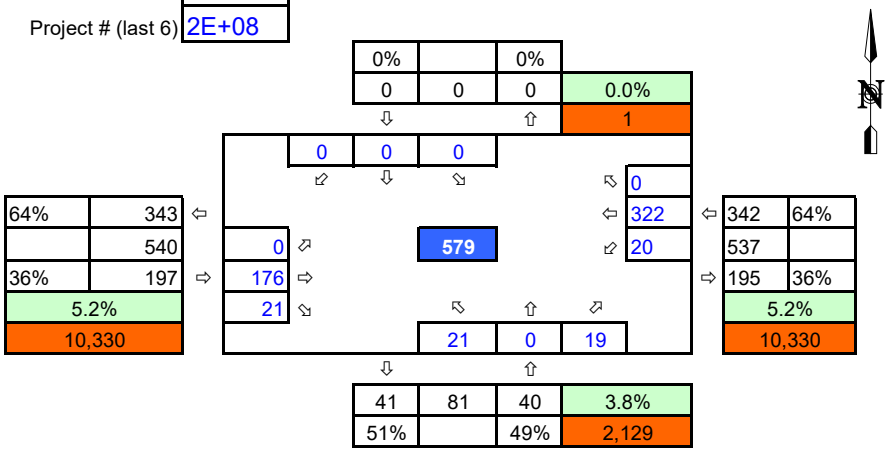
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

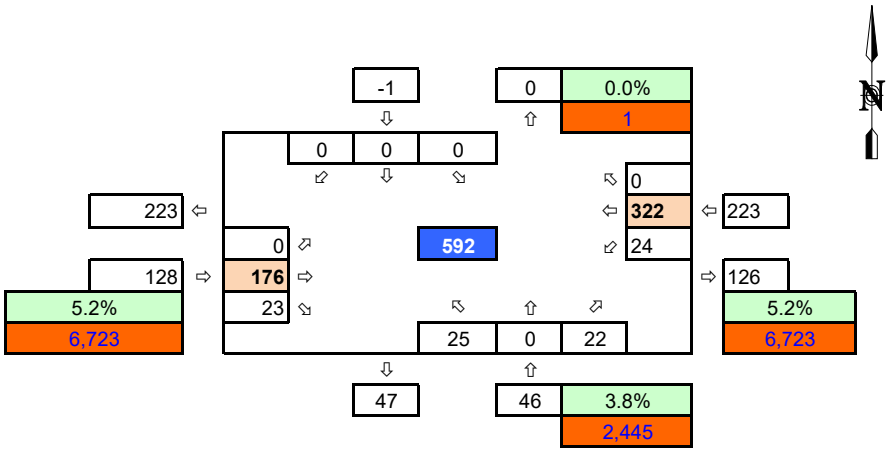
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 11 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**
Intersection #:	11
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**



LEGEND

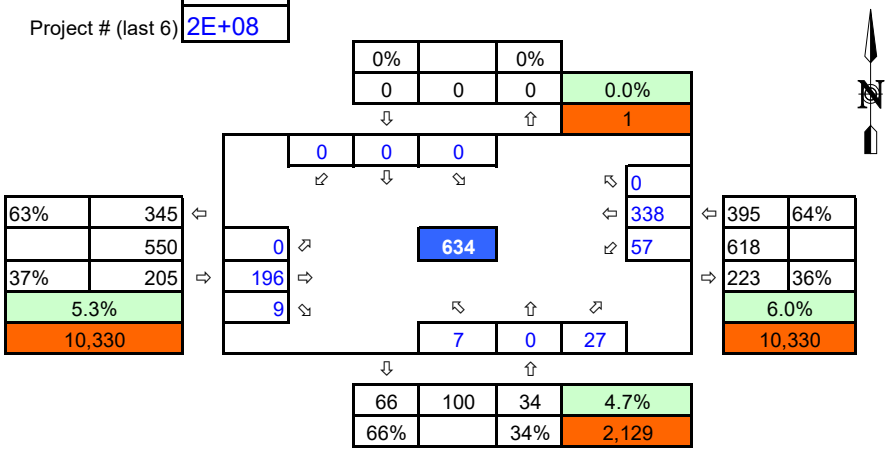
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

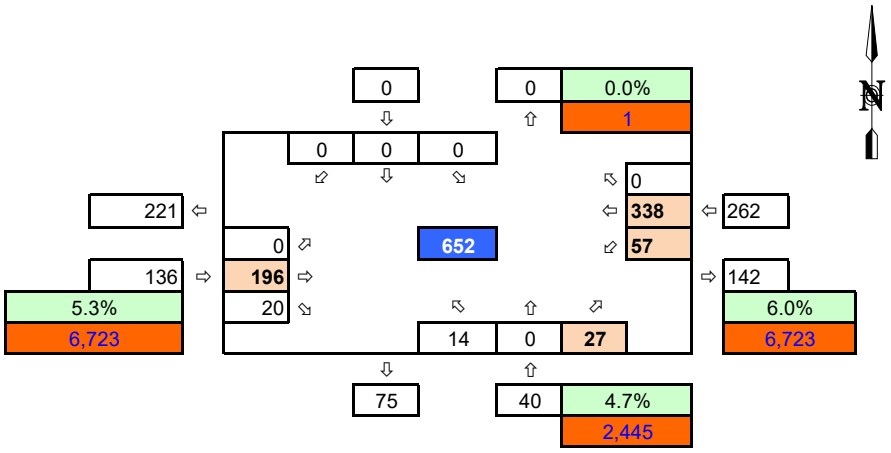
xx = predicted volume < baseline; volume manually increased.

Int 12 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**
Intersection #:	12
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**



LEGEND

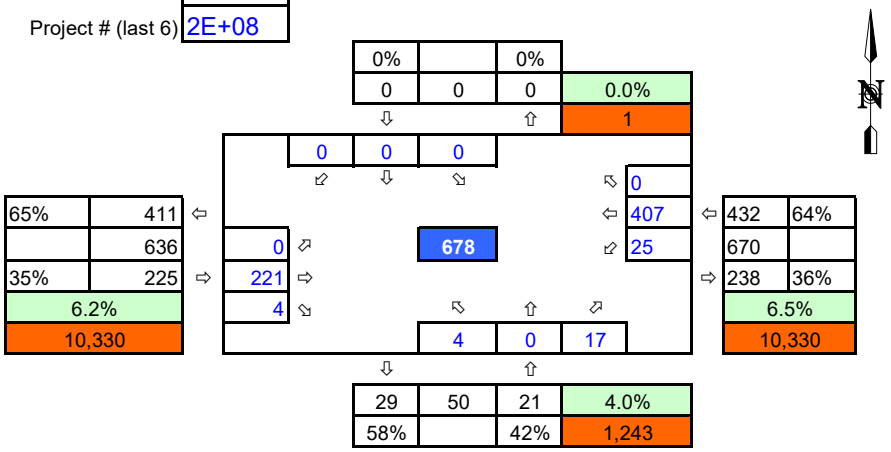
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

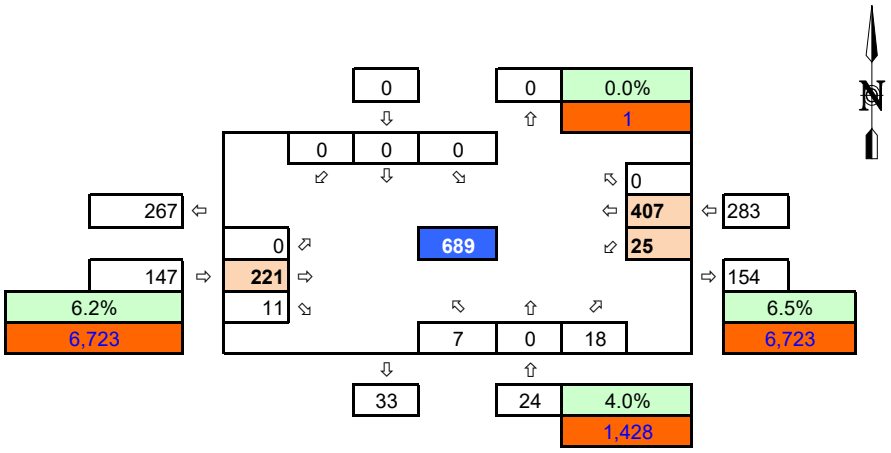
xx = predicted volume < baseline; volume manually increased.

Int 13 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**
Intersection #:	13
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**



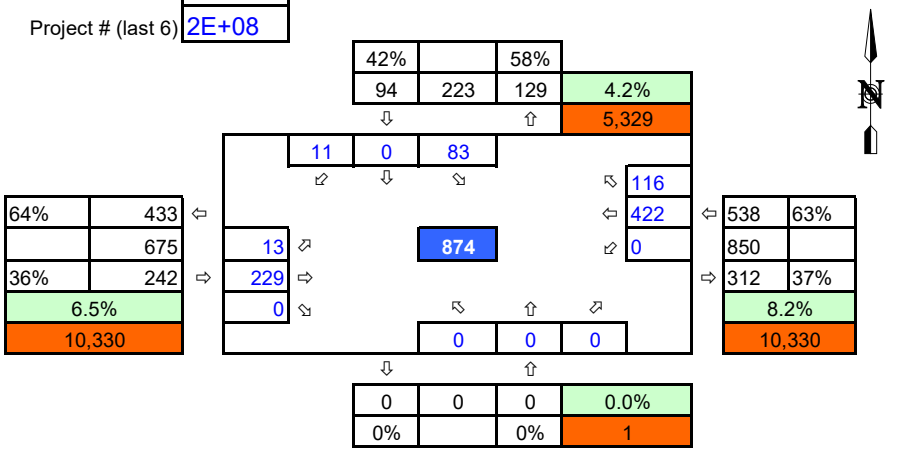
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

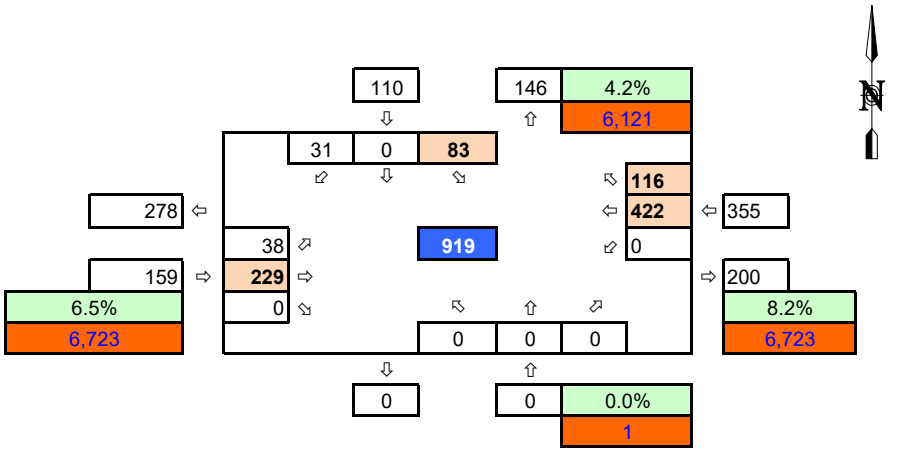
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 14 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**
Intersection #:	14
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**



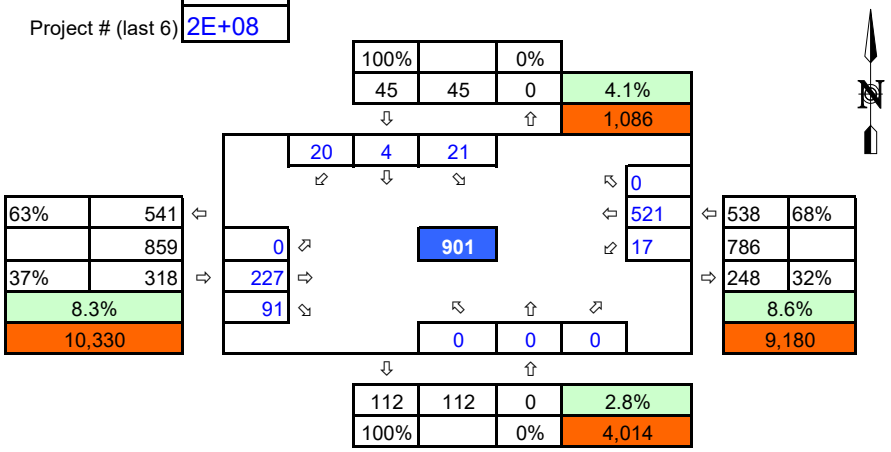
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

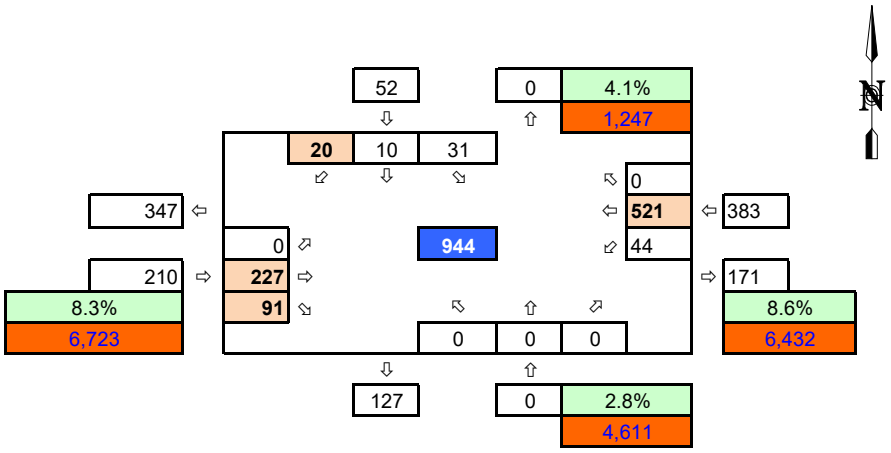
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 15 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**
Intersection #:	15
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**



LEGEND

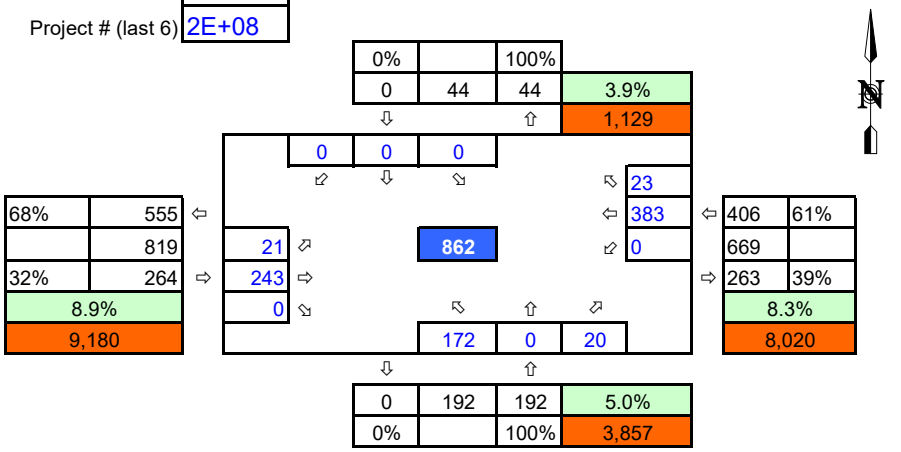
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

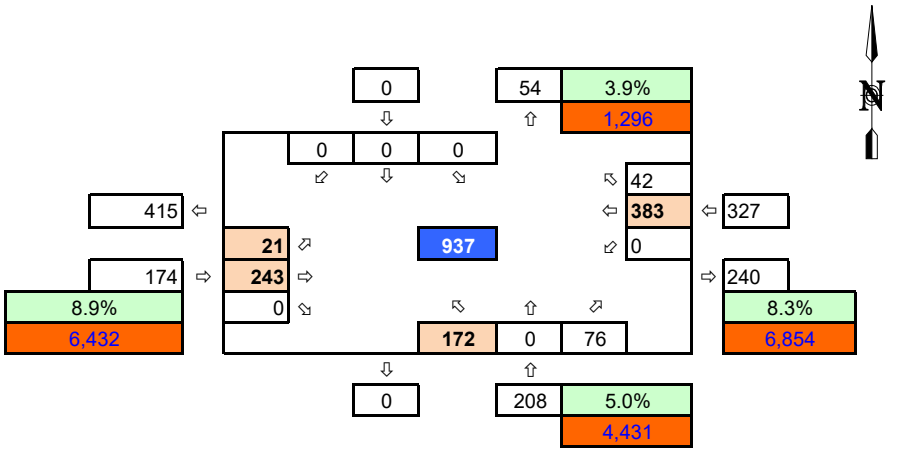
xx = predicted volume < baseline; volume manually increased.

Int 16 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**
Intersection #:	16
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**



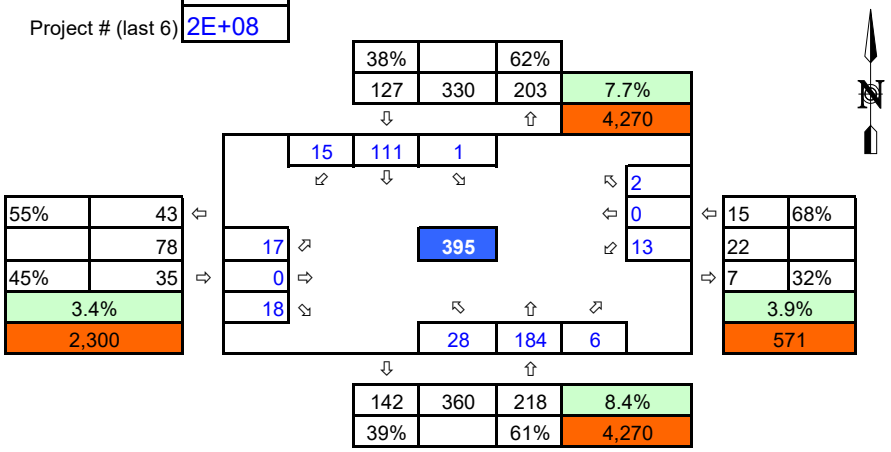
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

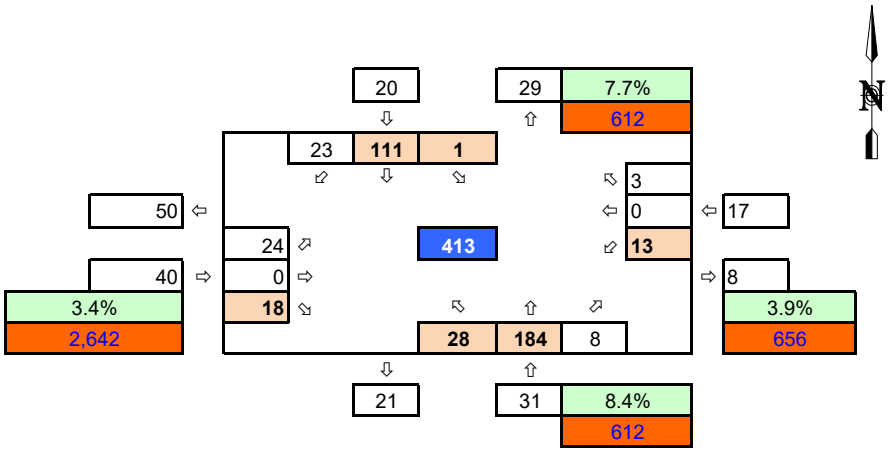
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 17 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**
Intersection #:	17
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**



LEGEND

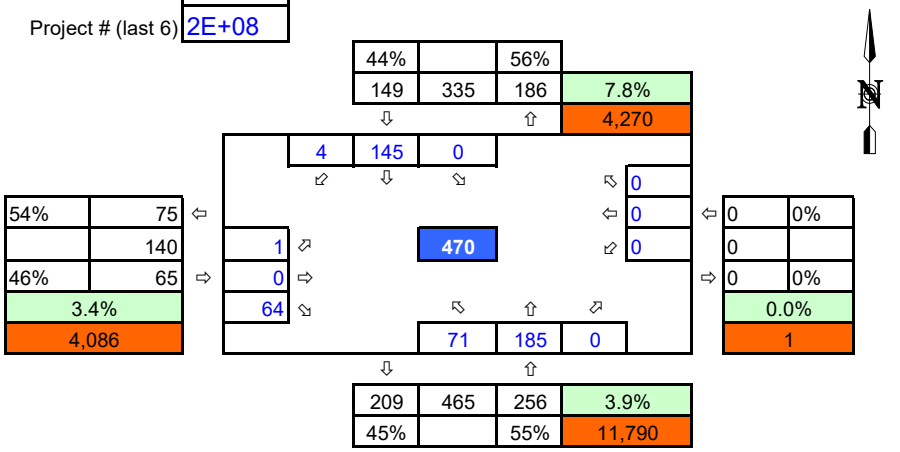
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

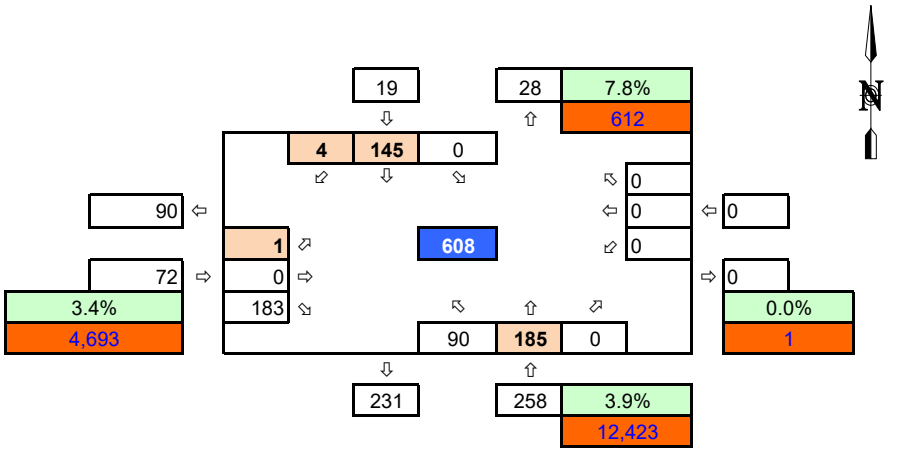
xx = predicted volume < baseline; volume manually increased.

Int 18 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**
Intersection #:	18
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**



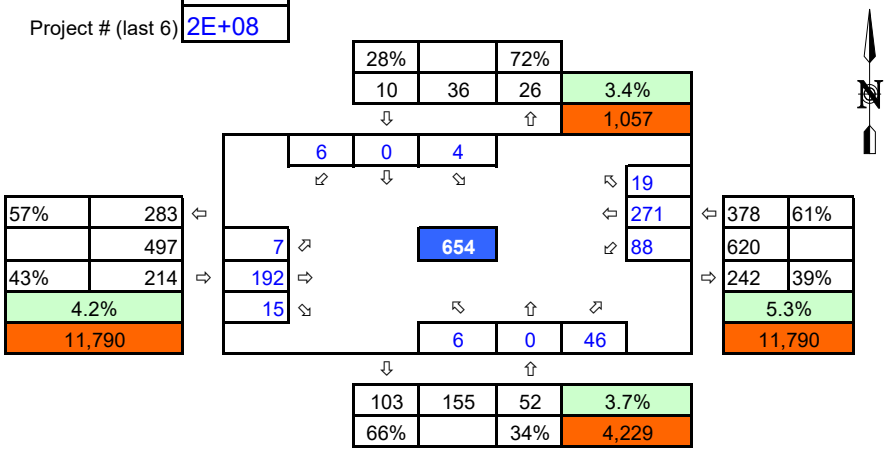
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

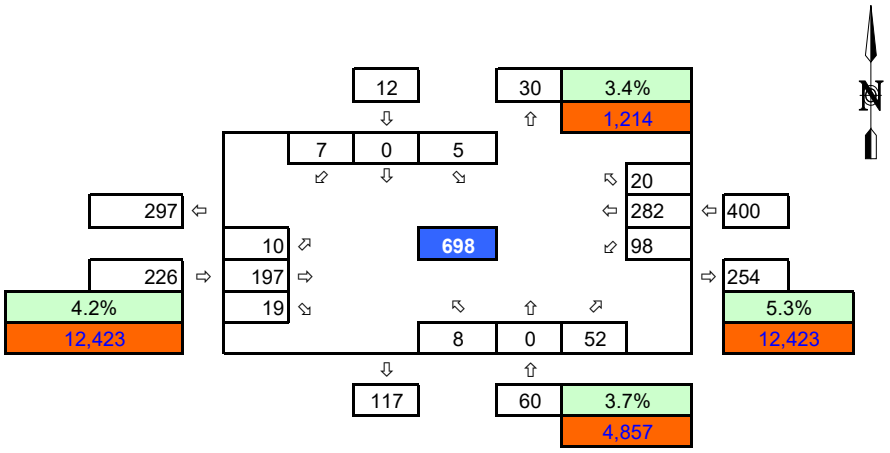
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 19 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**
Intersection #:	19
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**



LEGEND

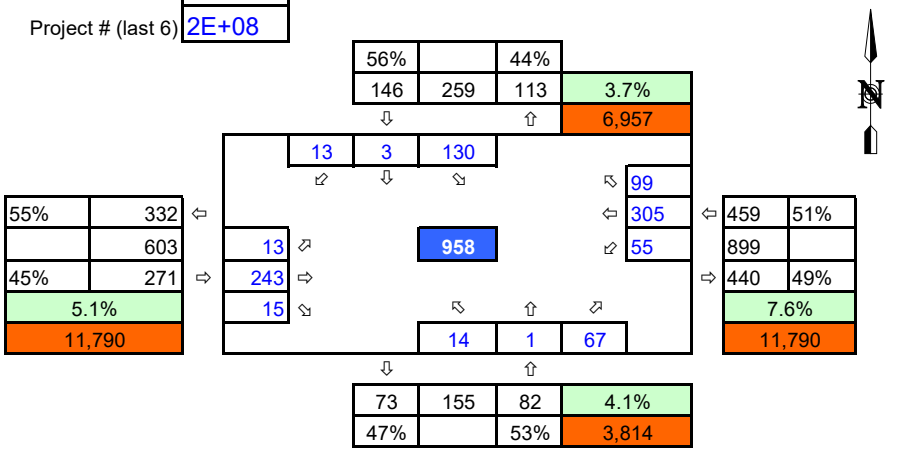
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

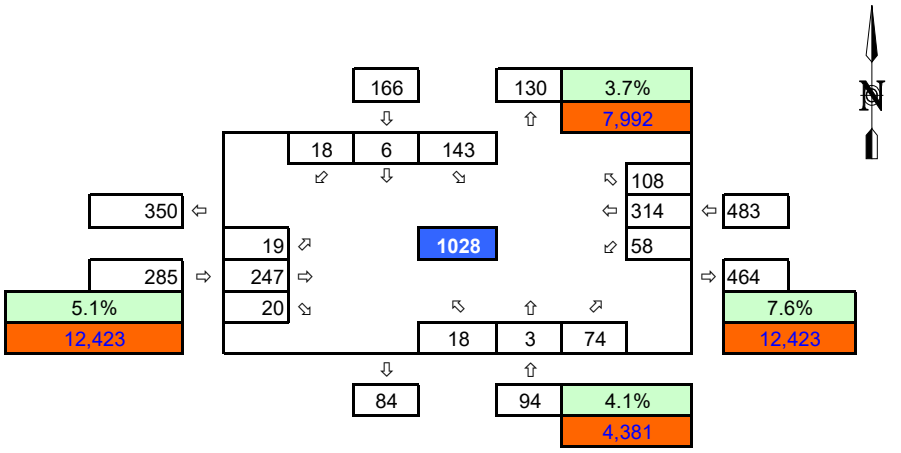
xx = predicted volume < baseline; volume manually increased.

Int 20 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**
Intersection #:	20
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**



LEGEND

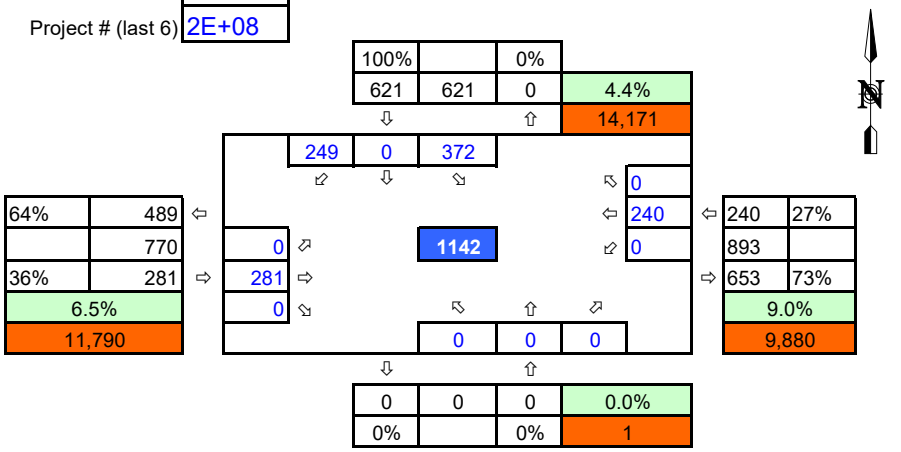
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

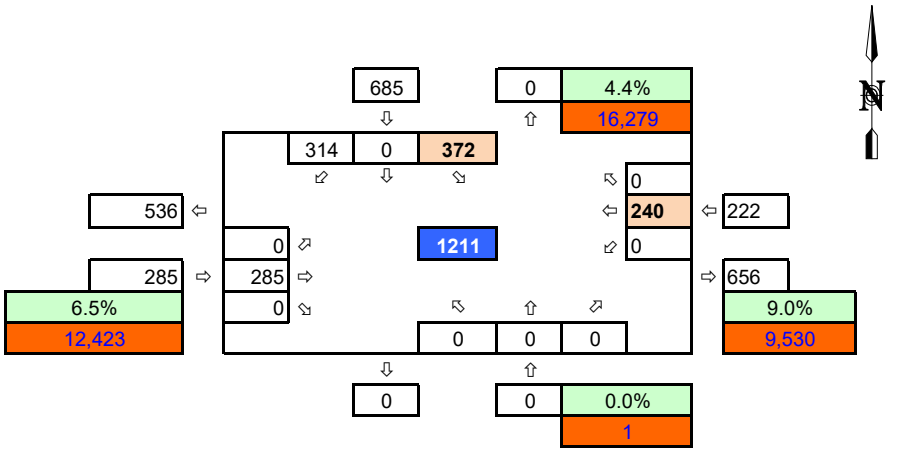
xx = predicted volume < baseline; volume manually increased.

Int 21 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	21
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**



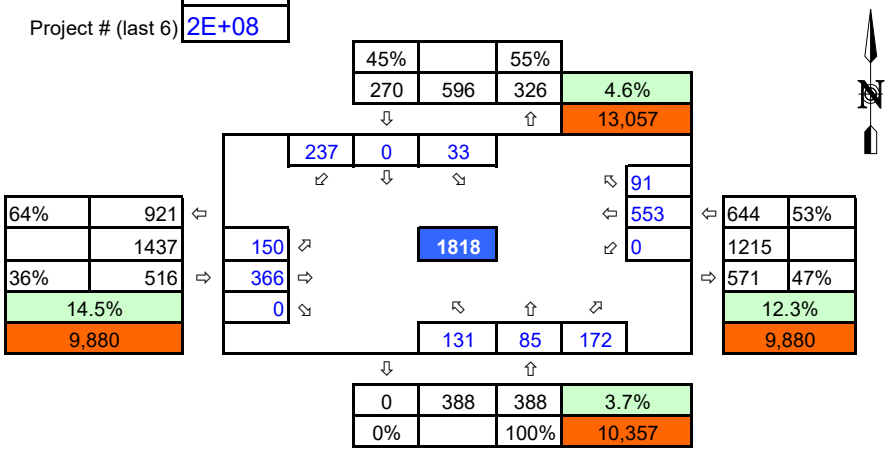
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

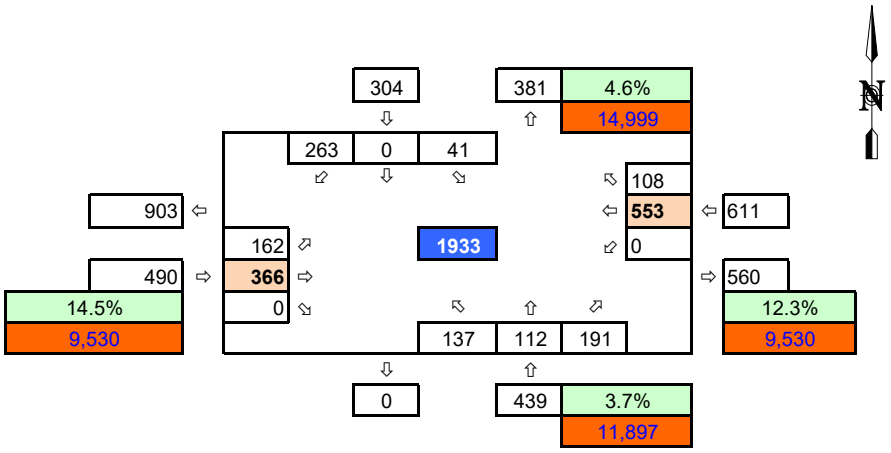
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 22 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	22
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**



LEGEND

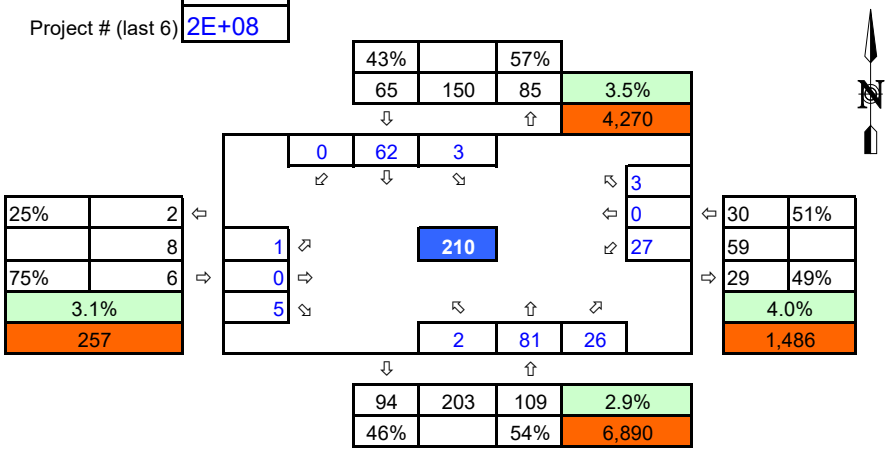
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

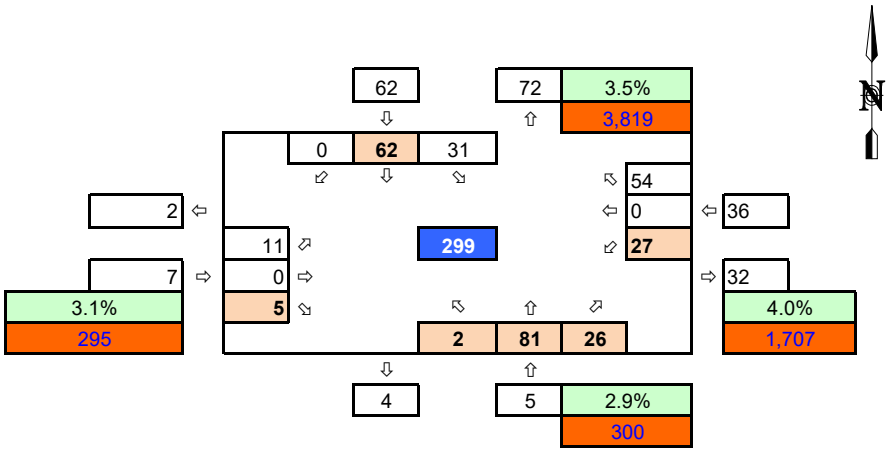
xx = predicted volume < baseline; volume manually increased.

Int 23 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**
Intersection #:	23
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**



LEGEND

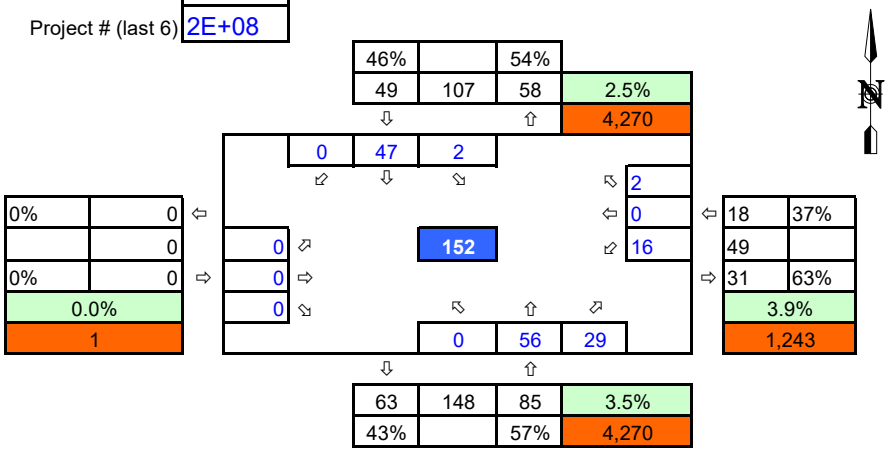
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

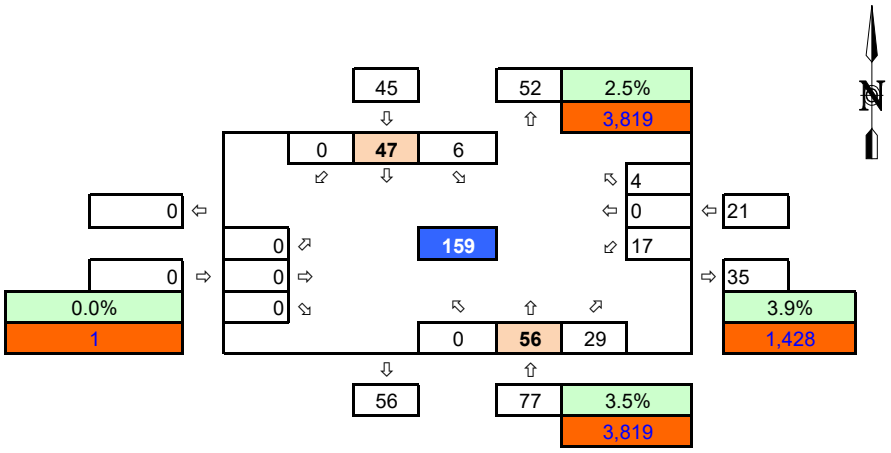
xx = predicted volume < baseline; volume manually increased.

Int 24 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**
Intersection #:	24
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**



LEGEND

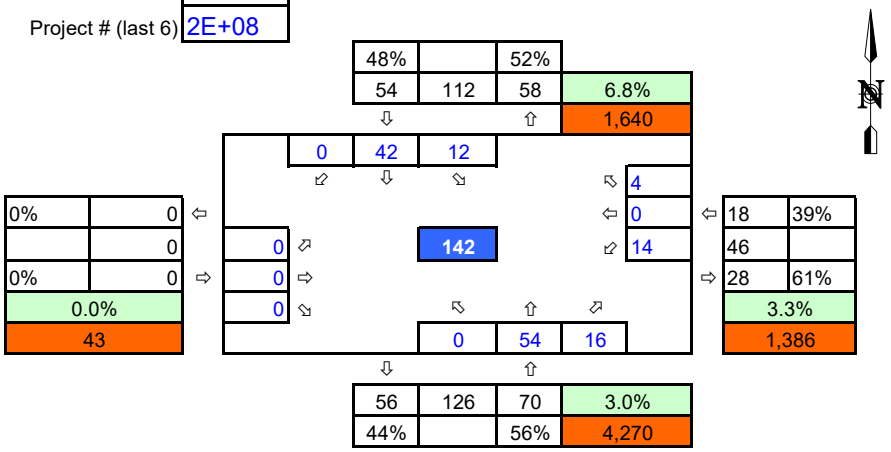
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

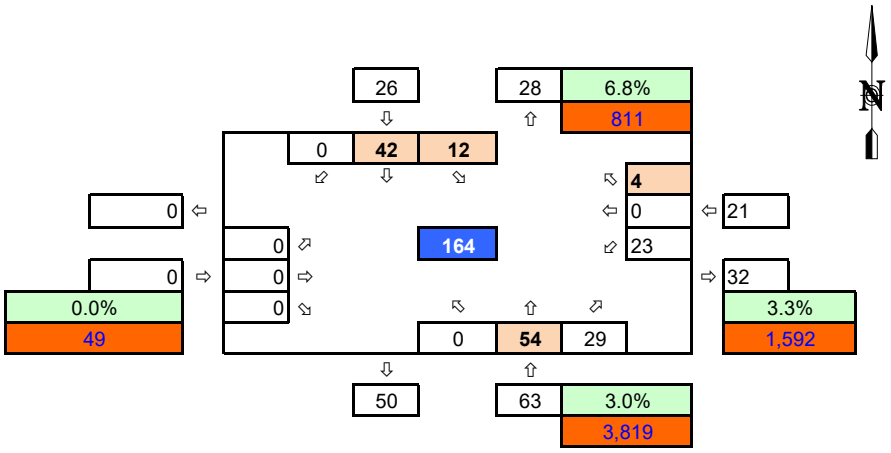
xx = predicted volume < baseline; volume manually increased.

Int 25 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**
Intersection #:	25
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**



LEGEND

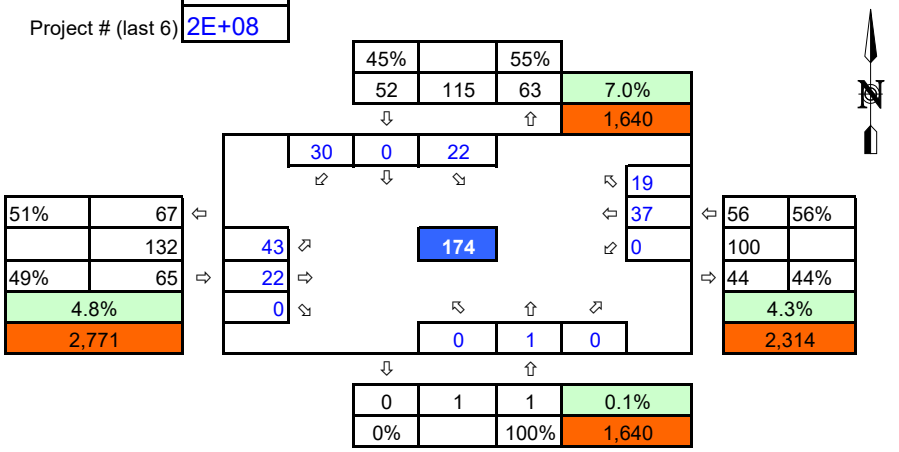
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

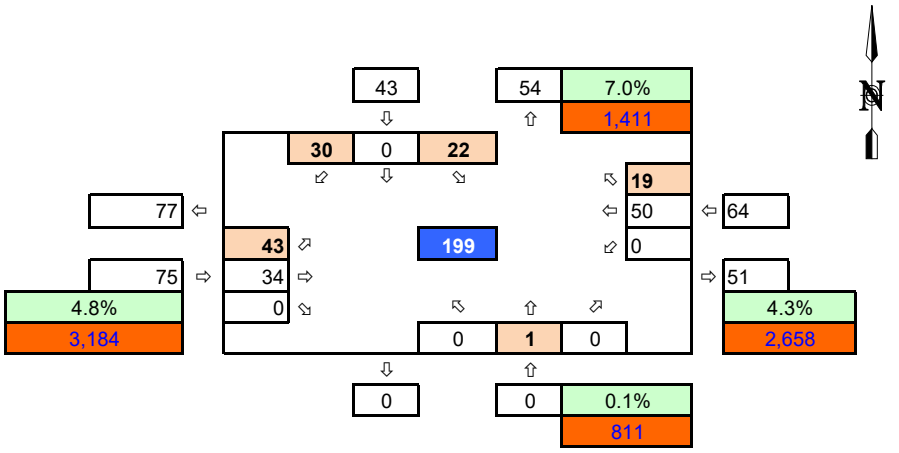
xx = predicted volume < baseline; volume manually increased.

Int 26 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**
Intersection #:	26
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**



LEGEND

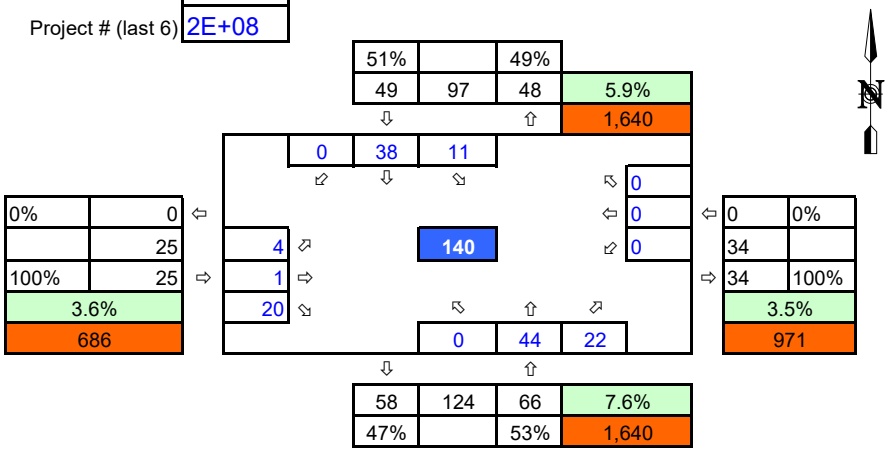
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

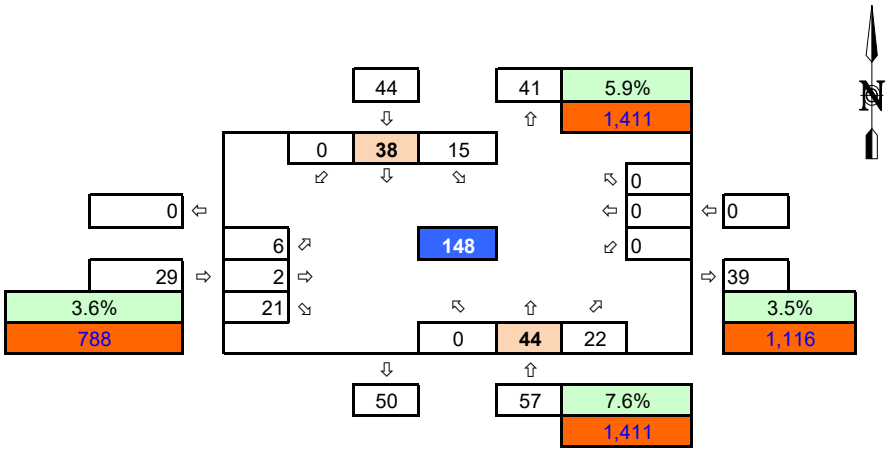
xx = predicted volume < baseline; volume manually increased.

Int 27 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**
Intersection #:	27
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**



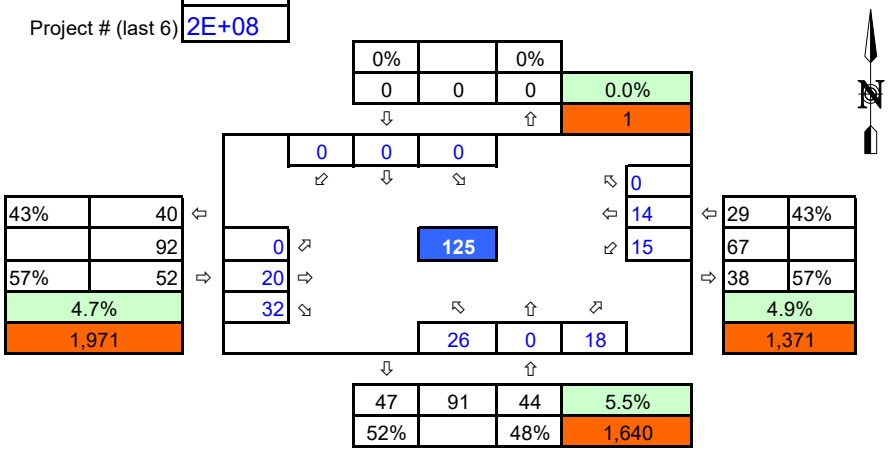
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

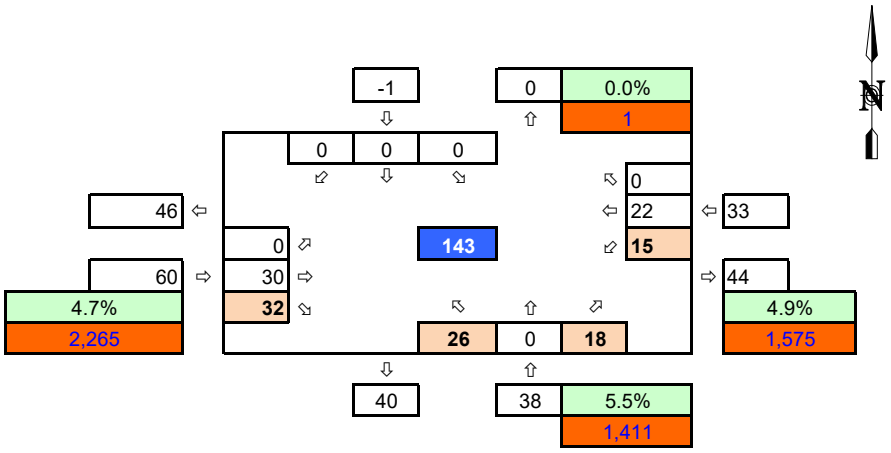
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 28 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**
Intersection #:	28
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**



LEGEND

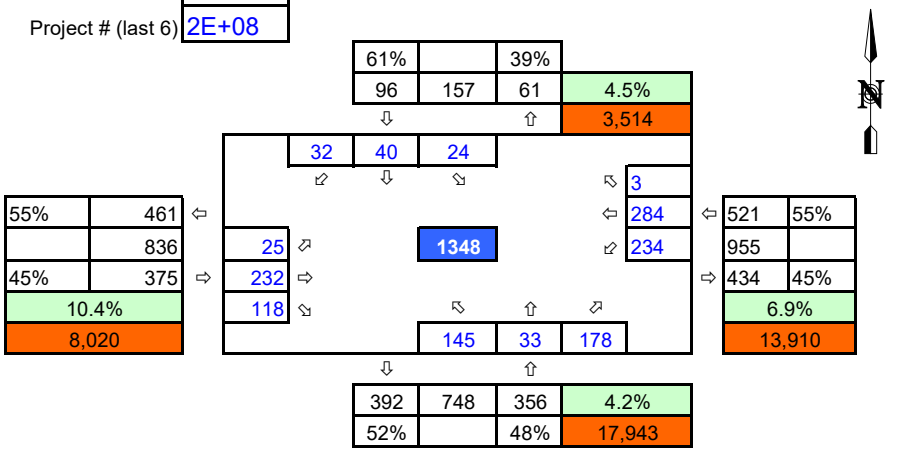
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

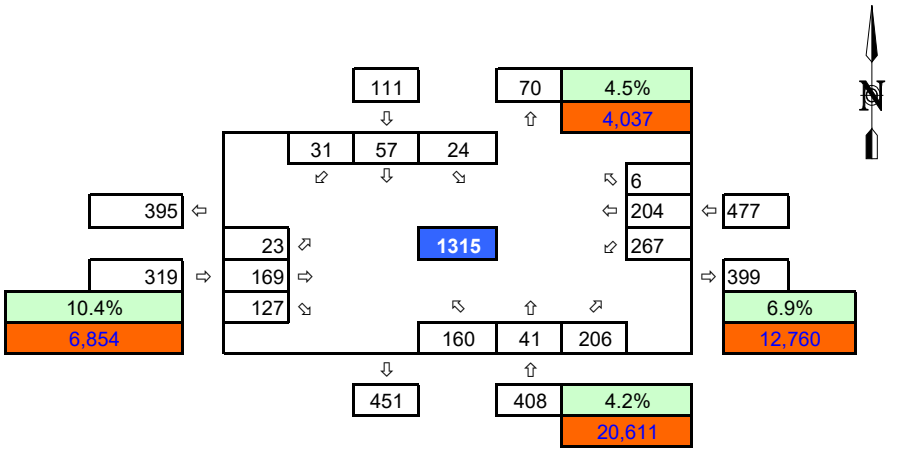
xx = predicted volume < baseline; volume manually increased.

Int 29 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**
Intersection #:	29
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**



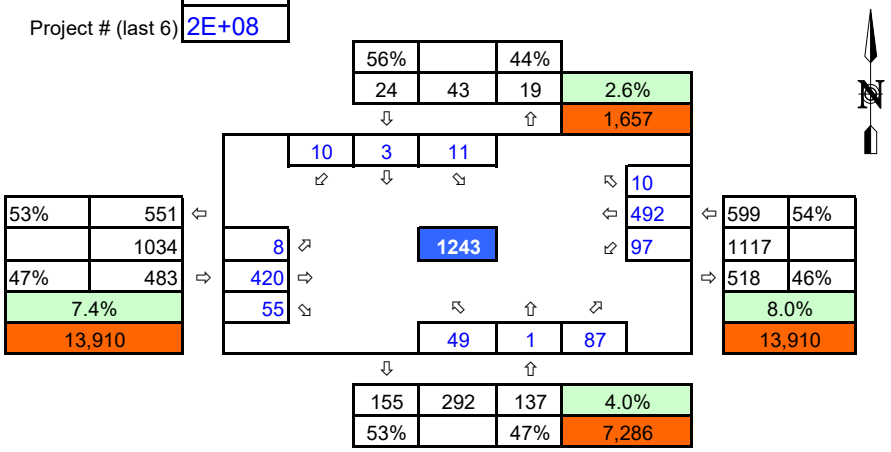
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

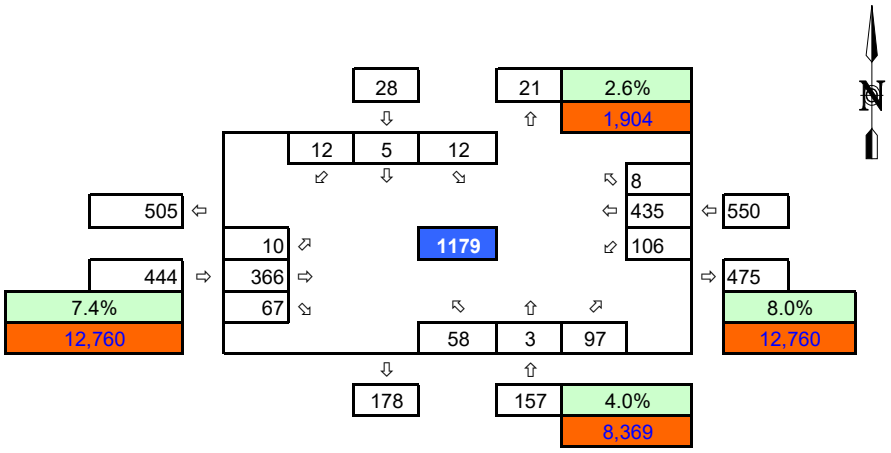
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 30 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**
Intersection #:	30
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**



LEGEND

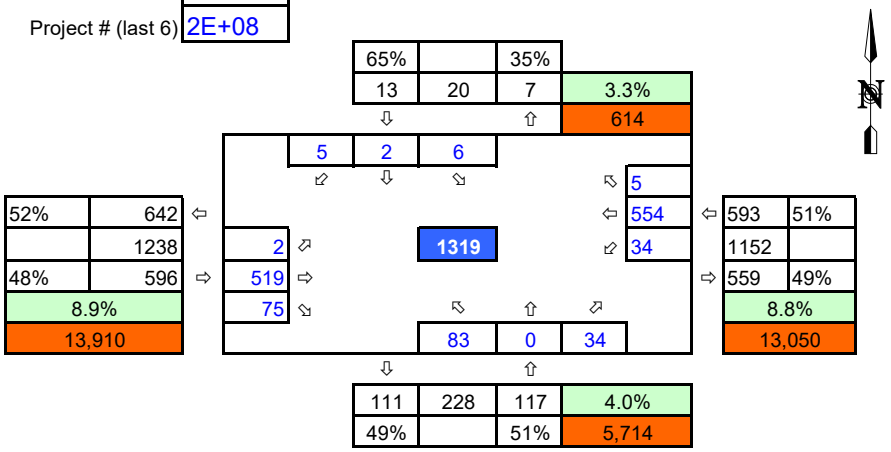
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

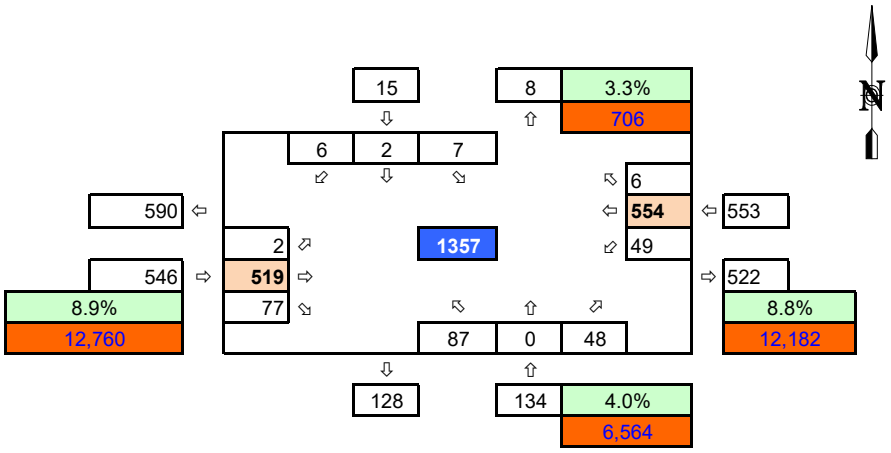
xx = predicted volume < baseline; volume manually increased.

Int 31 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**
Intersection #:	31
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**



LEGEND

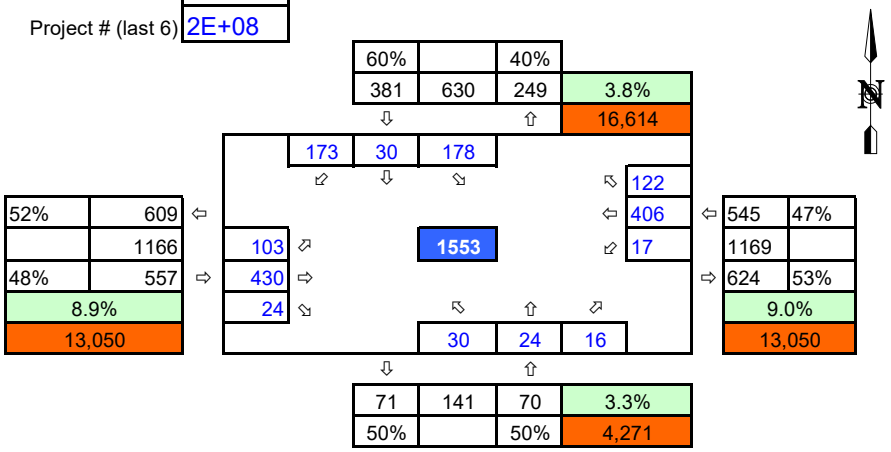
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

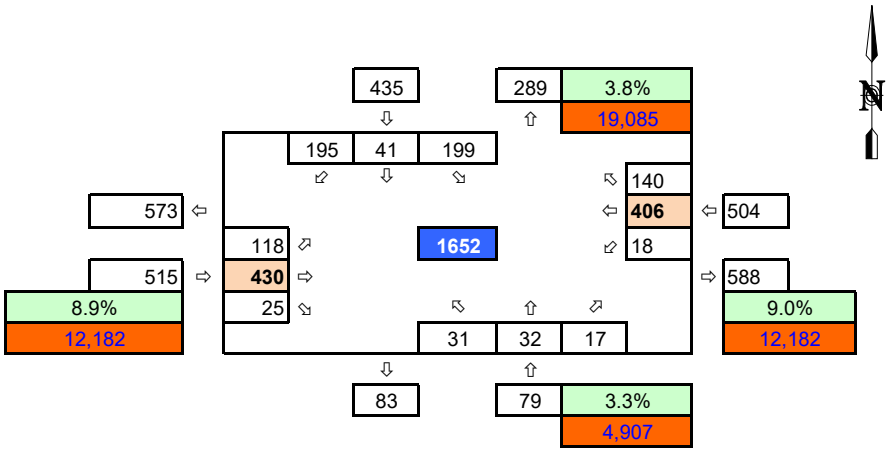
xx = predicted volume < baseline; volume manually increased.

Int 32 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**
Intersection #:	32
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**



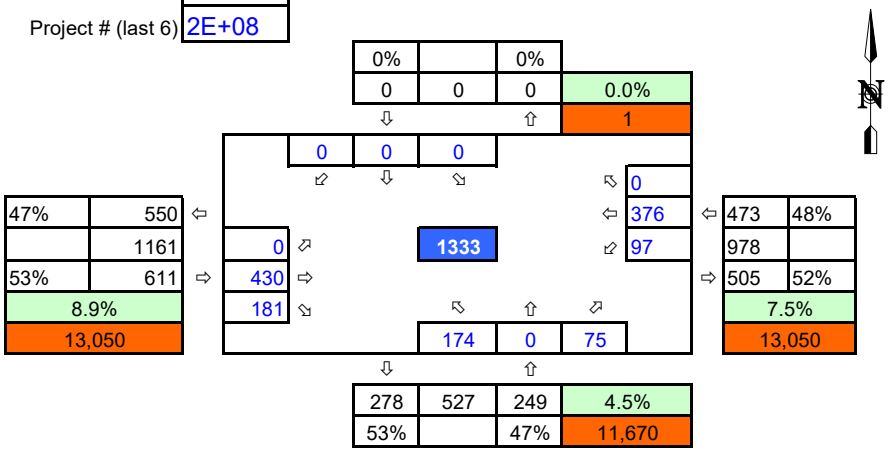
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

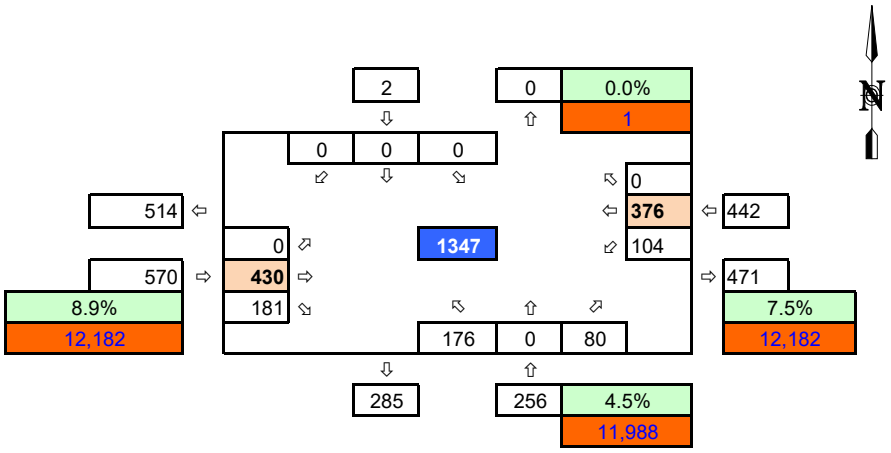
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 33 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**
Intersection #:	33
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**



LEGEND

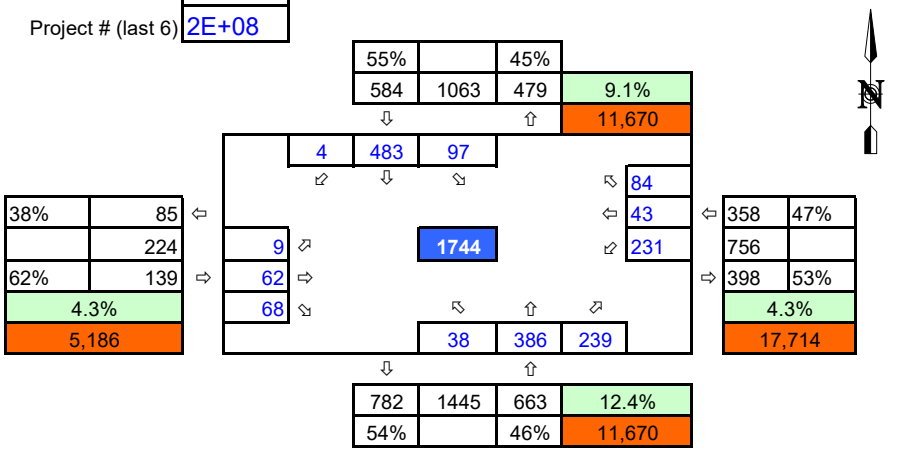
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

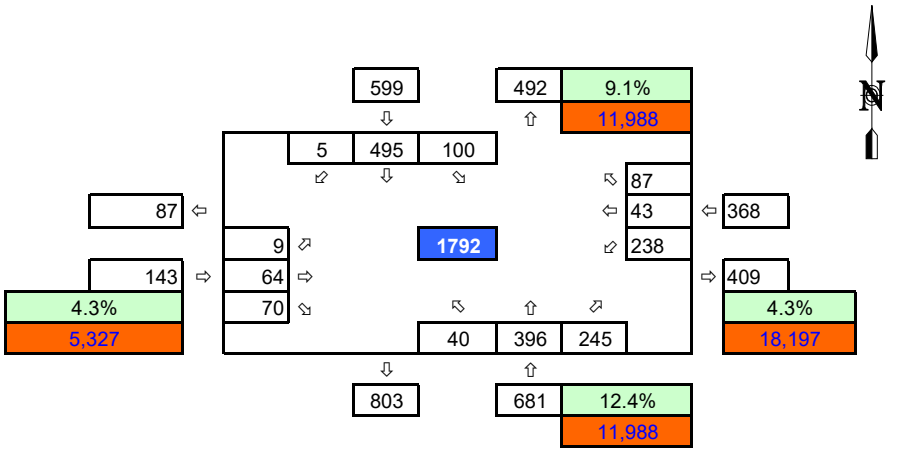
xx = predicted volume < baseline; volume manually increased.

Int 34 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**
Intersection #:	34
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**



LEGEND

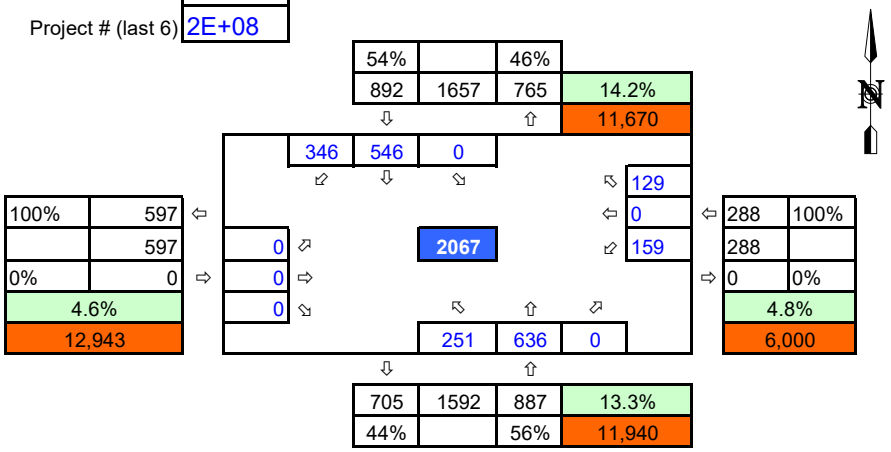
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

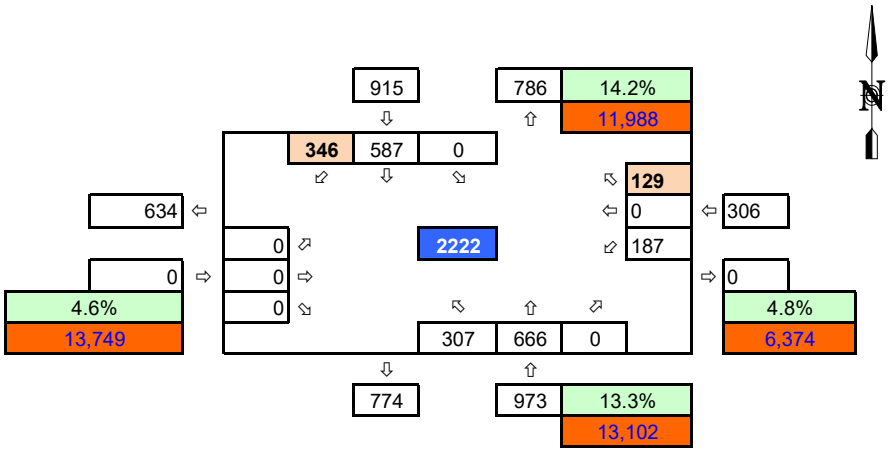
xx = predicted volume < baseline; volume manually increased.

Int 35 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**
Intersection #:	35
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**



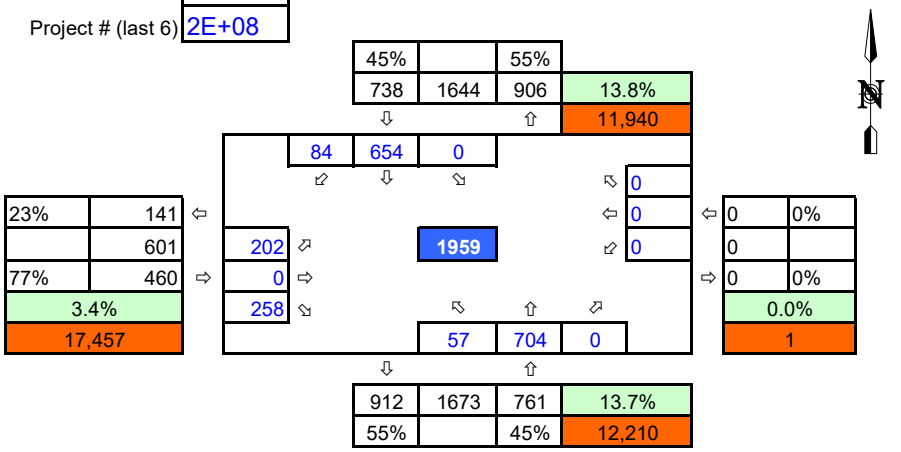
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

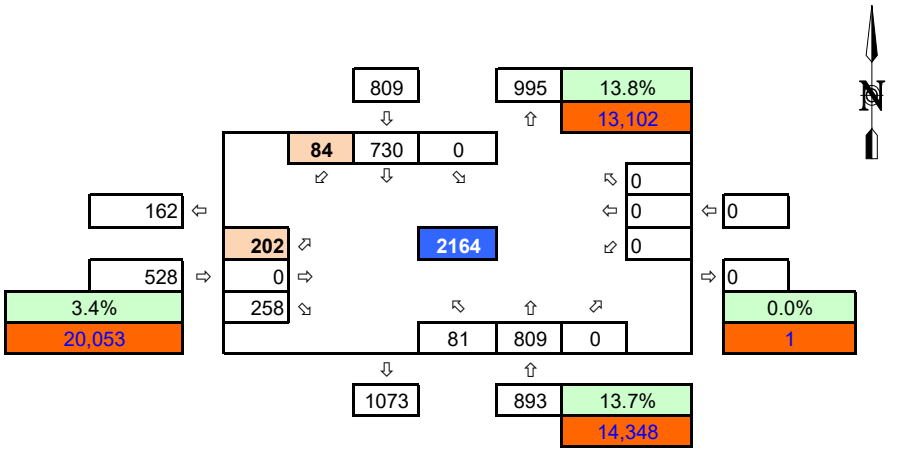
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 36 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**
Intersection #:	36
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**



LEGEND

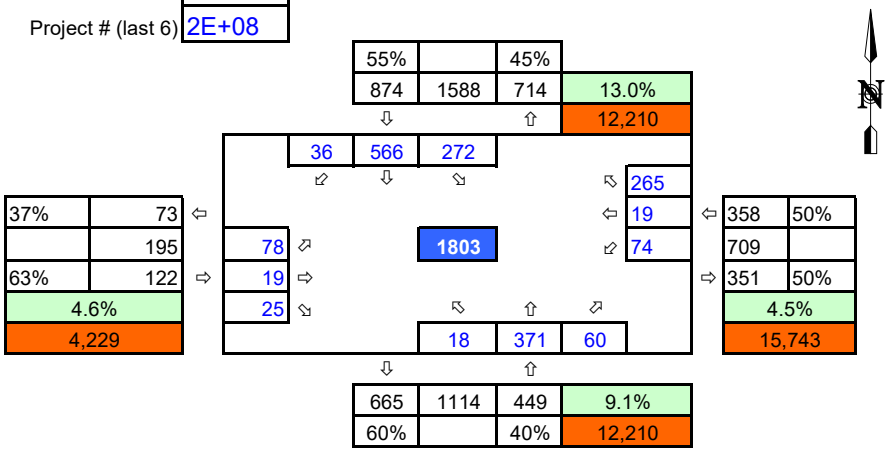
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

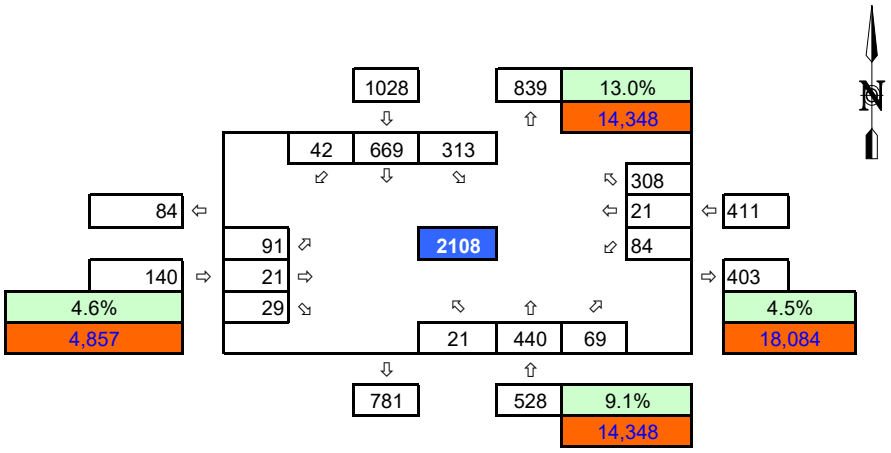
xx = predicted volume < baseline; volume manually increased.

Int 37 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**
Intersection #:	37
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**



LEGEND

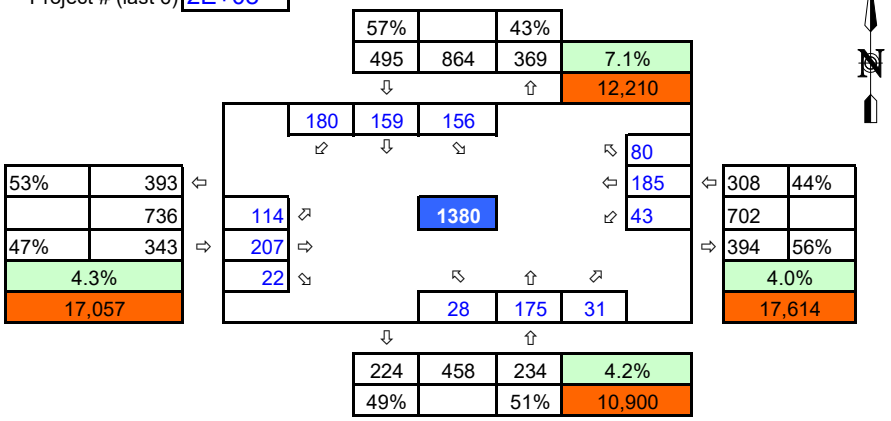
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

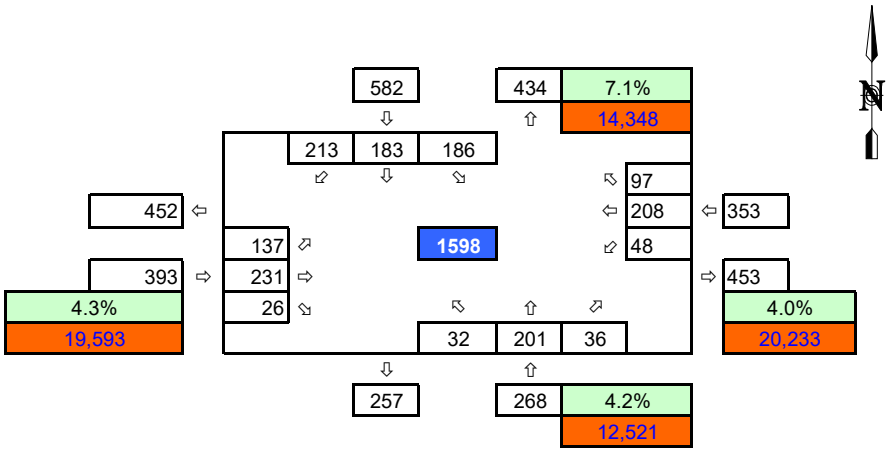
xx = predicted volume < baseline; volume manually increased.

Int 38 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**
Intersection #:	38
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**



LEGEND

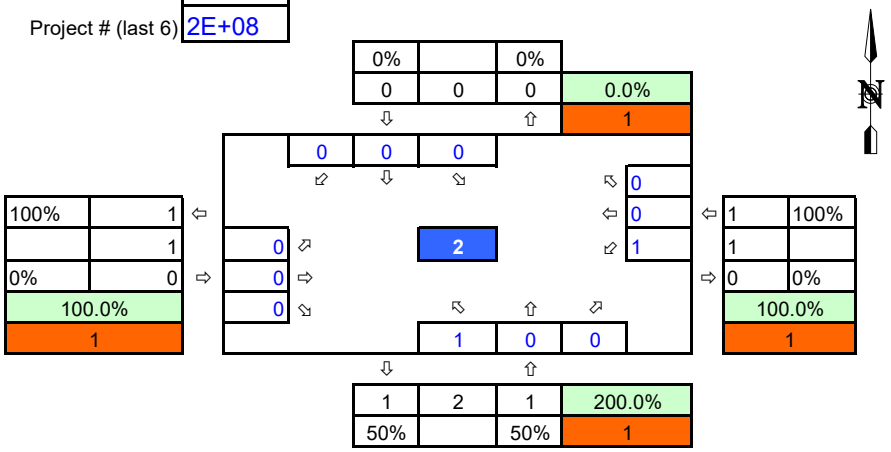
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

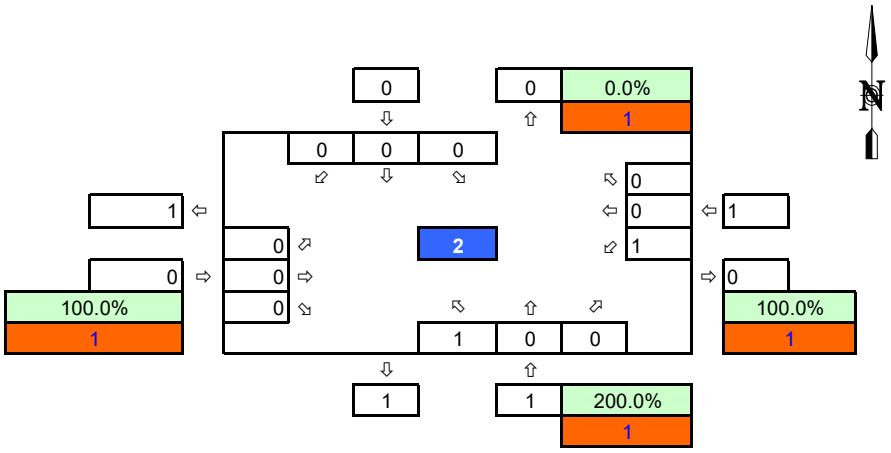
xx = predicted volume < baseline; volume manually increased.

Int 39 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	39
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**



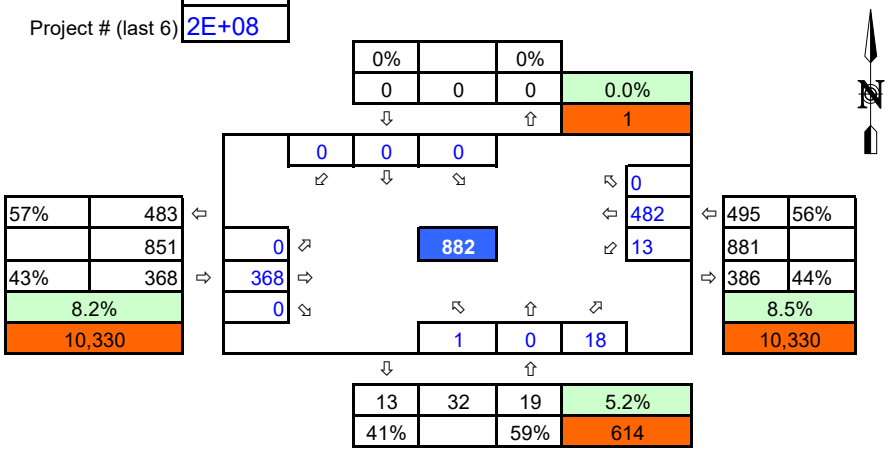
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

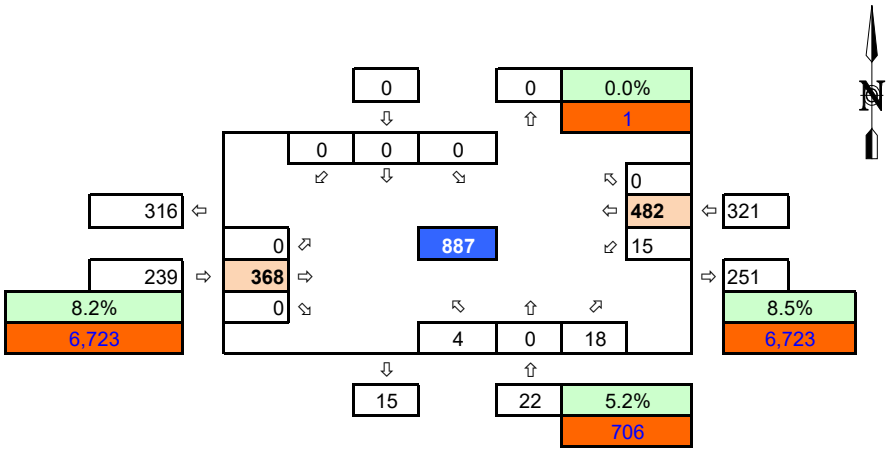
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 40 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**
Intersection #:	40
Project # (last 6)	2E+08



Scenario:	**Opening Year Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**



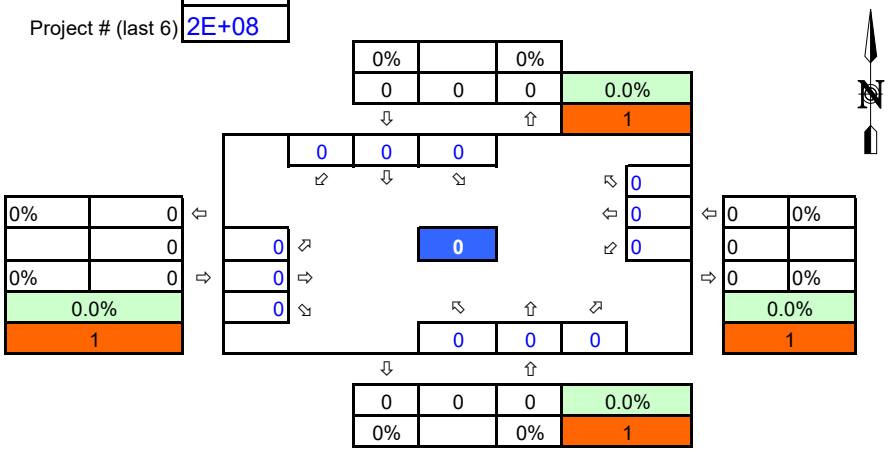
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

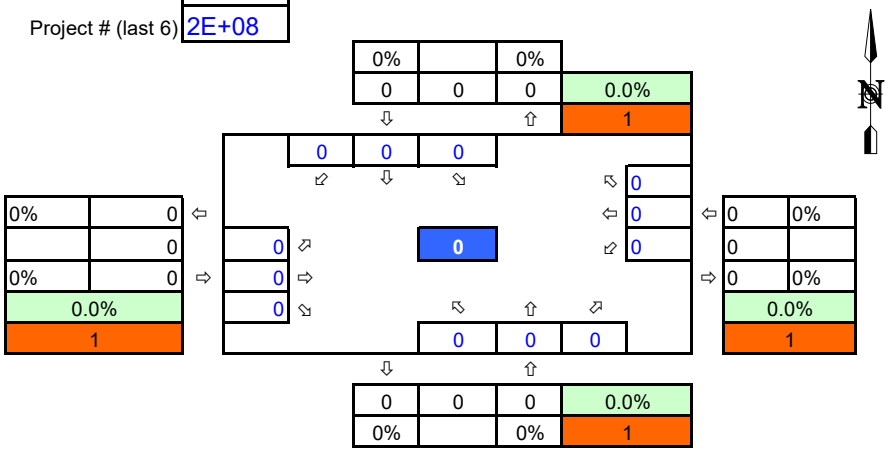
Int 41 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**A St / Jiggs Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	41
Project # (last 6)	2E+08


0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0
0% 0 0 0 0% 0 0 0 0

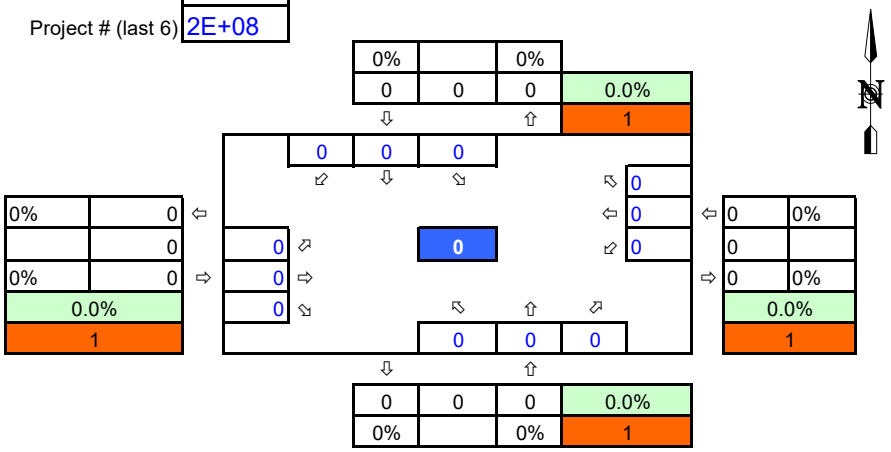
Int 42 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**B St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	42
Project # (last 6)	2E+08


0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0
0% 0 0 0 0% 0 0 0 0

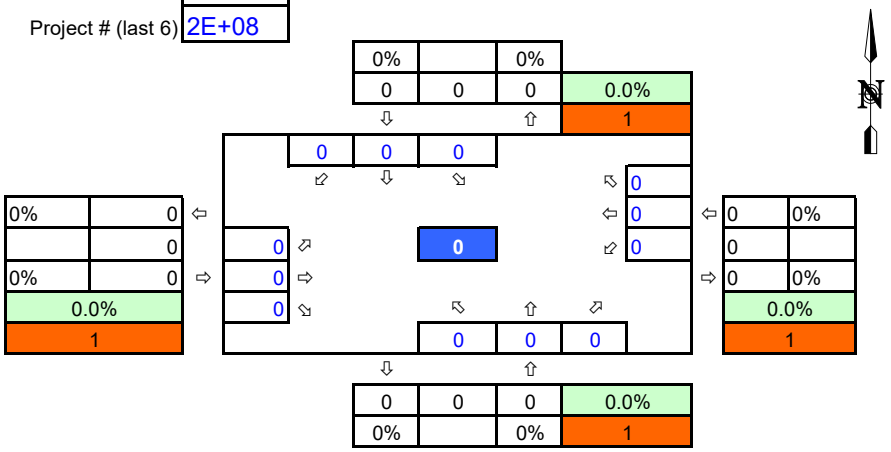
Int 43 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**C St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	43
Project # (last 6)	2E+08


0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0
0% 0 0 0 0% 0 0 0 0

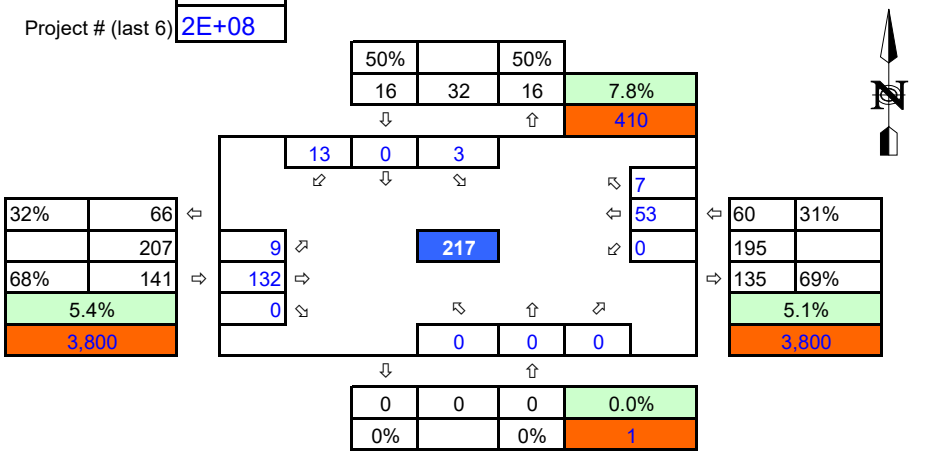
Int 44 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**C St**
E/W Street:	**0 / F St**
Intersection #:	44
Project # (last 6)	2E+08

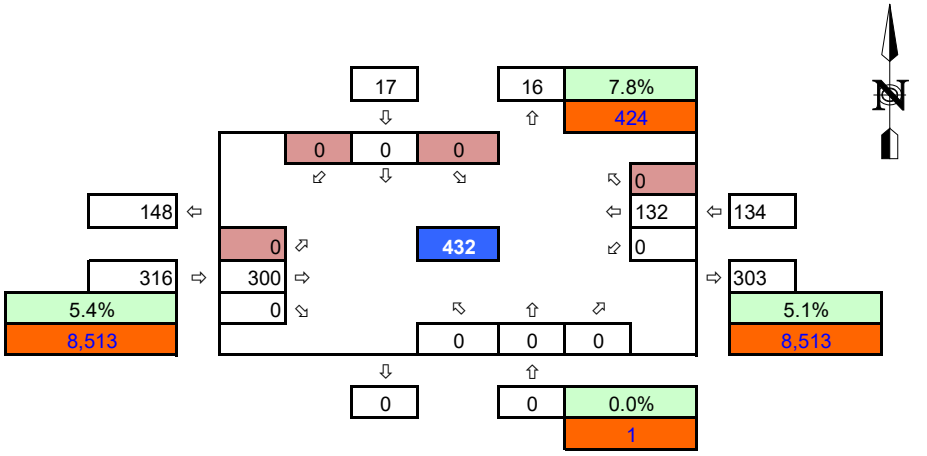

0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0
0% 0 0 0 0% 0 0 0 0

Int 1 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**
Intersection #:	1
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**



LEGEND

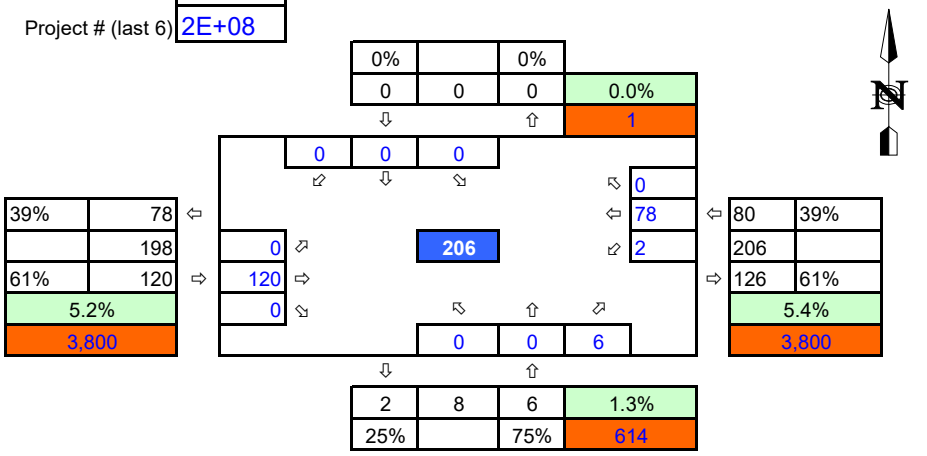
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

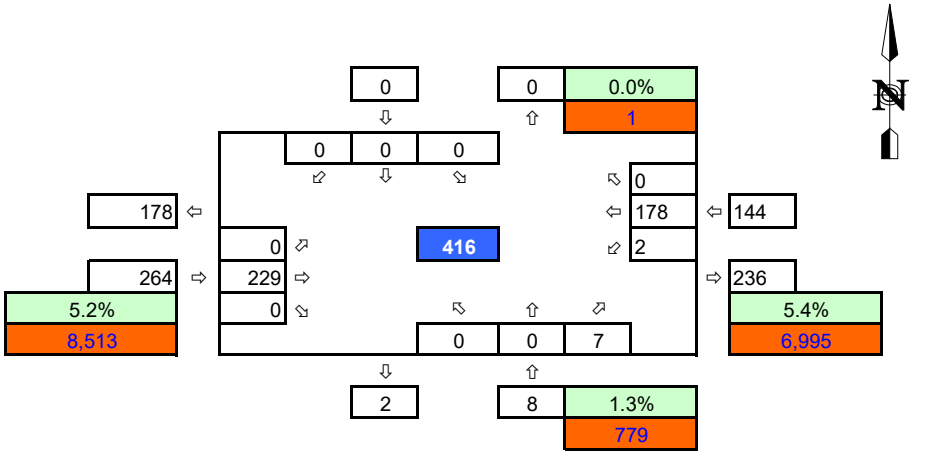
xx = predicted volume < baseline; volume manually increased.

Int 2 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**
Intersection #:	2
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**



LEGEND

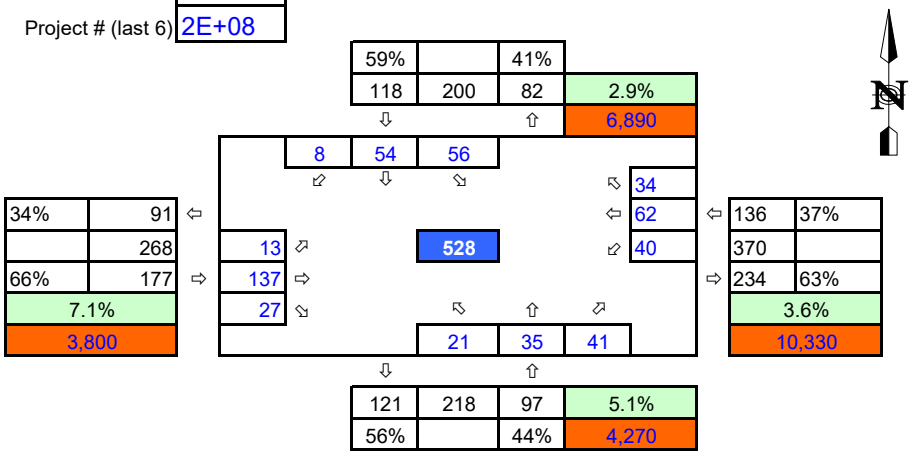
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

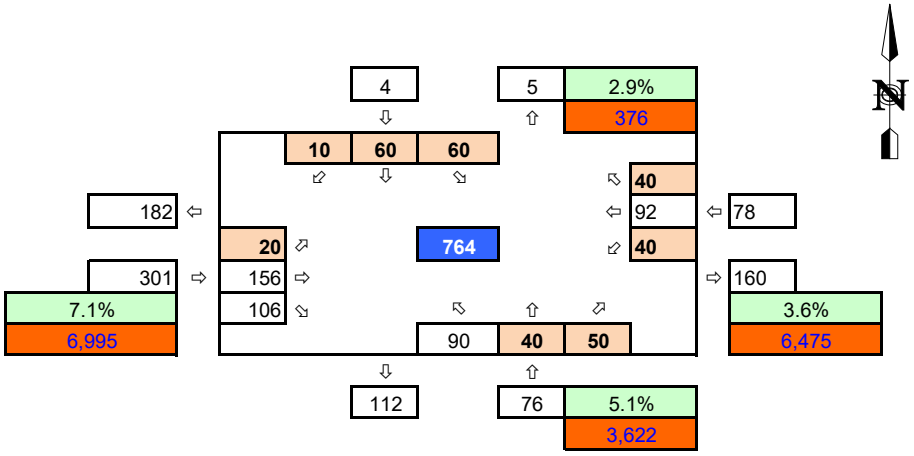
xx = predicted volume < baseline; volume manually increased.

Int 3 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**
Intersection #:	3
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**



LEGEND

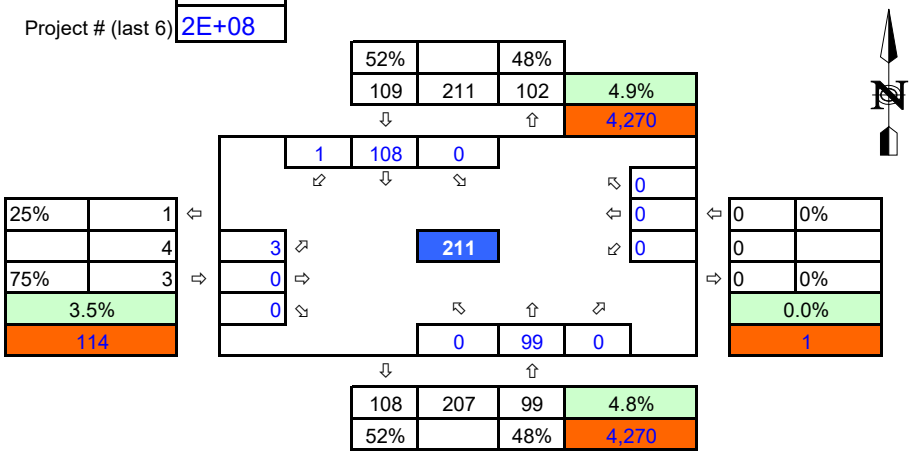
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

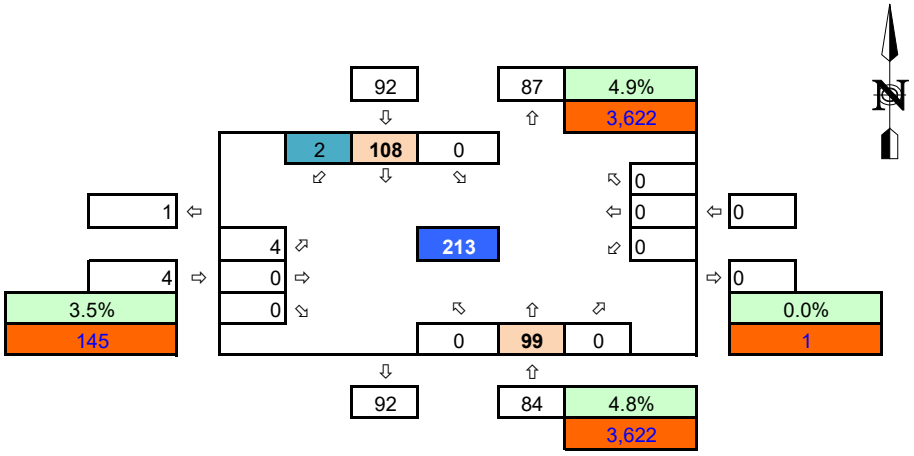
xx = predicted volume < baseline; volume manually increased.

Int 4 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**
Intersection #:	4
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**



LEGEND

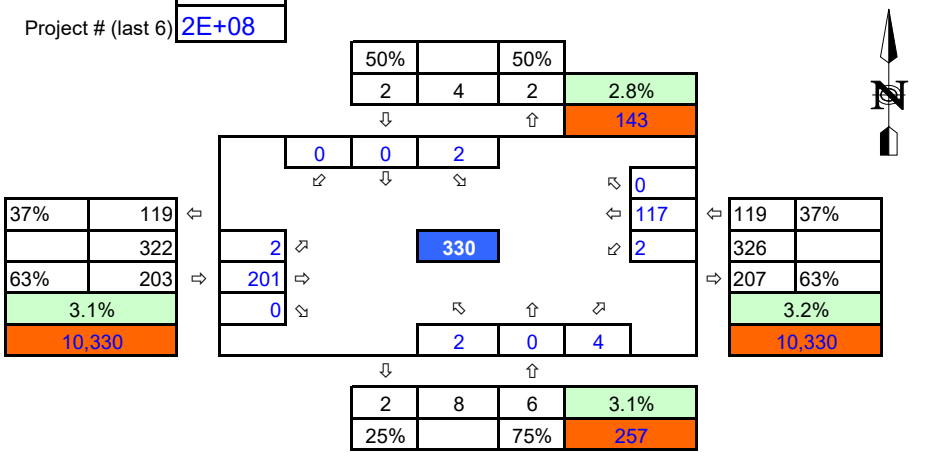
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

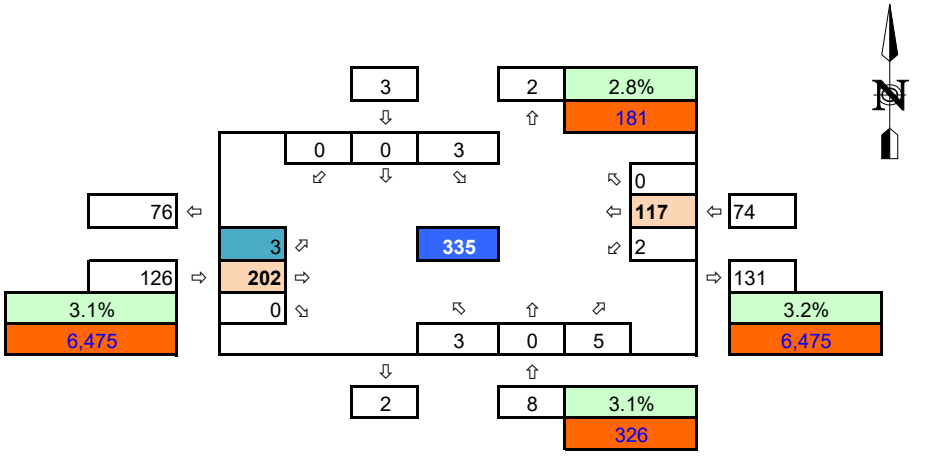
xx = predicted volume < baseline; volume manually increased.

Int 5 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**
Intersection #:	5
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**



LEGEND

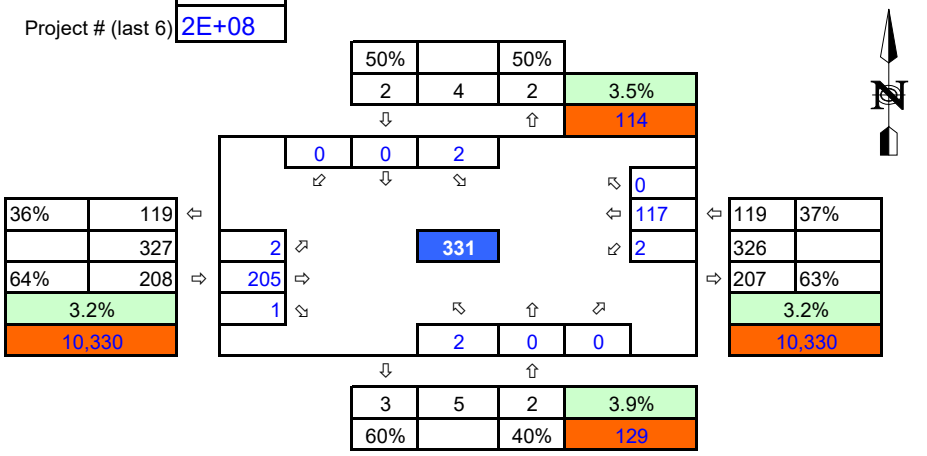
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

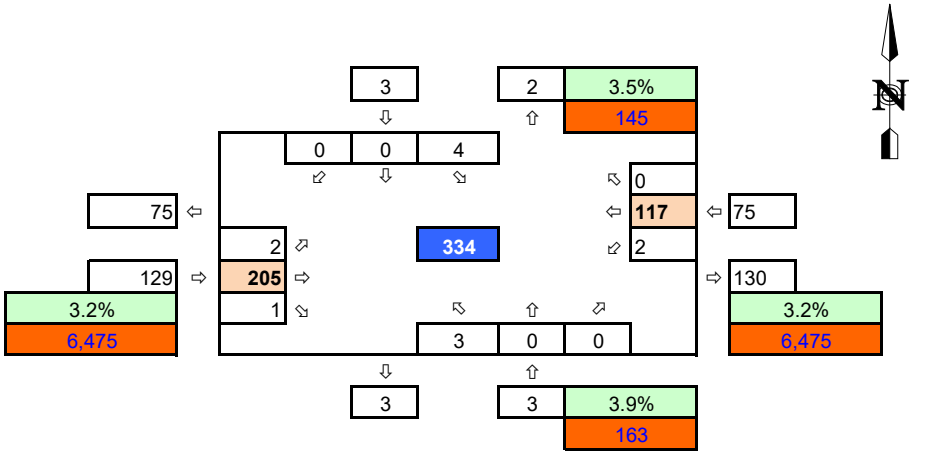
xx = predicted volume < baseline; volume manually increased.

Int 6 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**
Intersection #:	6
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**



LEGEND

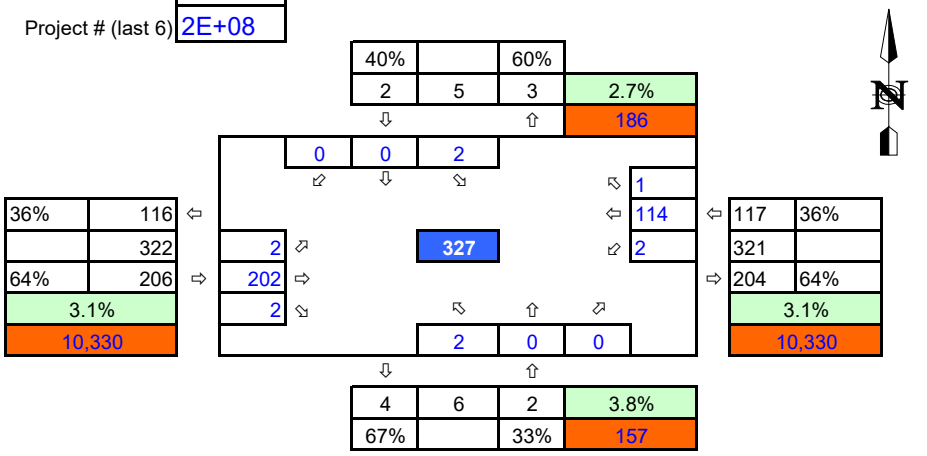
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

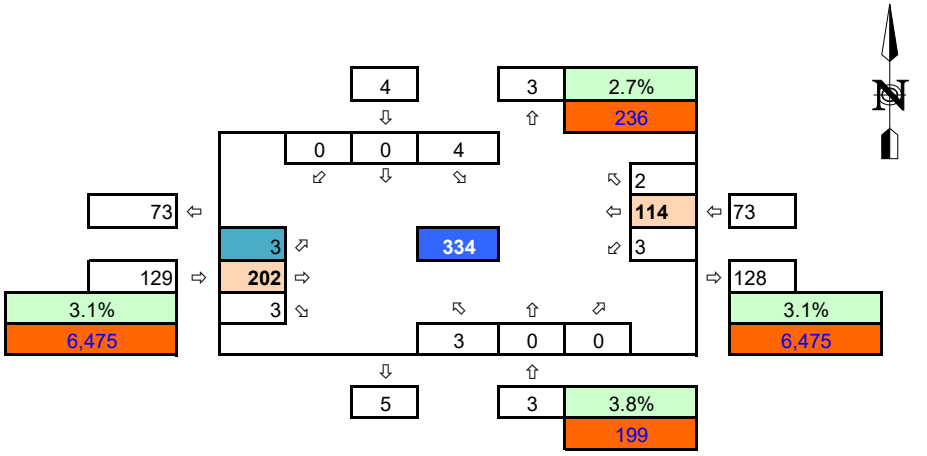
xx = predicted volume < baseline; volume manually increased.

Int 7 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**
Intersection #:	7
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**



LEGEND

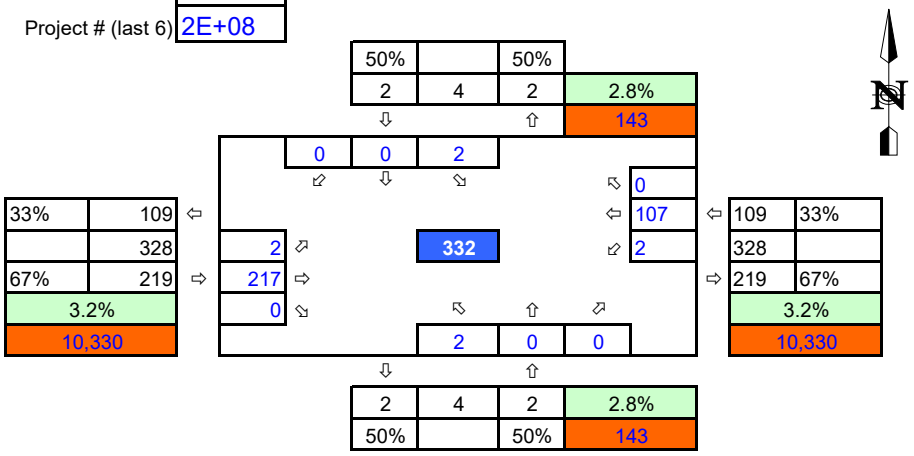
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

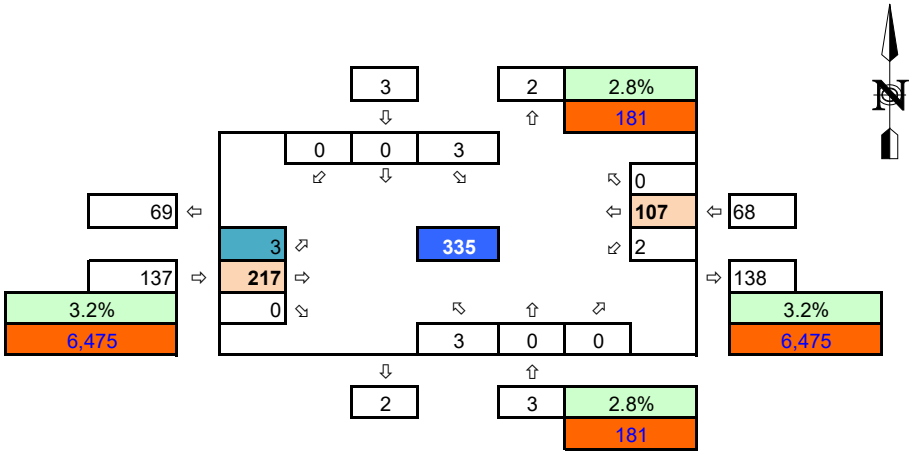
xx = predicted volume < baseline; volume manually increased.

Int 8 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**
Intersection #:	8
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**



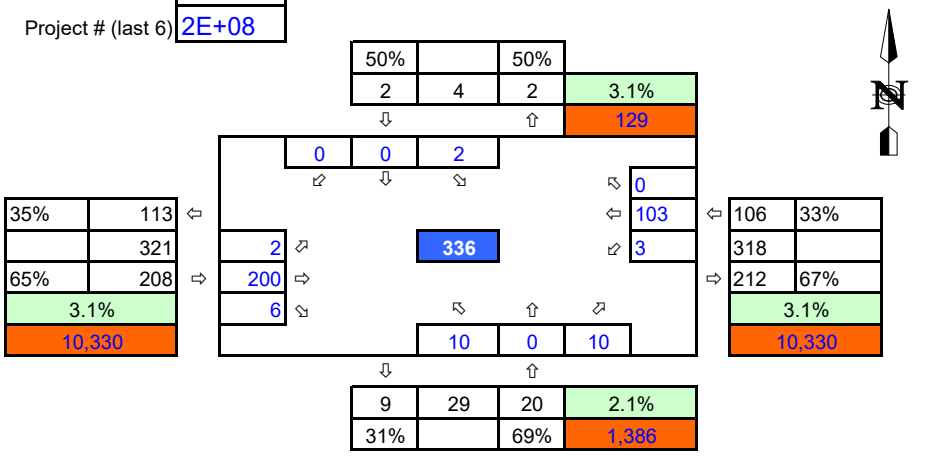
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

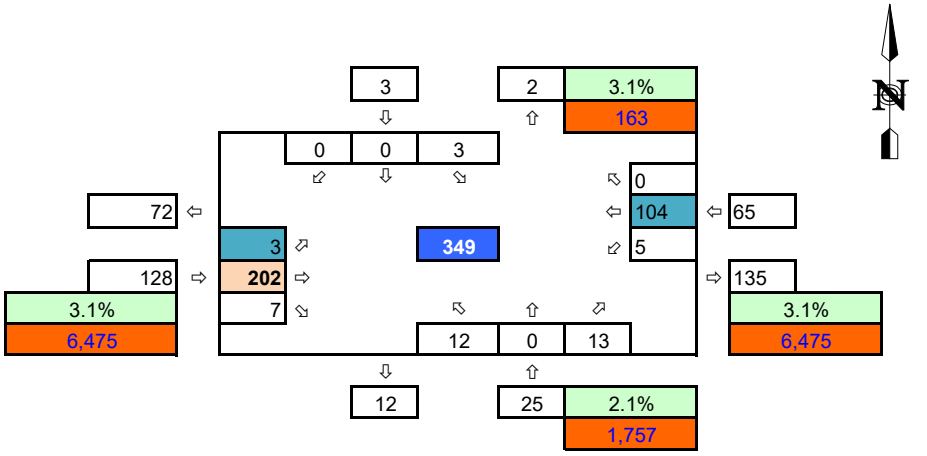
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 9 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**
Intersection #:	9
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**



LEGEND

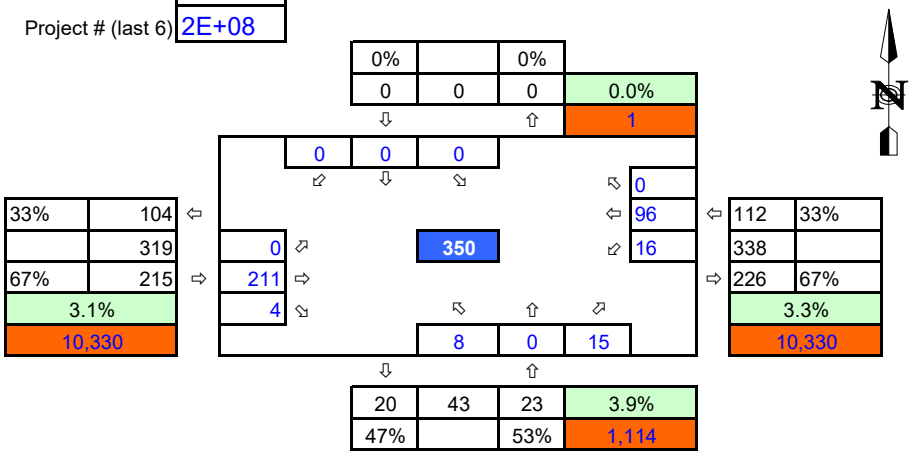
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

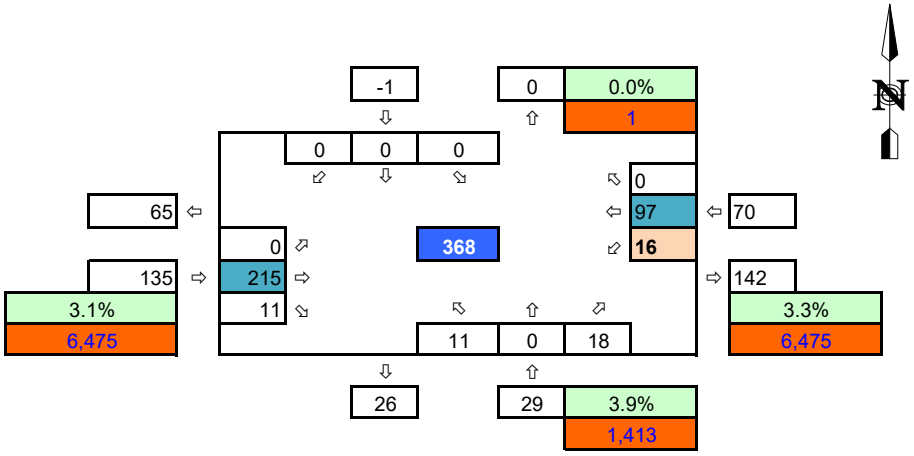
xx = predicted volume < baseline; volume manually increased.

Int 10 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**
Intersection #:	10
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**



LEGEND

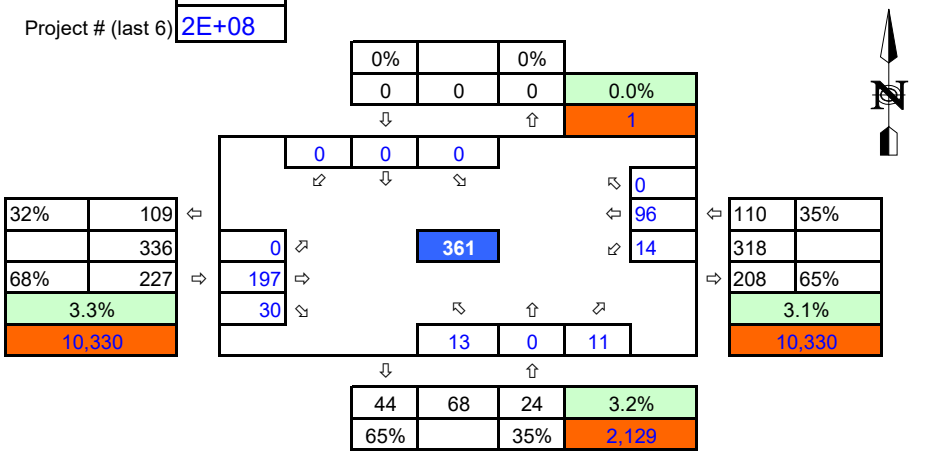
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

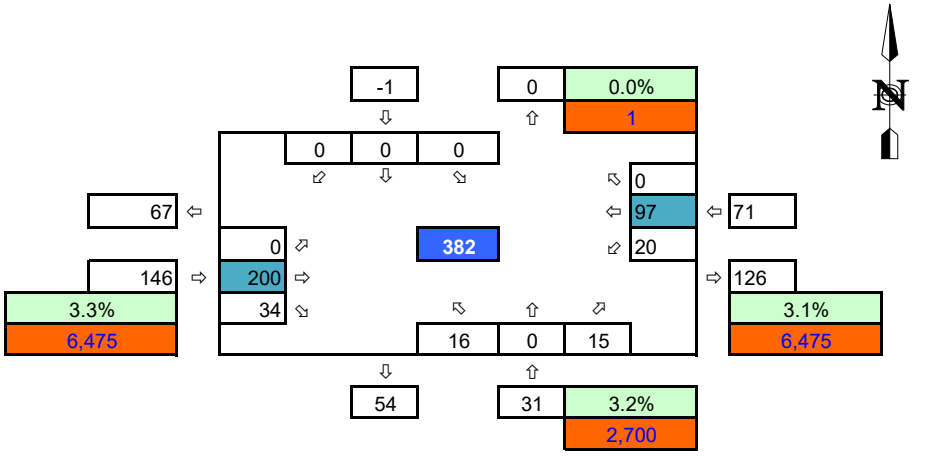
xx = predicted volume < baseline; volume manually increased.

Int 11 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**
Intersection #:	11
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**



LEGEND

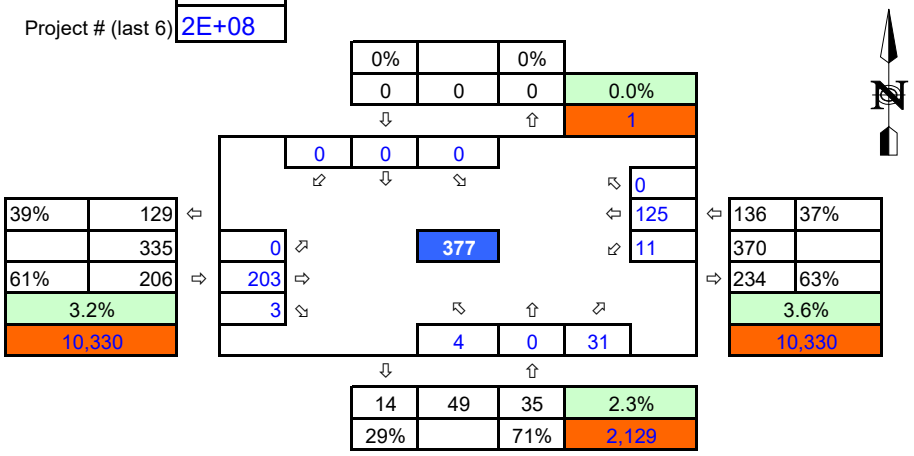
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

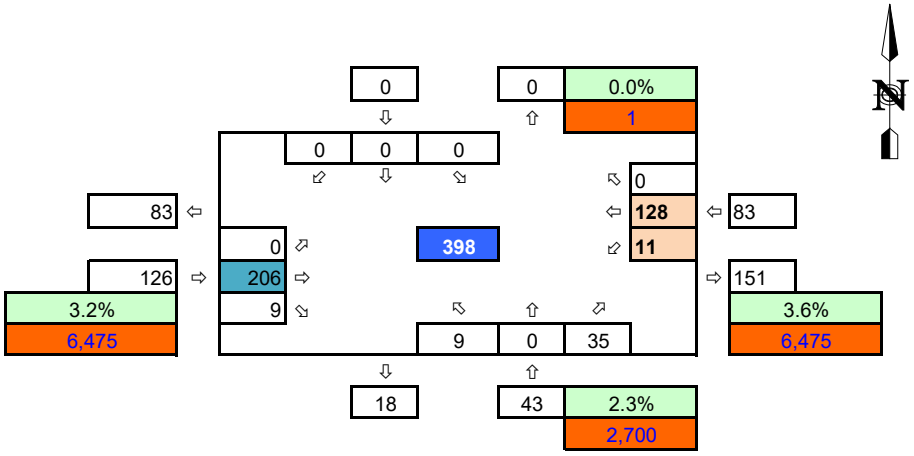
xx = predicted volume < baseline; volume manually increased.

Int 12 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**
Intersection #:	12
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**



LEGEND

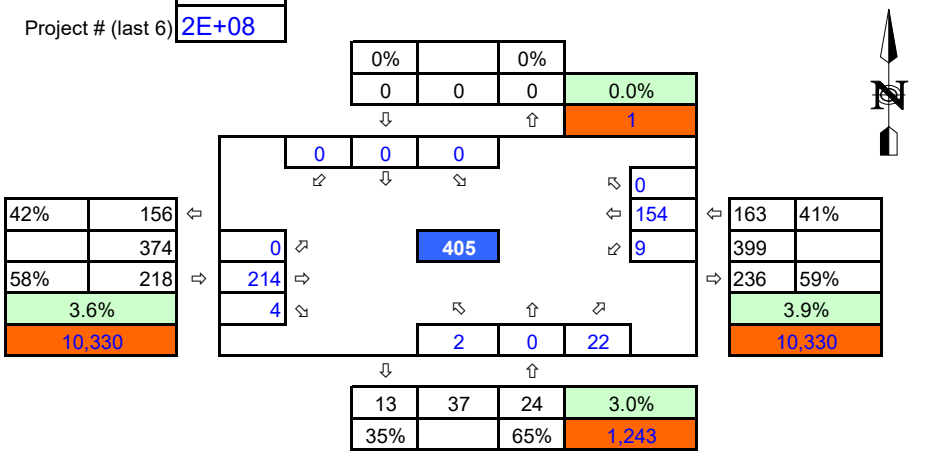
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

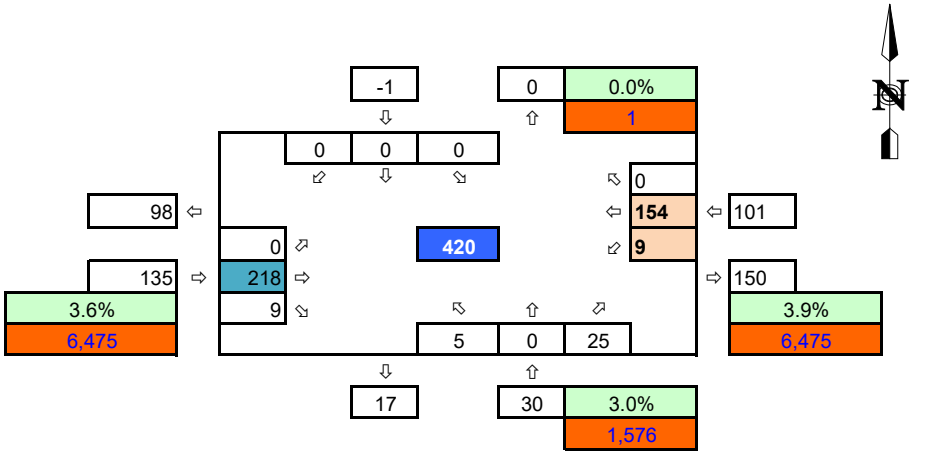
xx = predicted volume < baseline; volume manually increased.

Int 13 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**
Intersection #:	13
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**



LEGEND

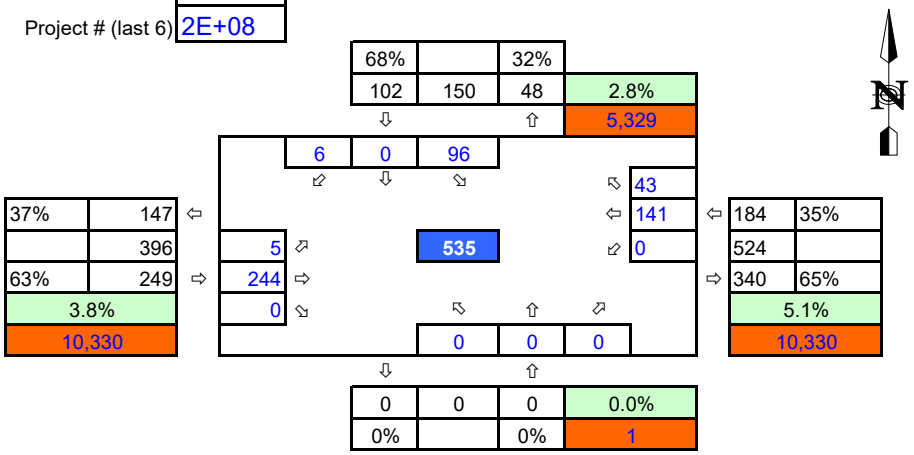
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

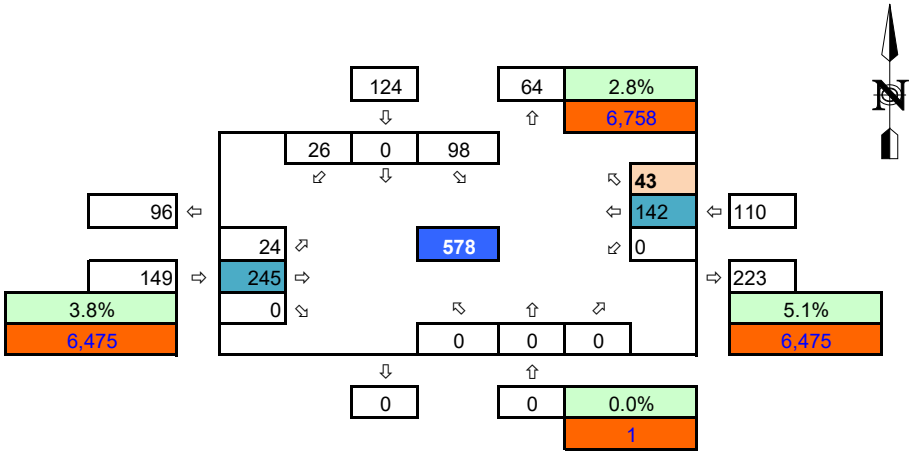
xx = predicted volume < baseline; volume manually increased.

Int 14 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**
Intersection #:	14
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**



LEGEND

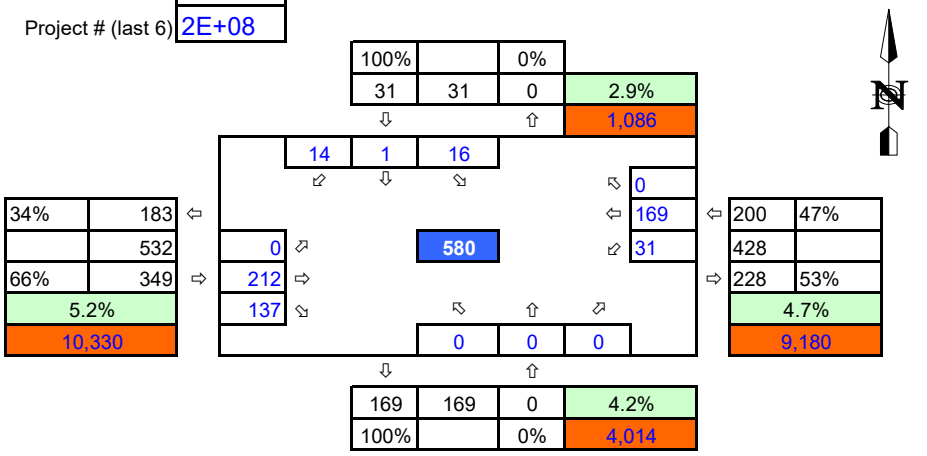
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

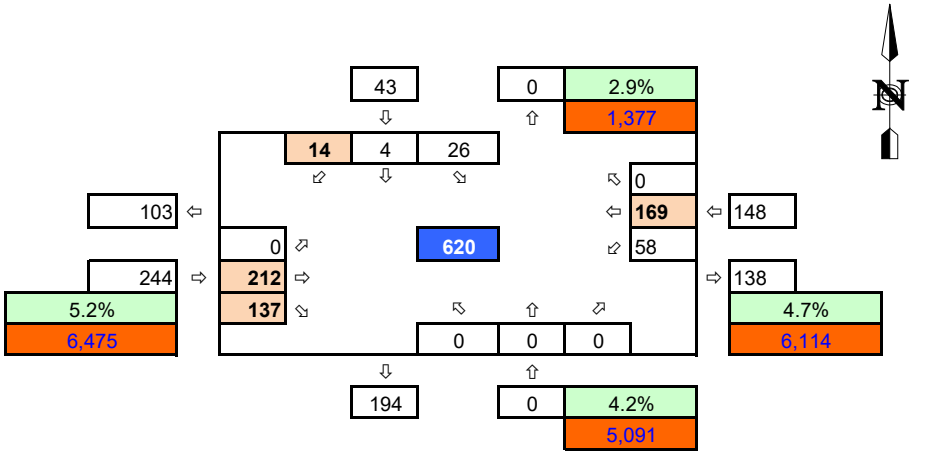
xx = predicted volume < baseline; volume manually increased.

Int 15 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**
Intersection #:	15
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**



LEGEND

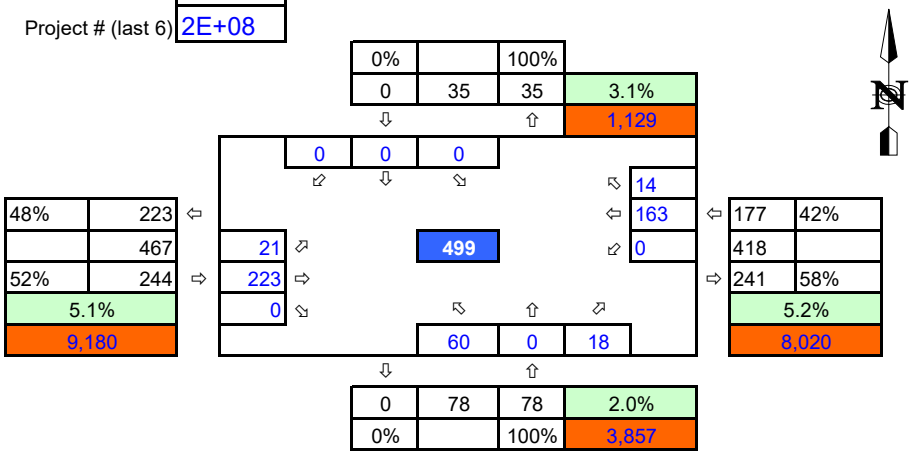
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

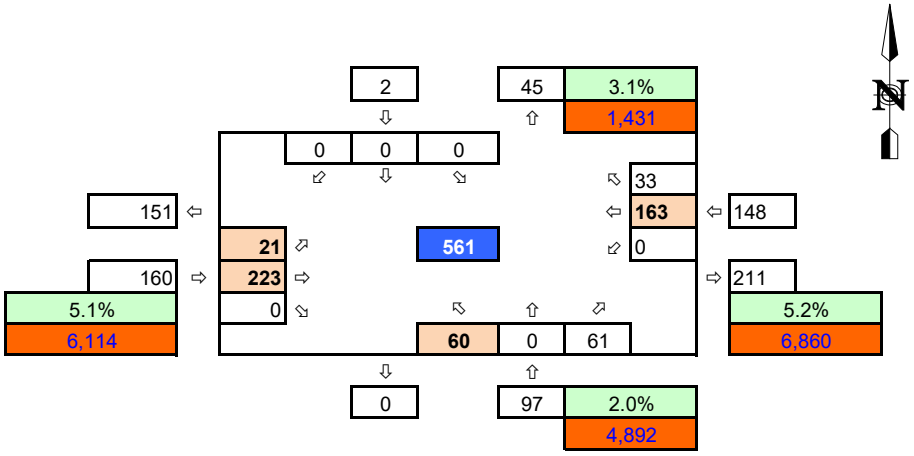
xx = predicted volume < baseline; volume manually increased.

Int 16 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**
Intersection #:	16
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**



LEGEND

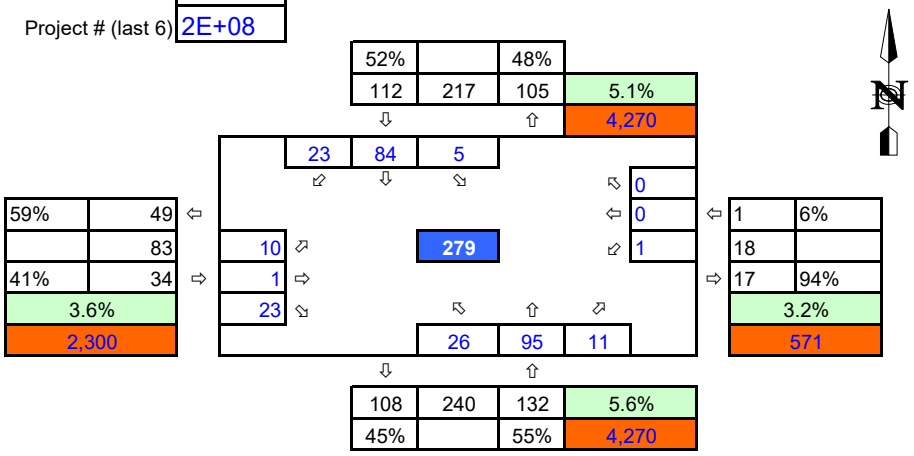
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

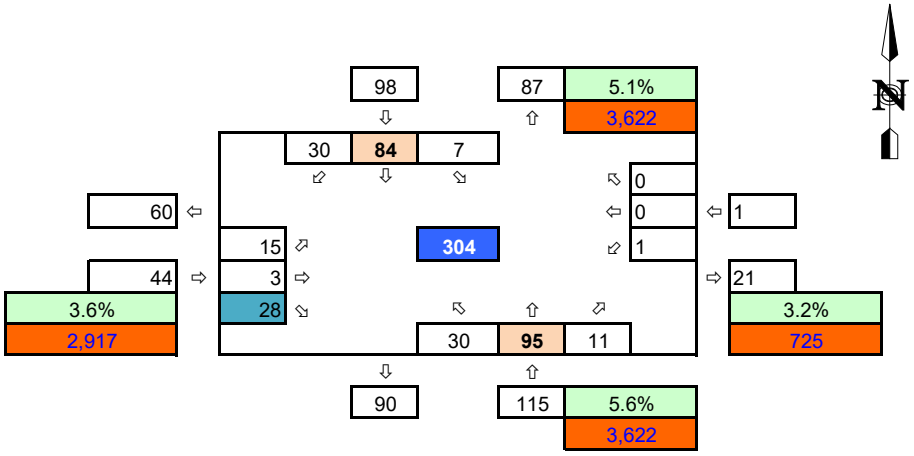
xx = predicted volume < baseline; volume manually increased.

Int 17 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**
Intersection #:	17
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**



LEGEND

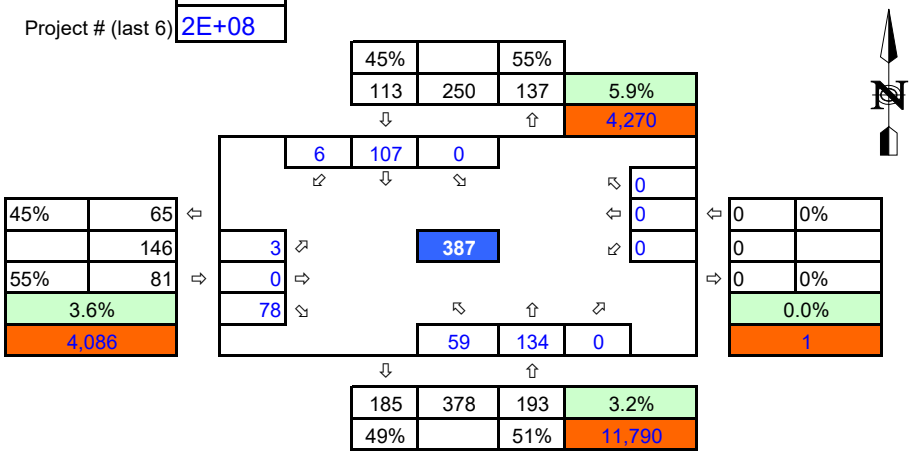
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

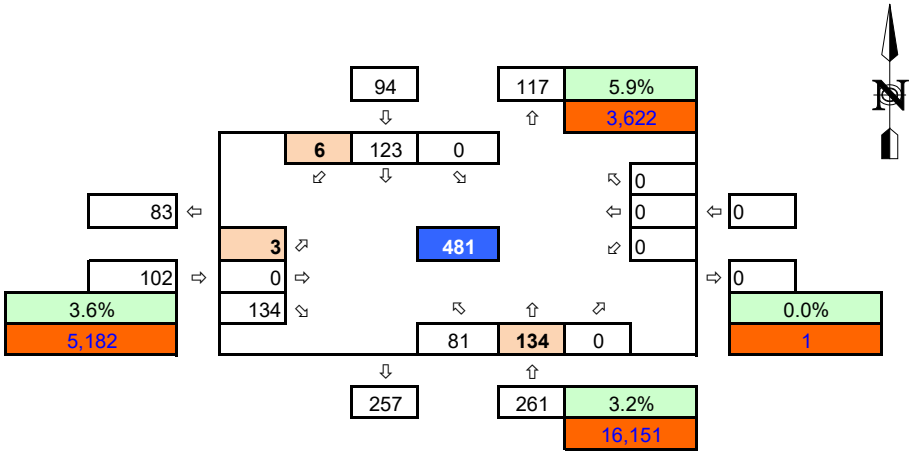
xx = predicted volume < baseline; volume manually increased.

Int 18 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**
Intersection #:	18
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**



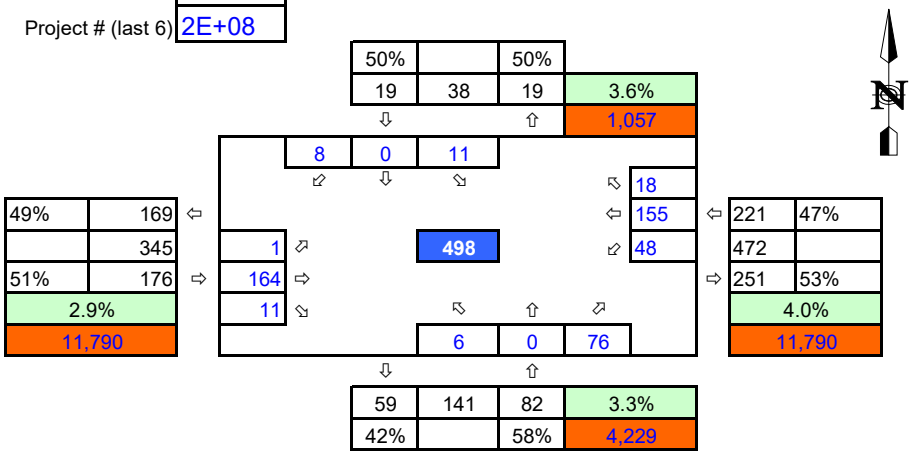
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

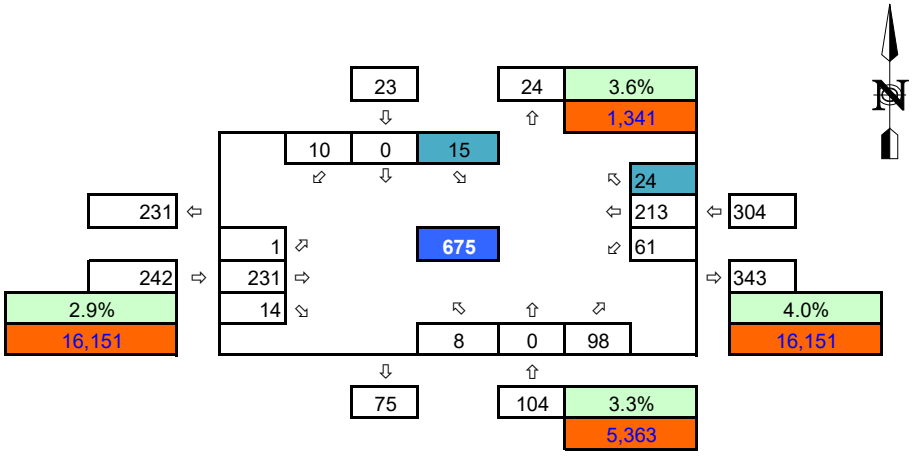
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 19 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**
Intersection #:	19
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**



LEGEND

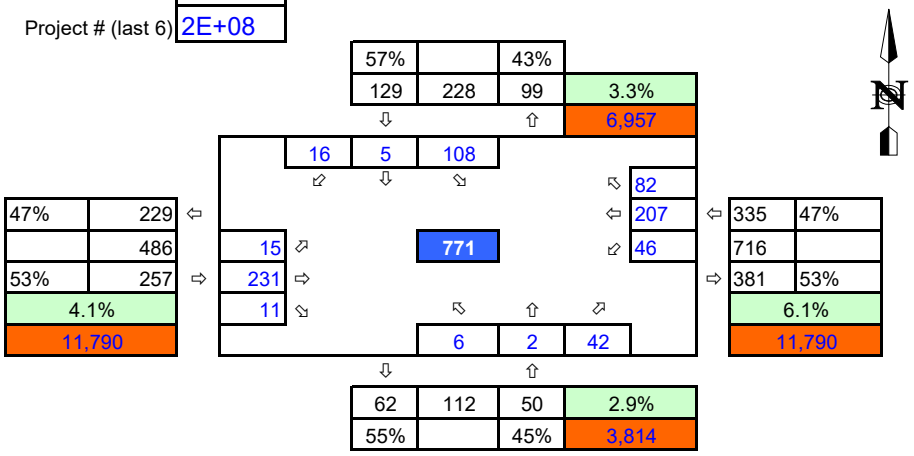
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

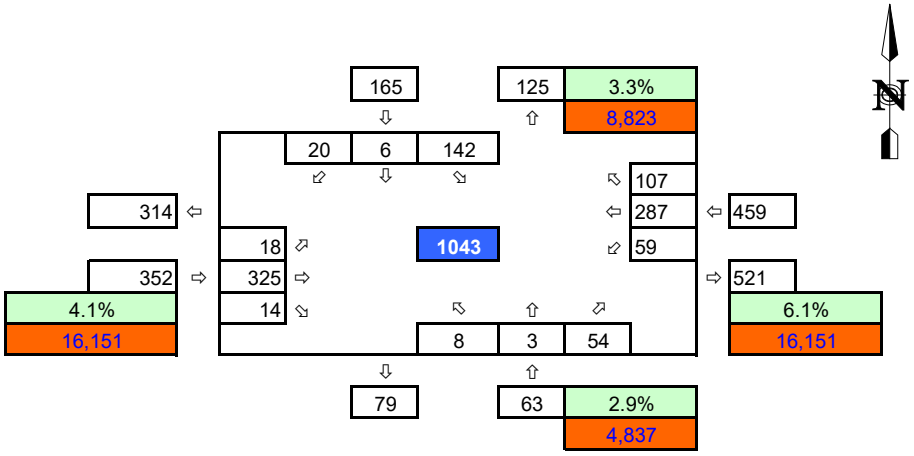
xx = predicted volume < baseline; volume manually increased.

Int 20 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**
Intersection #:	20
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**



LEGEND

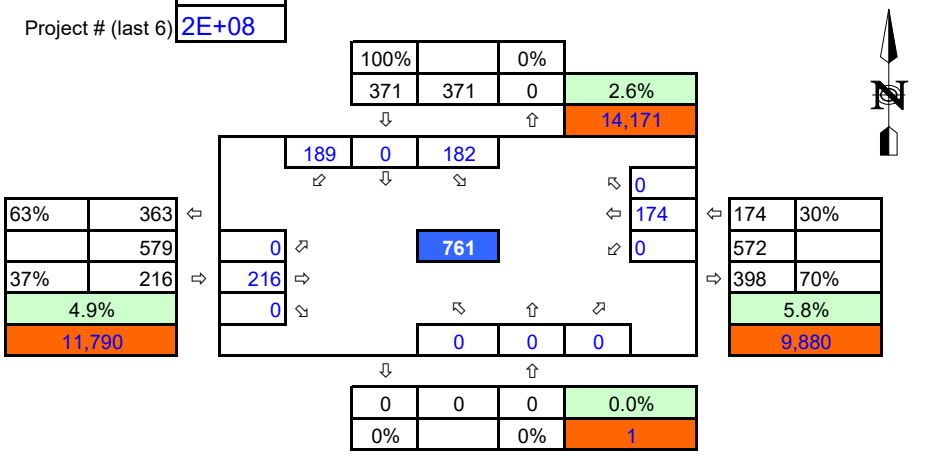
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

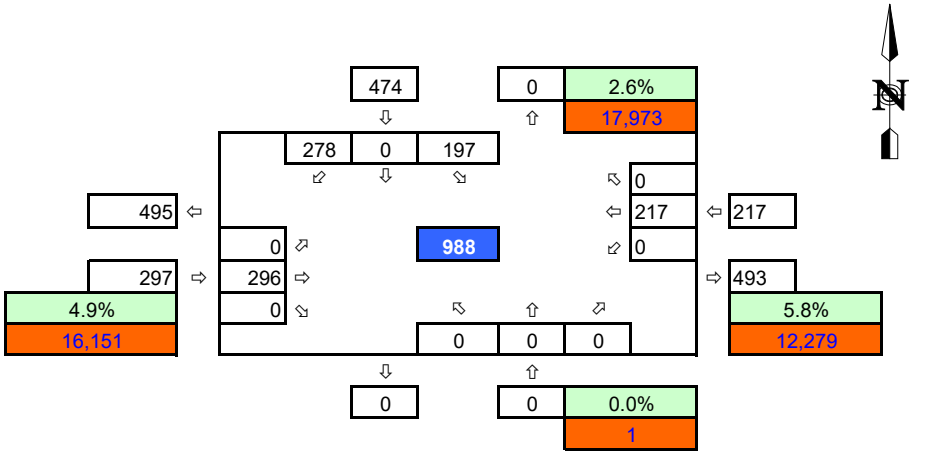
xx = predicted volume < baseline; volume manually increased.

Int 21 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	21
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**



LEGEND

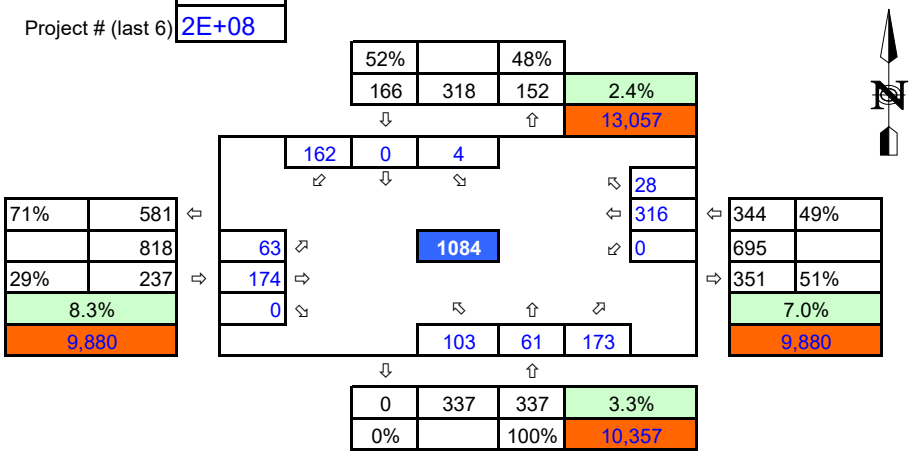
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

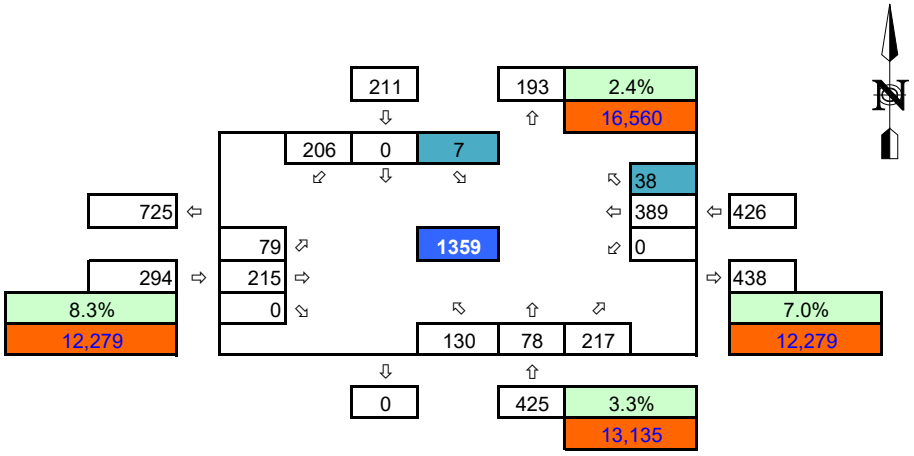
xx = predicted volume < baseline; volume manually increased.

Int 22 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	22
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**



LEGEND

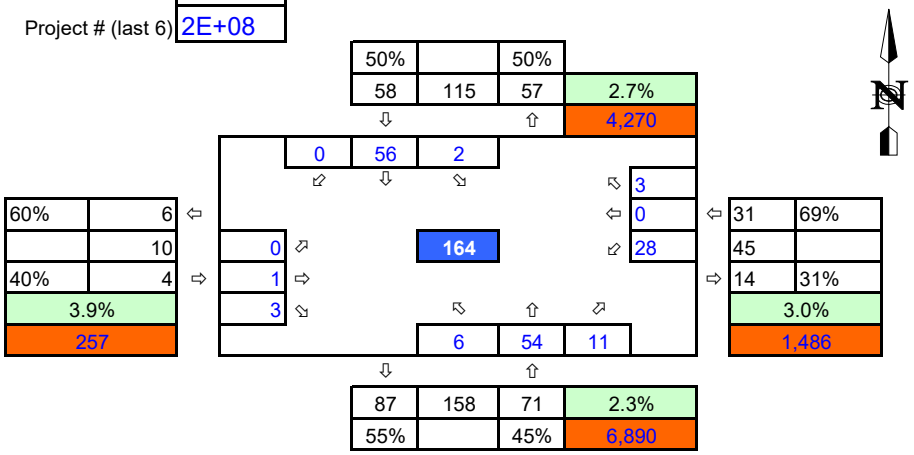
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

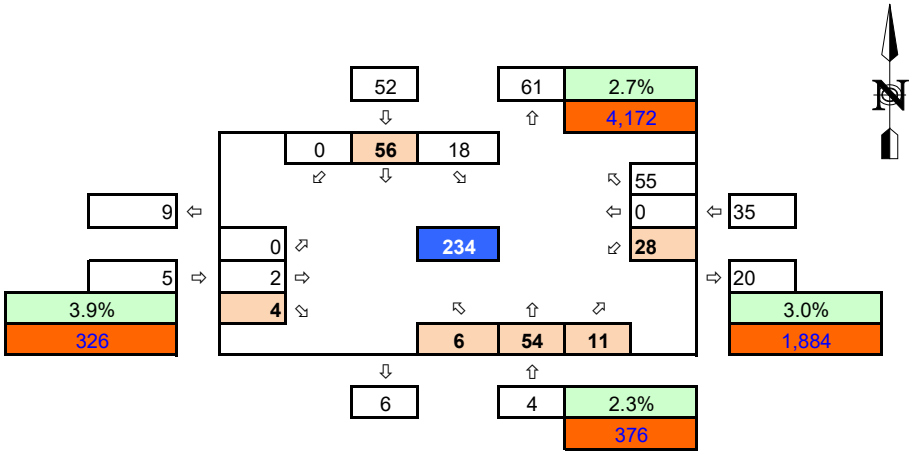
xx = predicted volume < baseline; volume manually increased.

Int 23 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**
Intersection #:	23
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**



LEGEND

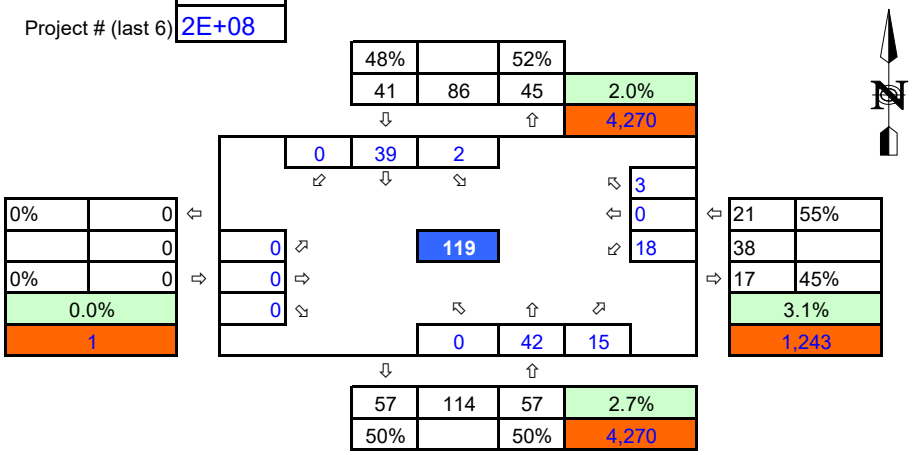
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

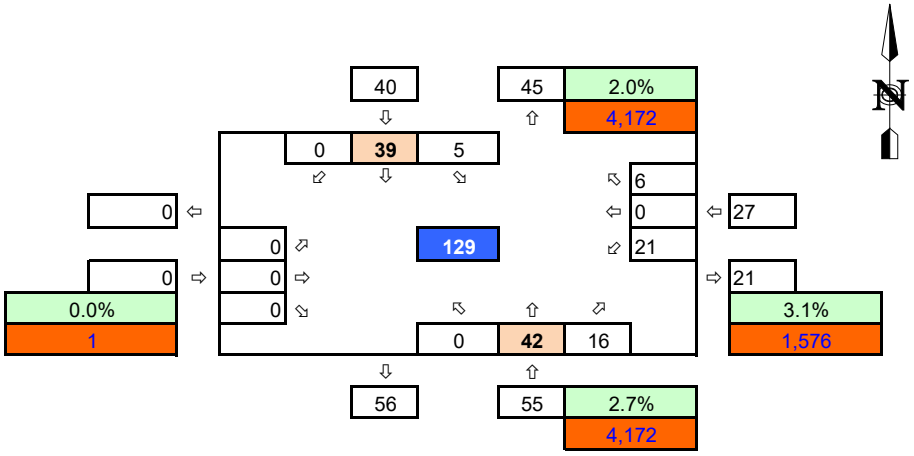
xx = predicted volume < baseline; volume manually increased.

Int 24 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**
Intersection #:	24
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**



LEGEND

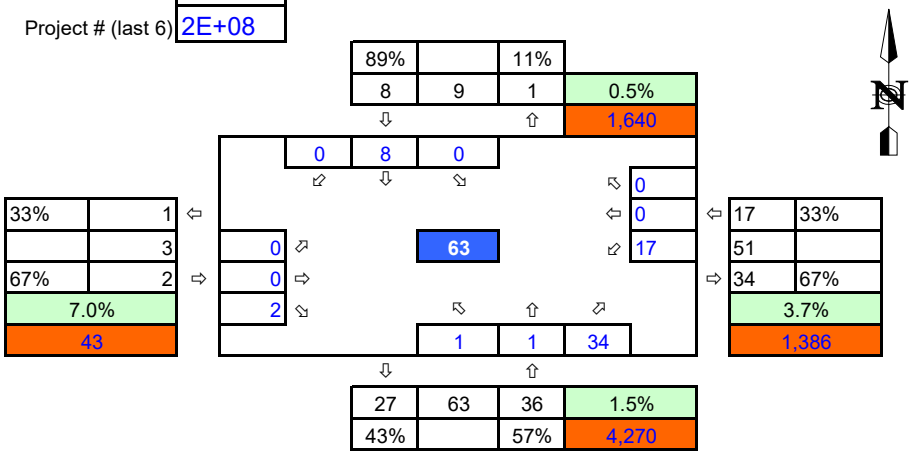
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

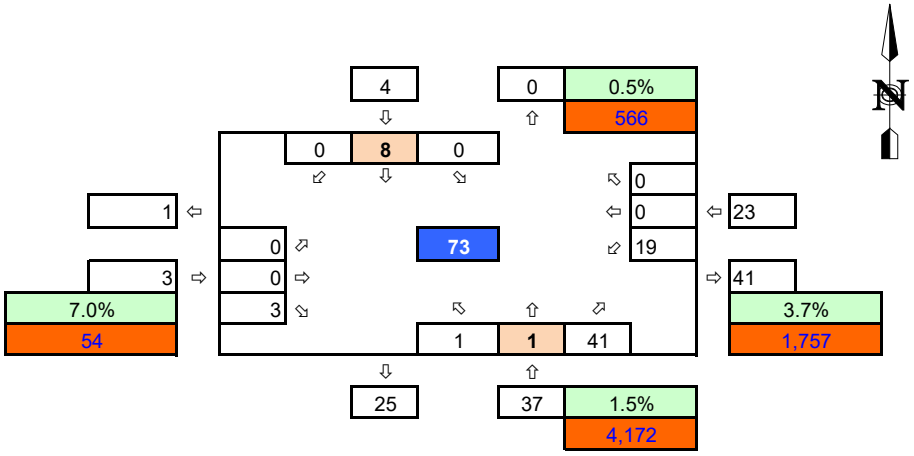
xx = predicted volume < baseline; volume manually increased.

Int 25 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**
Intersection #:	25
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**



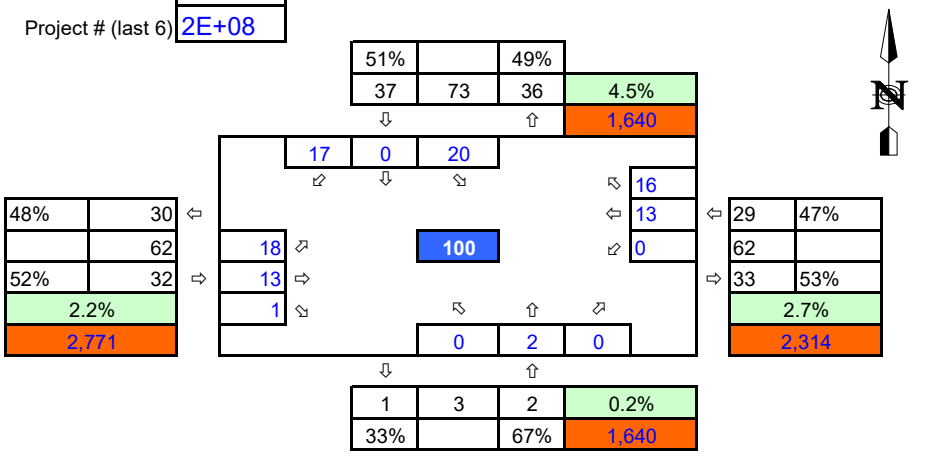
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

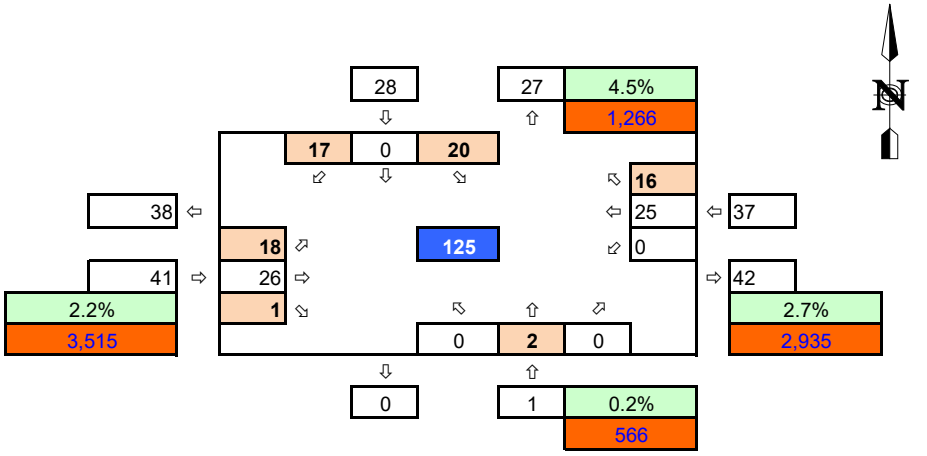
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 26 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**
Intersection #:	26
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**



LEGEND

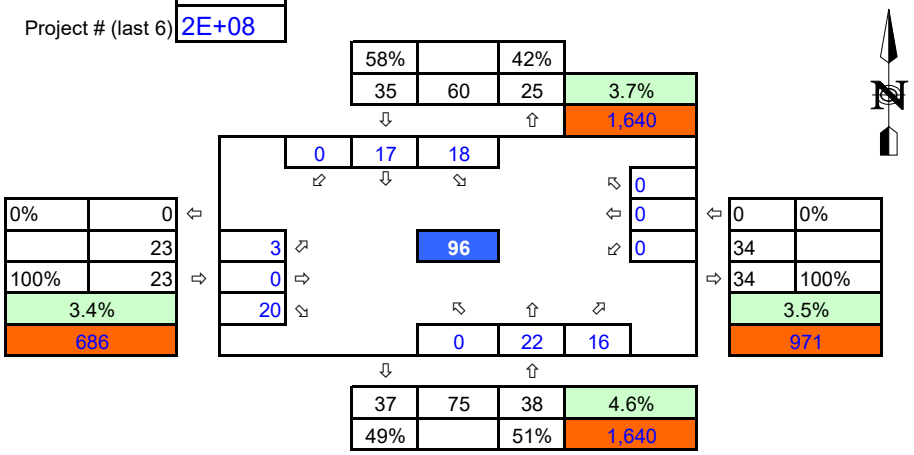
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

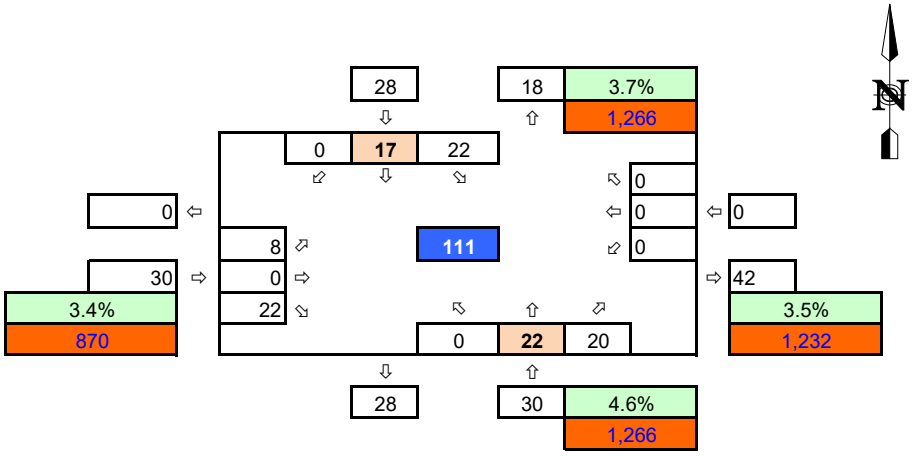
xx = predicted volume < baseline; volume manually increased.

Int 27 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**
Intersection #:	27
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**



LEGEND

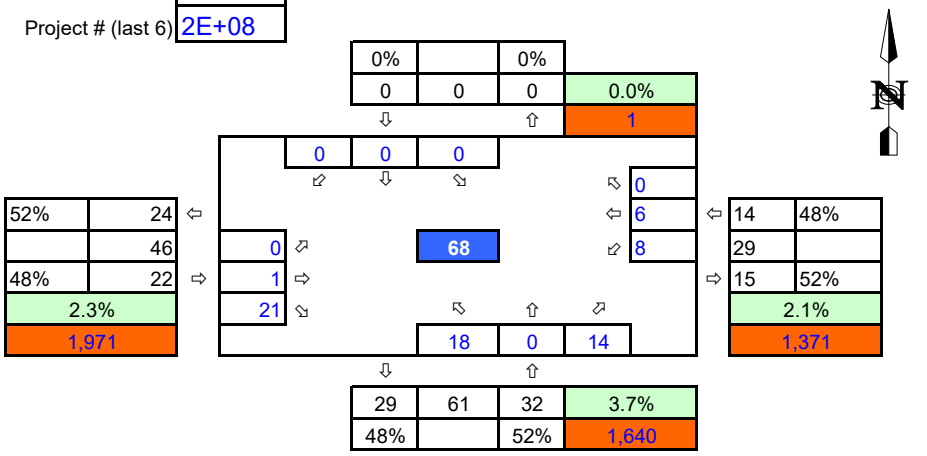
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

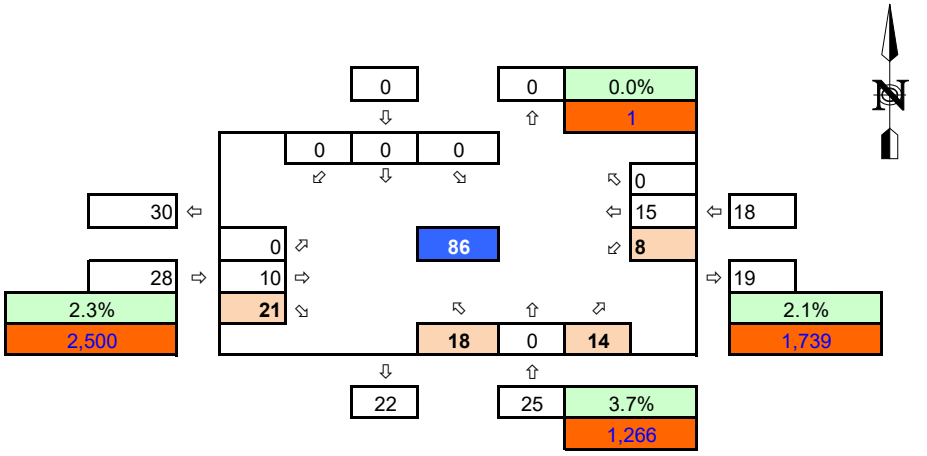
xx = predicted volume < baseline; volume manually increased.

Int 28 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**
Intersection #:	28
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**



LEGEND

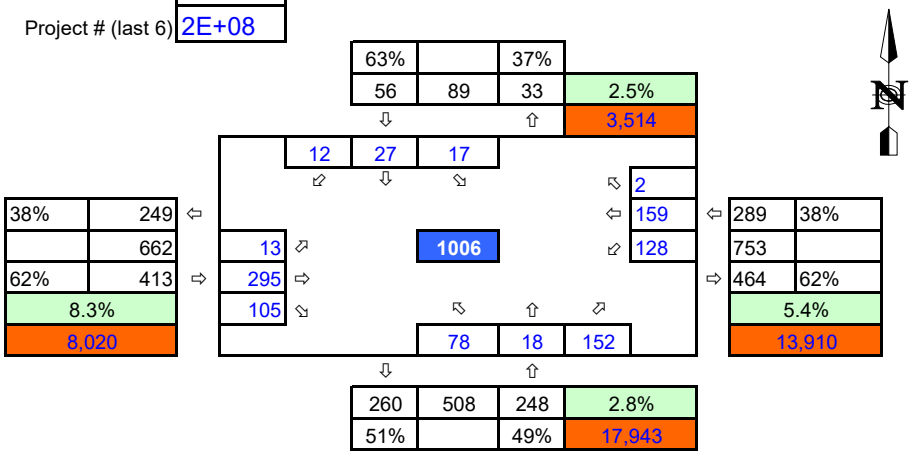
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

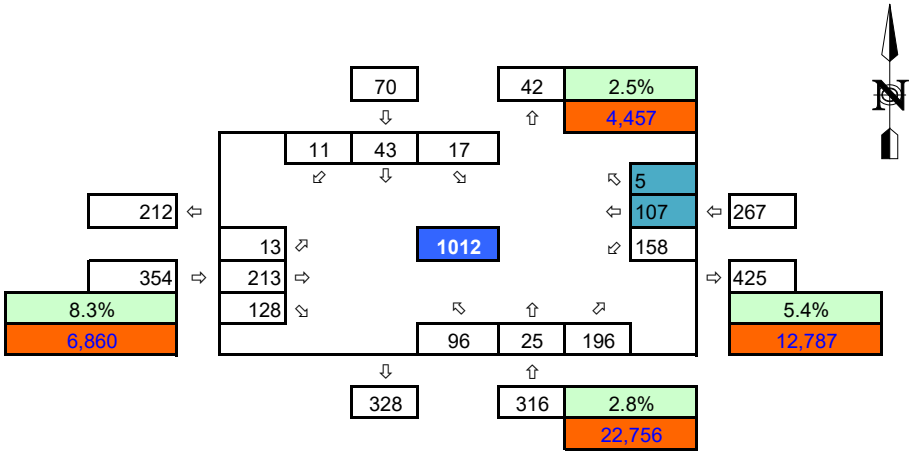
xx = predicted volume < baseline; volume manually increased.

Int 29 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**
Intersection #:	29
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**



LEGEND

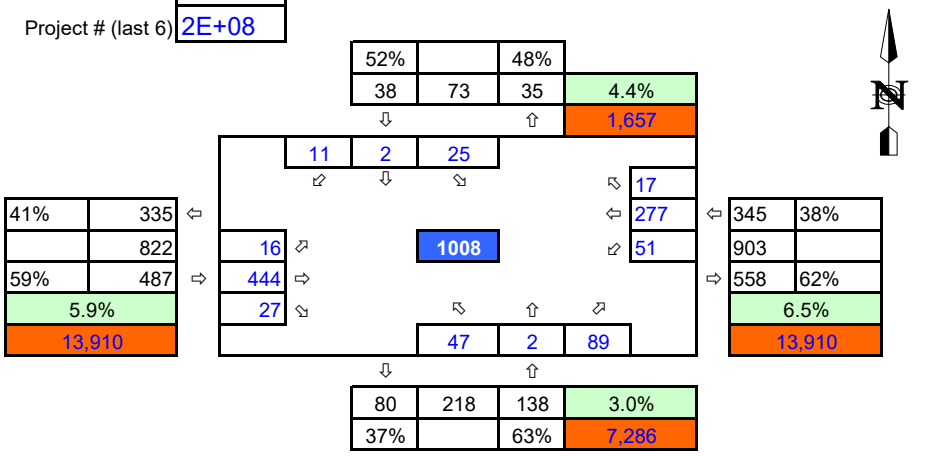
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

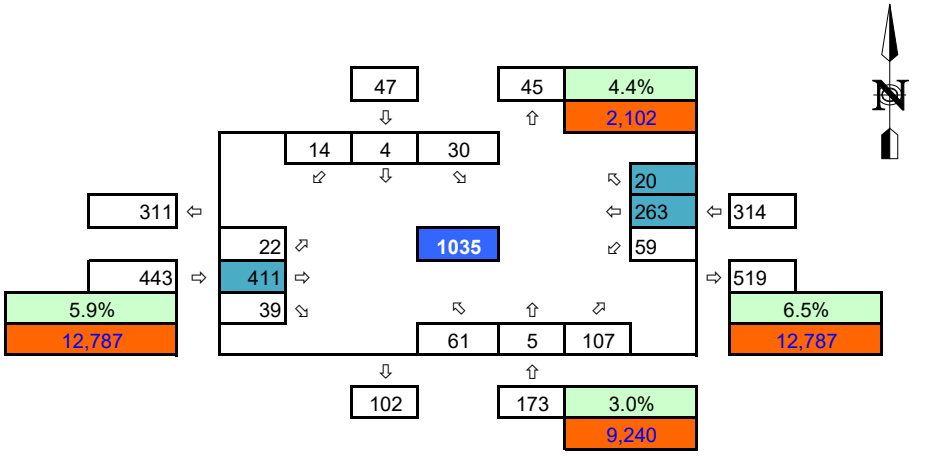
xx = predicted volume < baseline; volume manually increased.

Int 30 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**
Intersection #:	30
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**



LEGEND

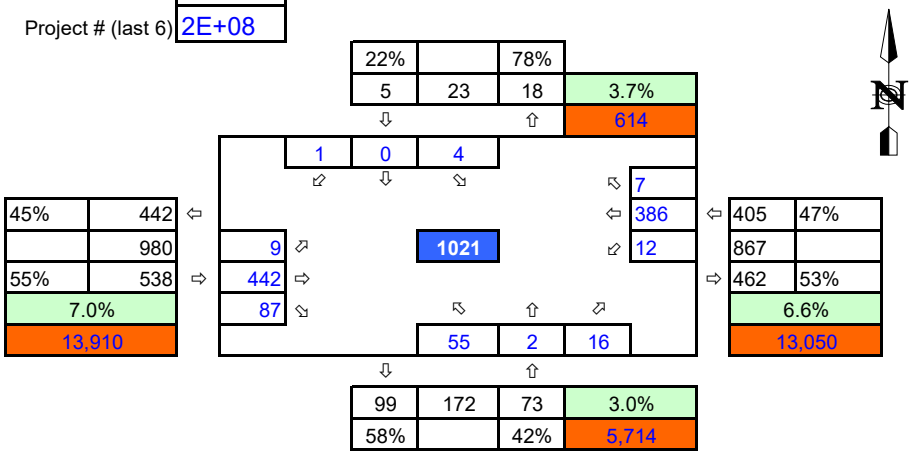
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

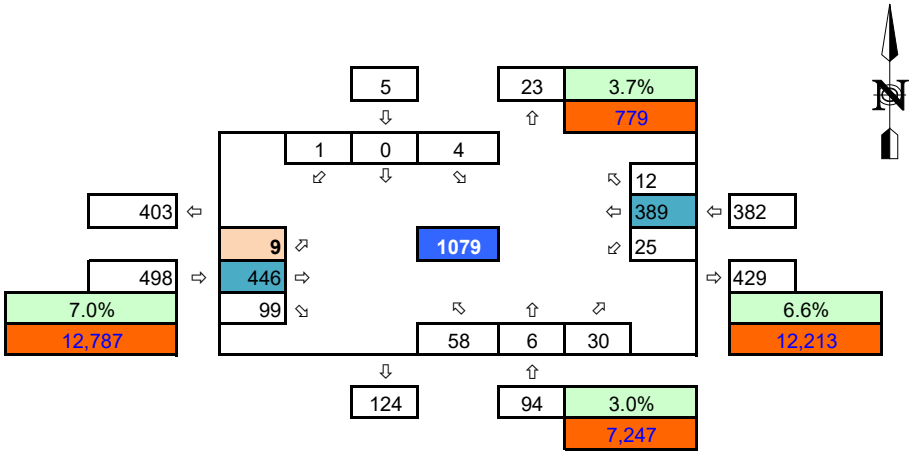
xx = predicted volume < baseline; volume manually increased.

Int 31 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**
Intersection #:	31
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**



LEGEND

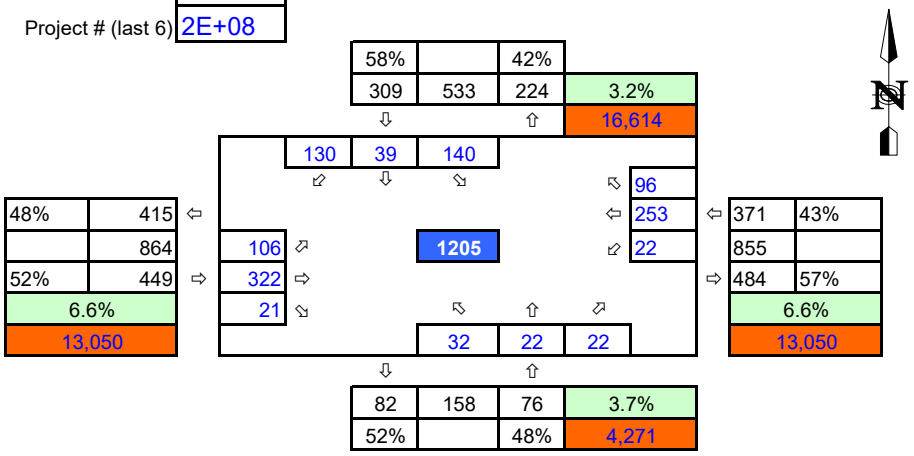
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

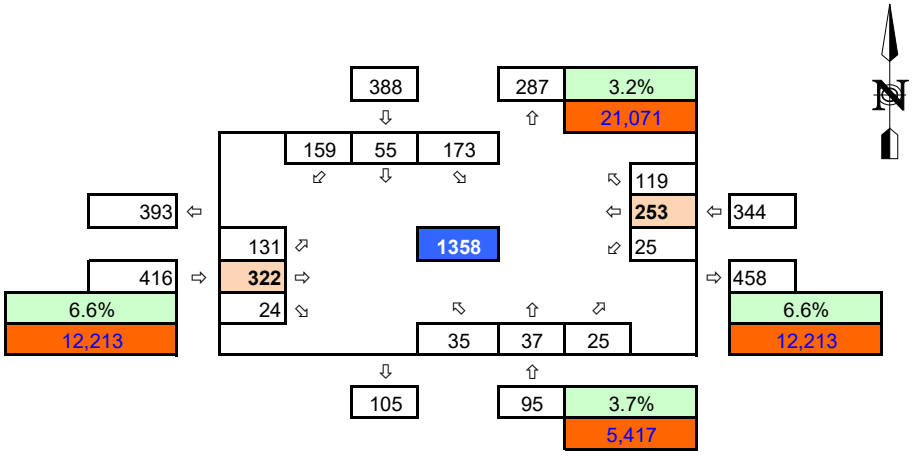
xx = predicted volume < baseline; volume manually increased.

Int 32 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**
Intersection #:	32
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**



LEGEND

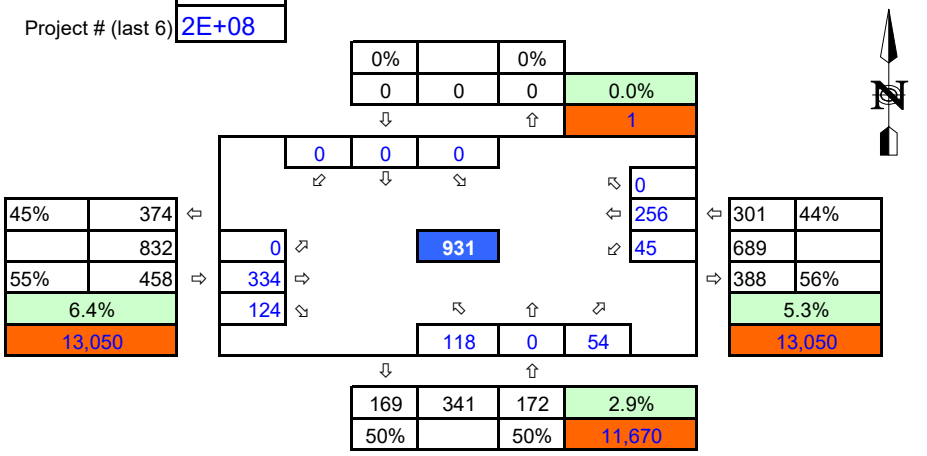
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

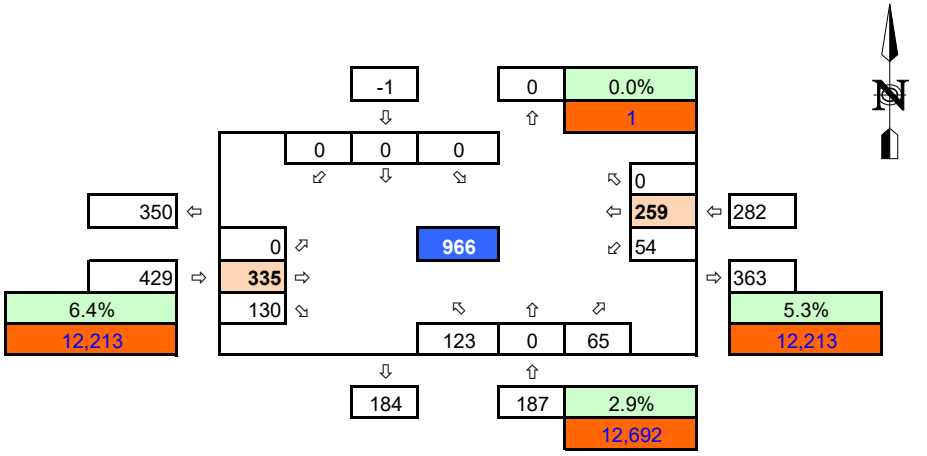
xx = predicted volume < baseline; volume manually increased.

Int 33 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**
Intersection #:	33
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**



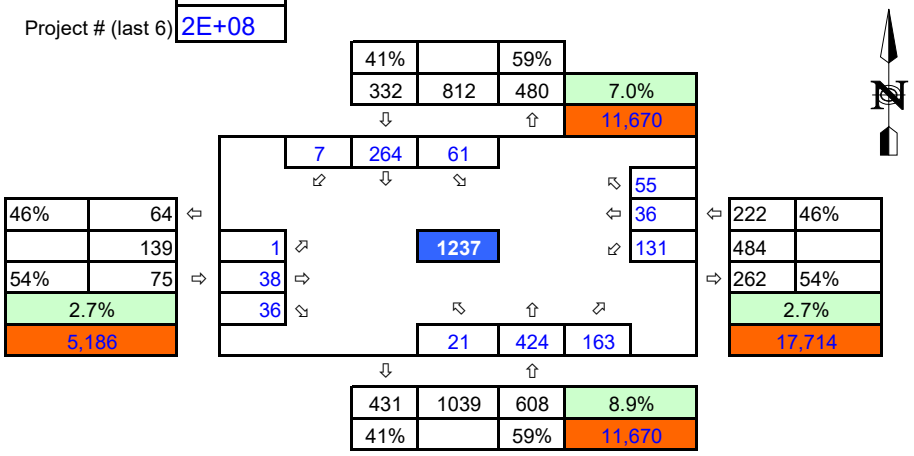
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

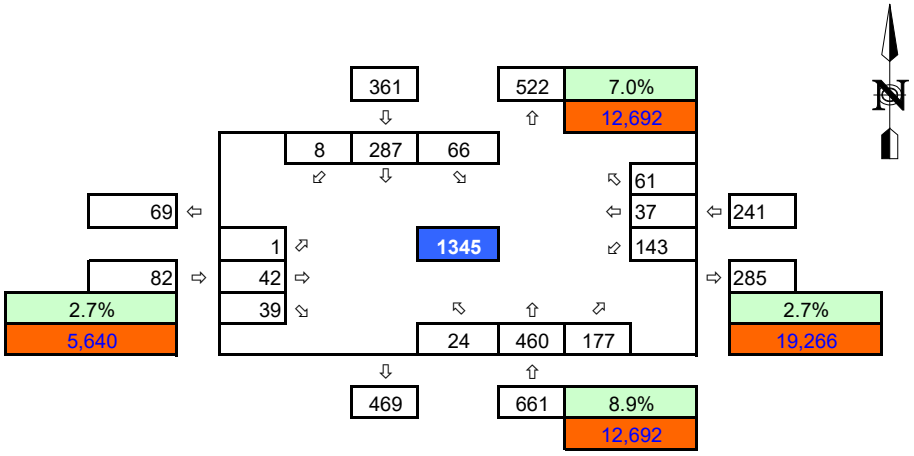
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.

Int 34 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**
Intersection #:	34
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**



LEGEND

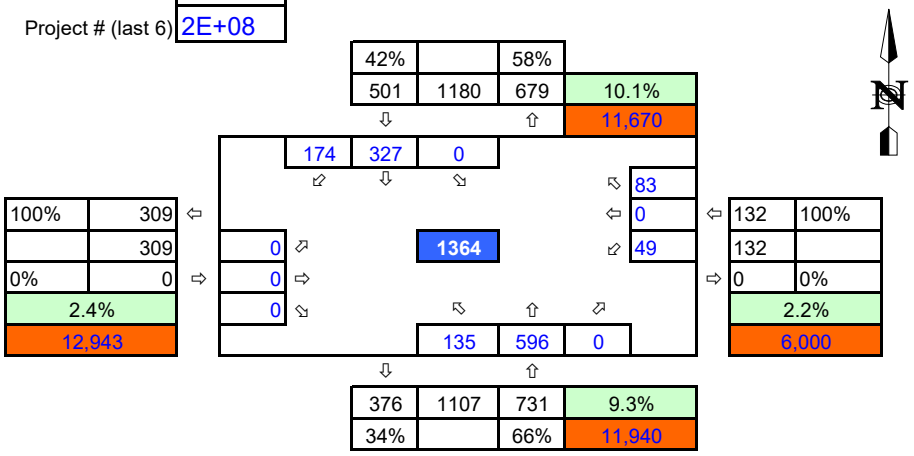
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

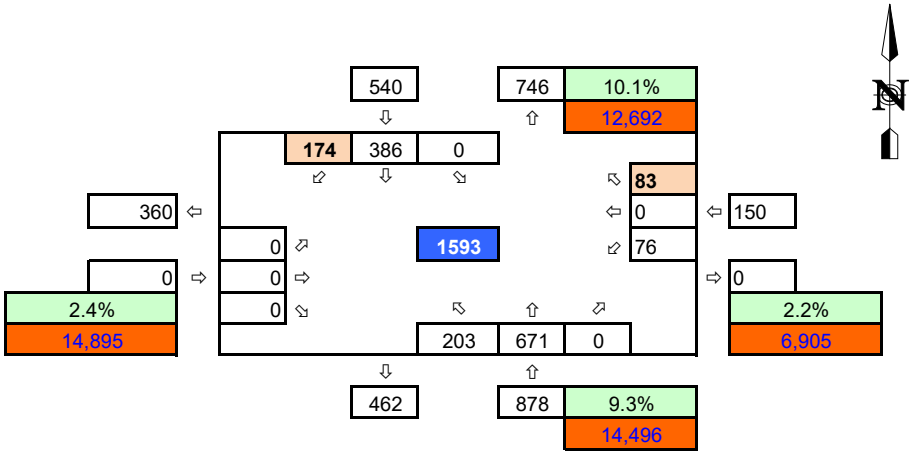
xx = predicted volume < baseline; volume manually increased.

Int 35 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**
Intersection #:	35
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**



LEGEND

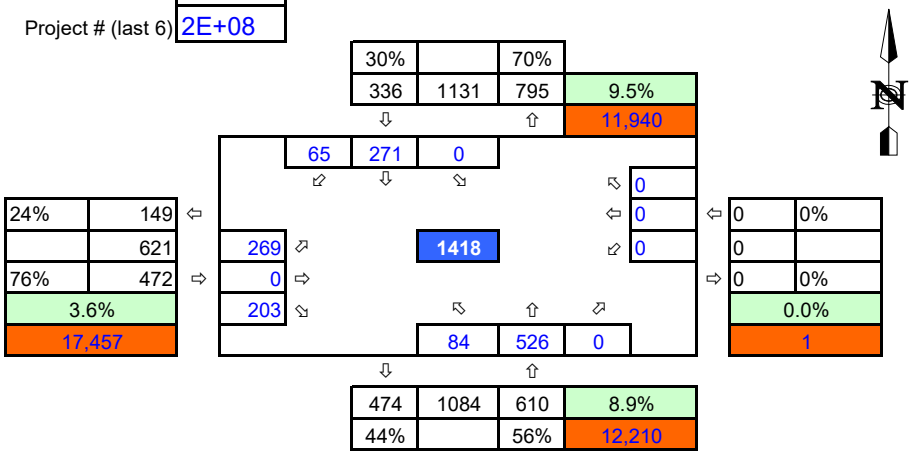
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

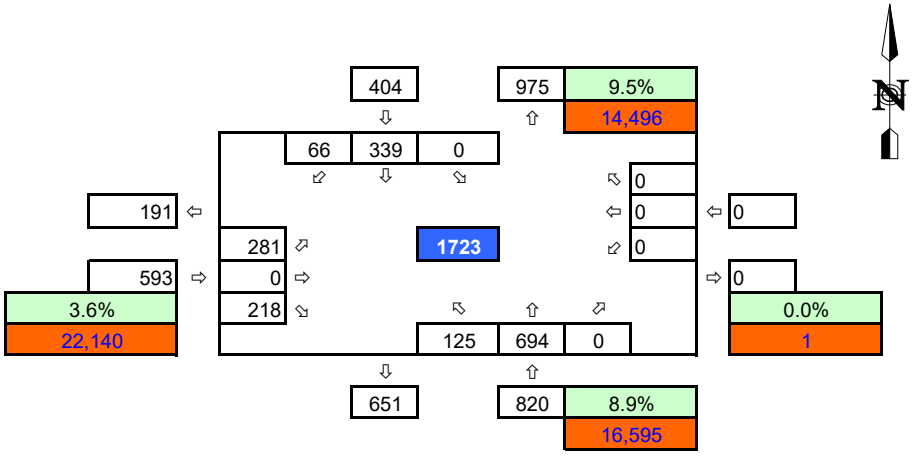
xx = predicted volume < baseline; volume manually increased.

Int 36 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**
Intersection #:	36
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**



LEGEND

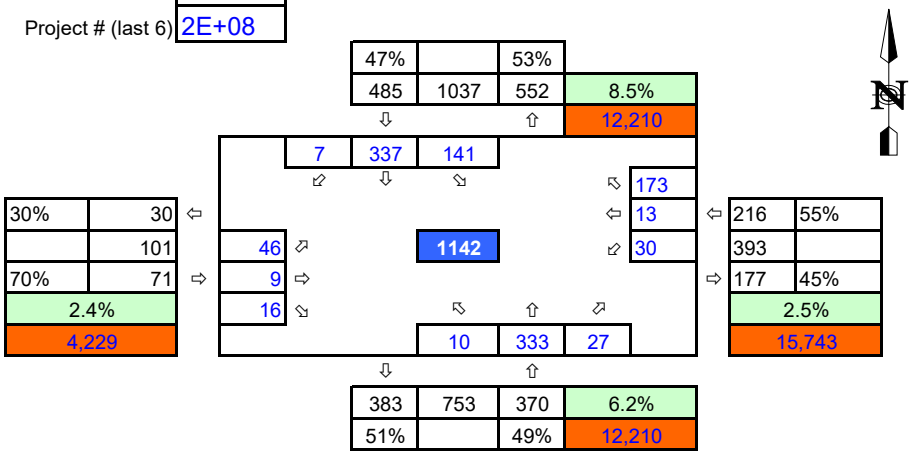
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

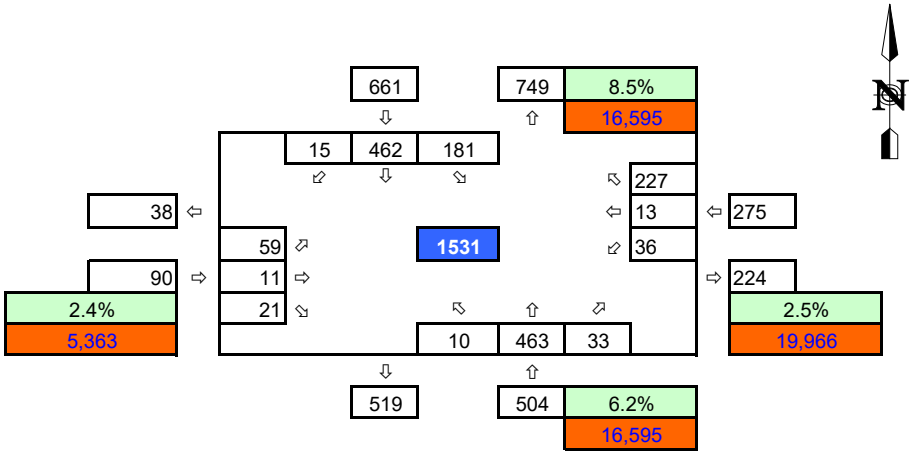
xx = predicted volume < baseline; volume manually increased.

Int 37 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**
Intersection #:	37
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**



LEGEND

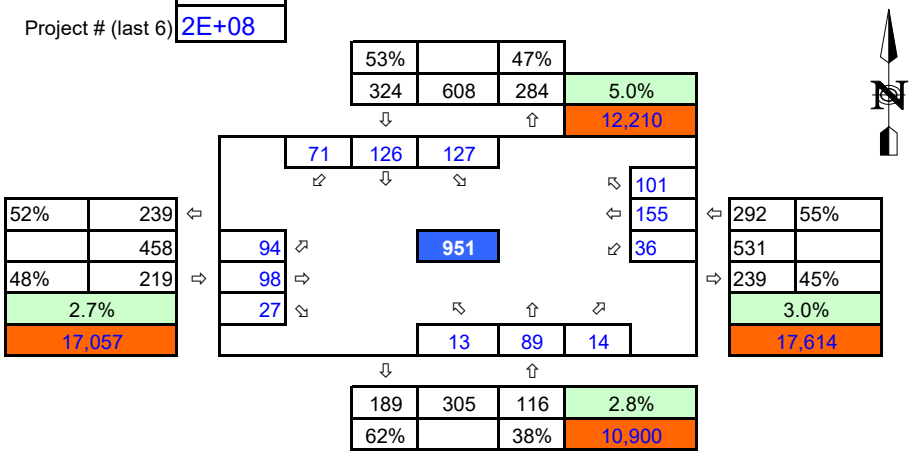
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

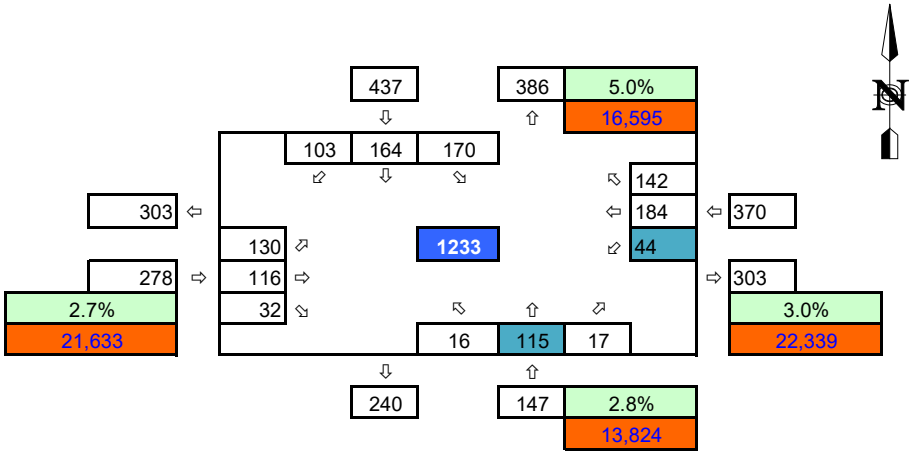
xx = predicted volume < baseline; volume manually increased.

Int 38 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**
Intersection #:	38
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**



LEGEND

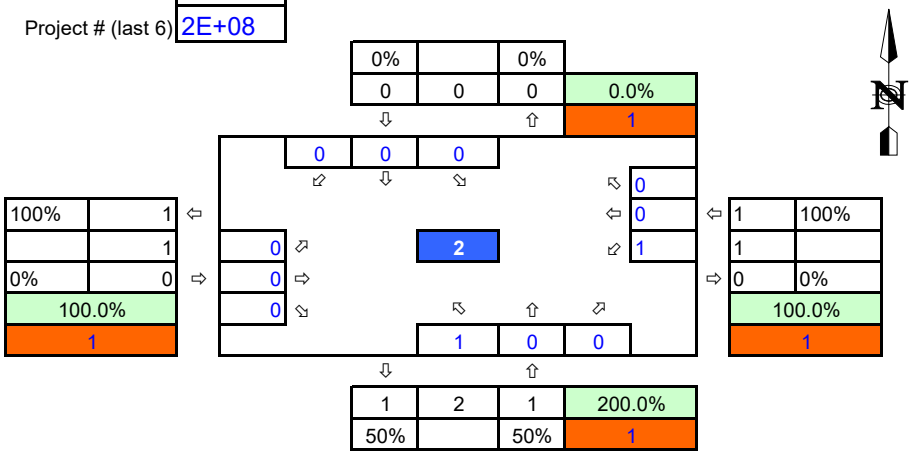
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

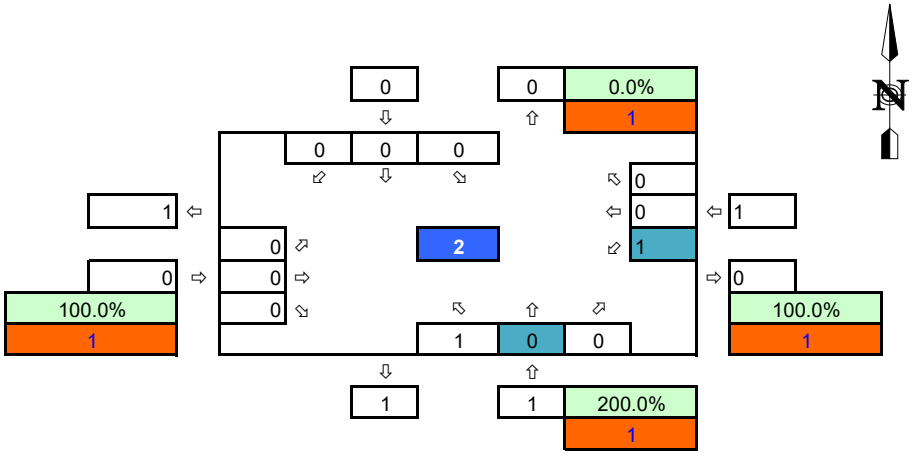
xx = predicted volume < baseline; volume manually increased.

Int 39 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**
Intersection #:	39
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**



LEGEND

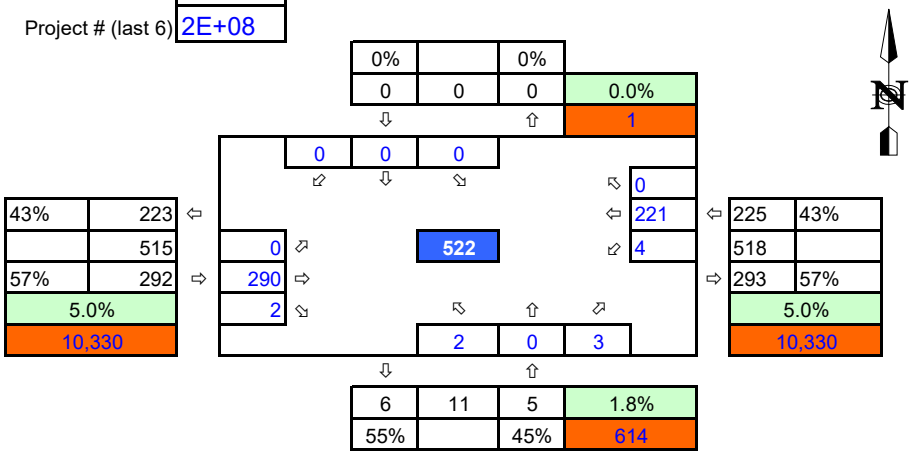
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

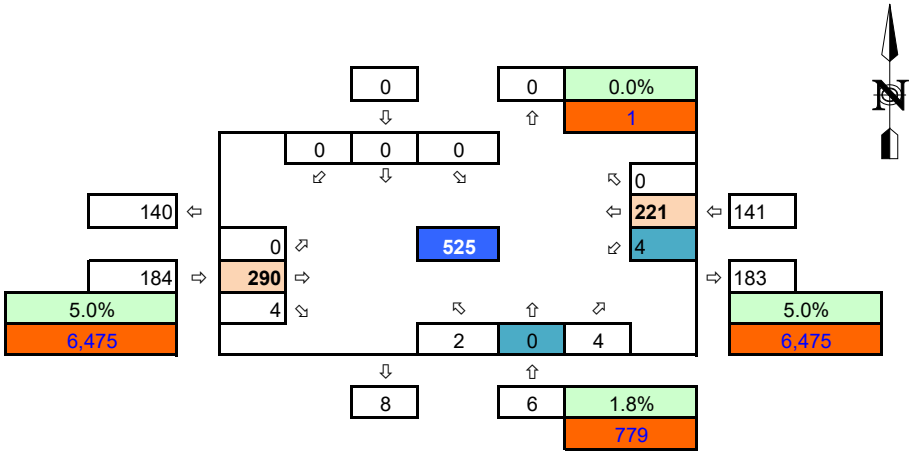
xx = predicted volume < baseline; volume manually increased.

Int 40 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	40
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**



LEGEND

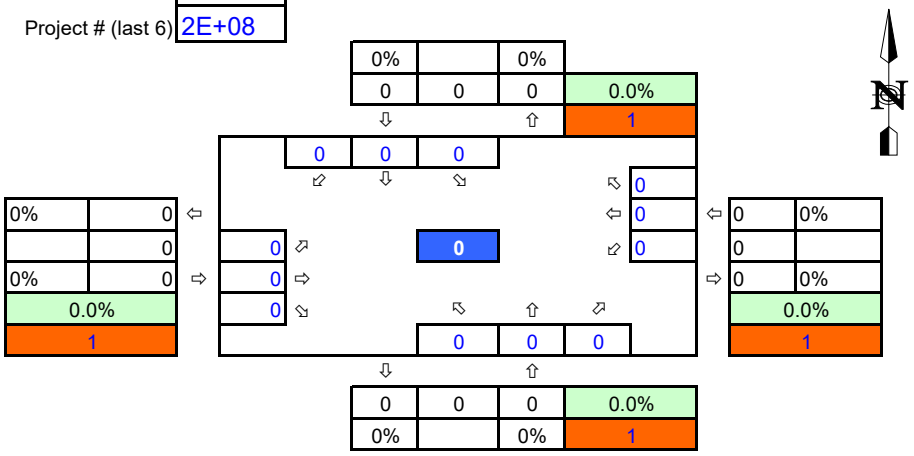
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

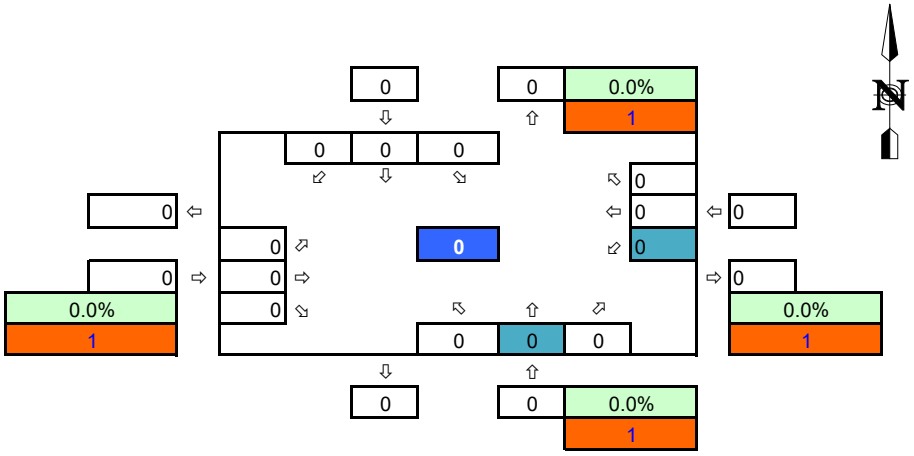
xx = predicted volume < baseline; volume manually increased.

Int 41 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**
Intersection #:	41
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**



LEGEND

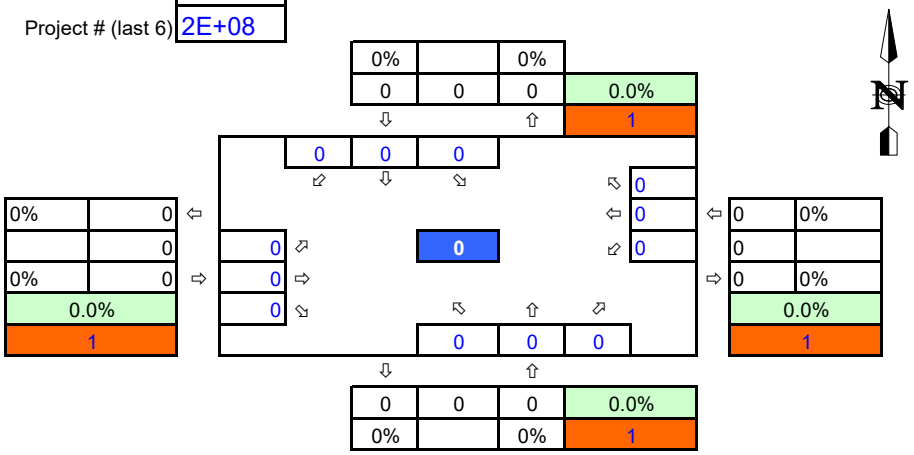
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

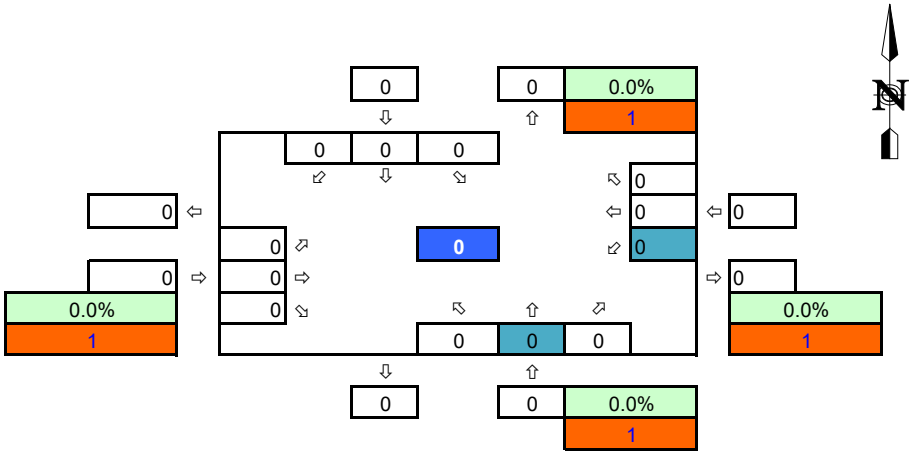
xx = predicted volume < baseline; volume manually increased.

Int 42 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**A St / Jiggs Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	42
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**A St / Jiggs Rd**
E/W Street:	**Hinkley Rd**



LEGEND

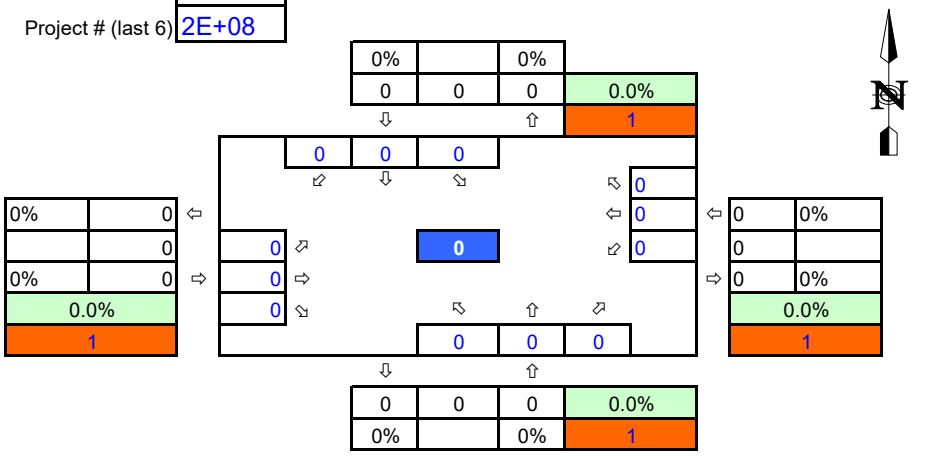
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

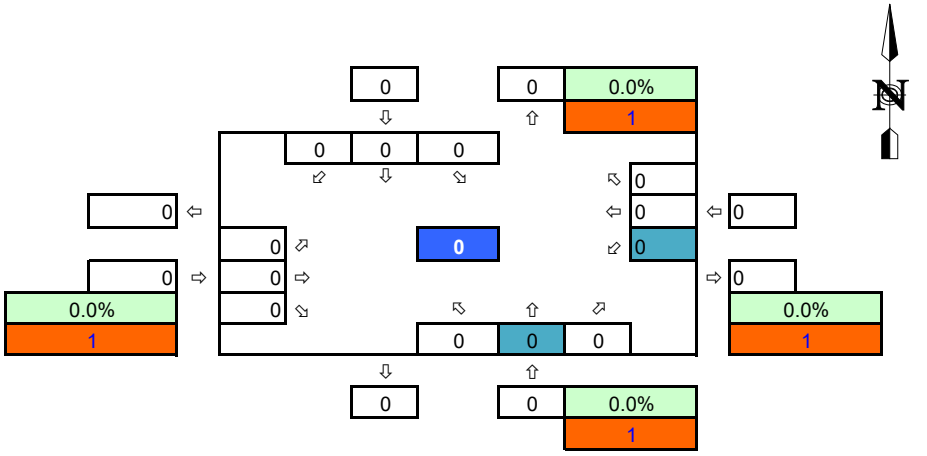
xx = predicted volume < baseline; volume manually increased.

Int 43 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**B St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	43
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**B St / 0**
E/W Street:	**Hinkley Rd**



LEGEND

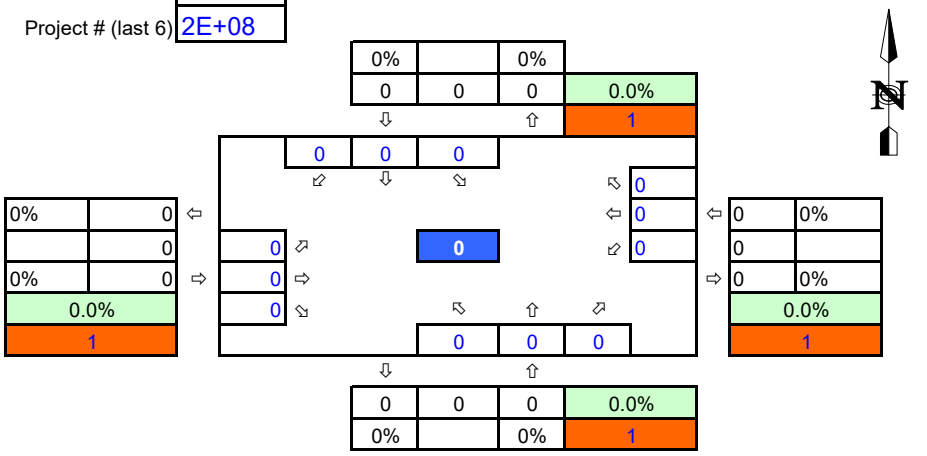
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

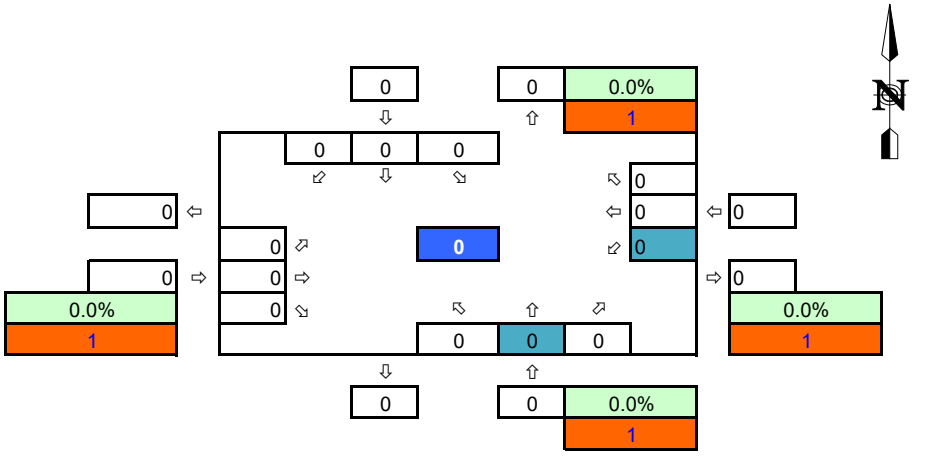
xx = predicted volume < baseline; volume manually increased.

Int 44 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**C St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	44
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**C St / 0**
E/W Street:	**Hinkley Rd**



LEGEND

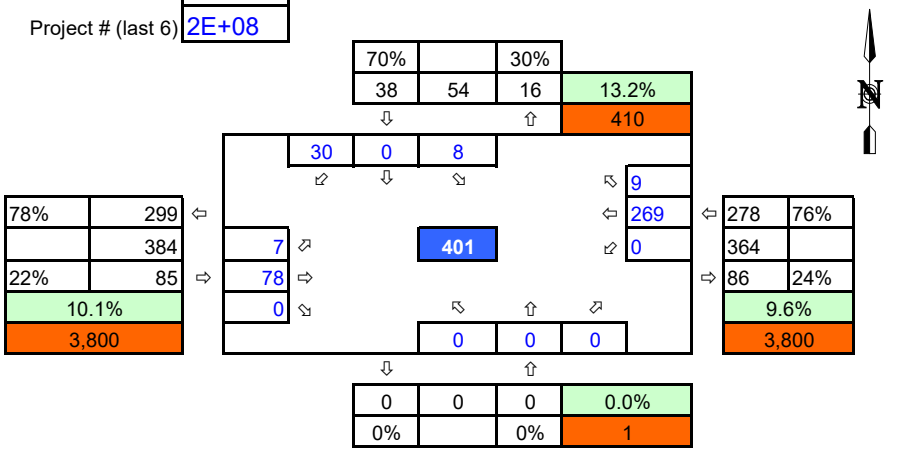
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer exists.

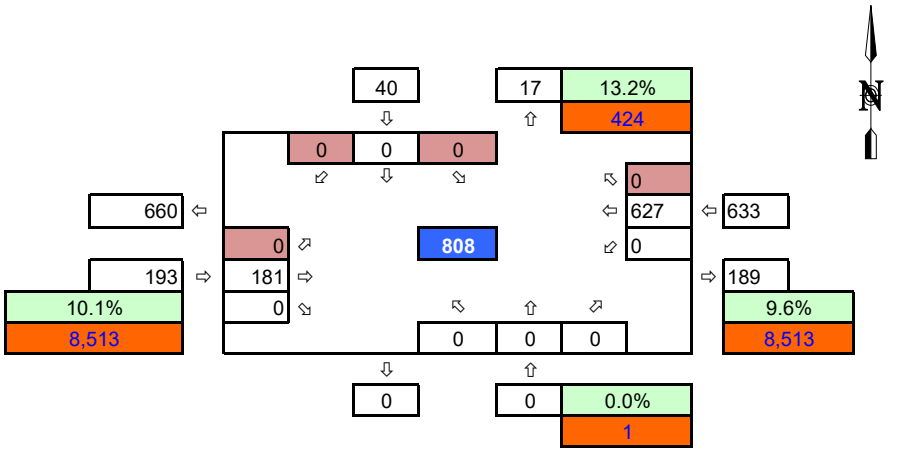
xx = predicted volume < baseline; volume manually increased.

Int 1 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**
Intersection #:	1
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**



LEGEND

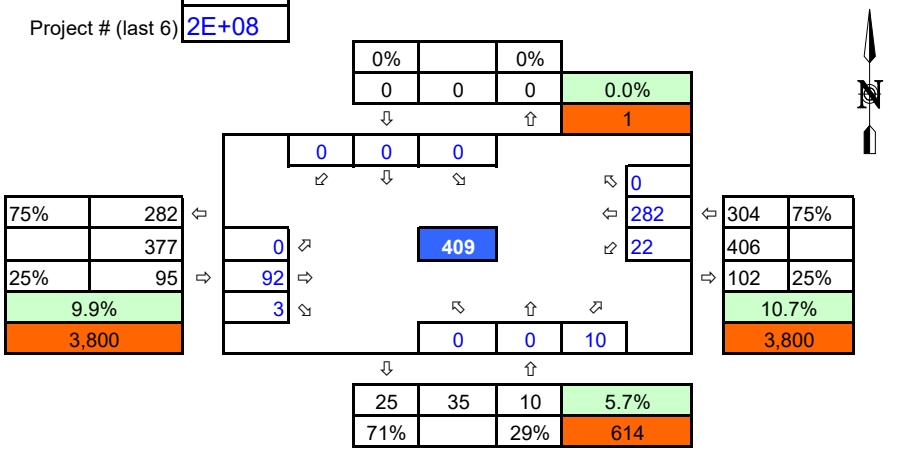
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

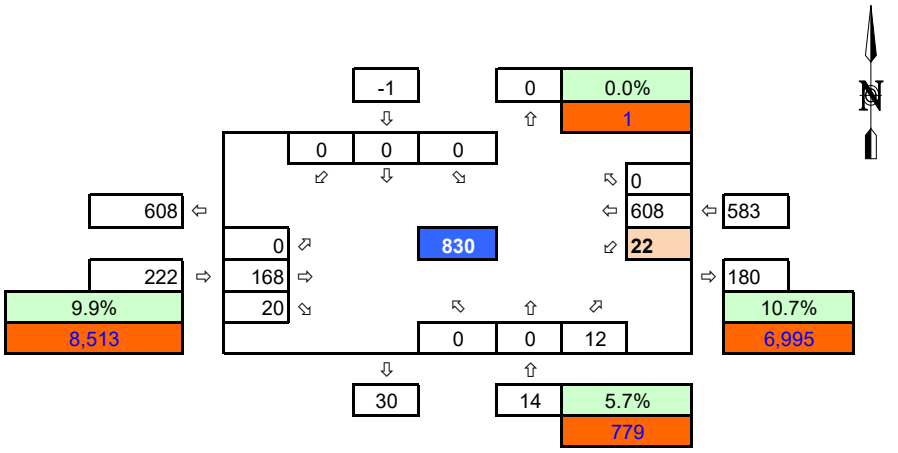
xx = predicted volume < baseline; volume manually increased.

Int 2 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**
Intersection #:	2
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**



LEGEND

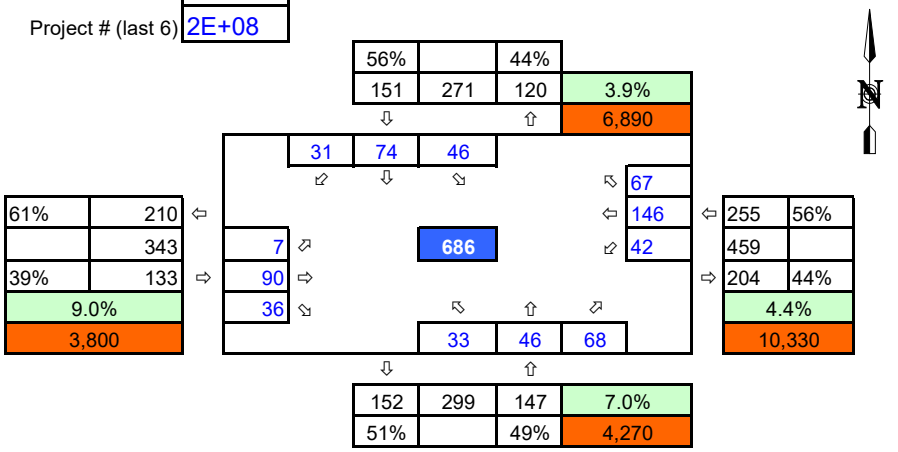
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

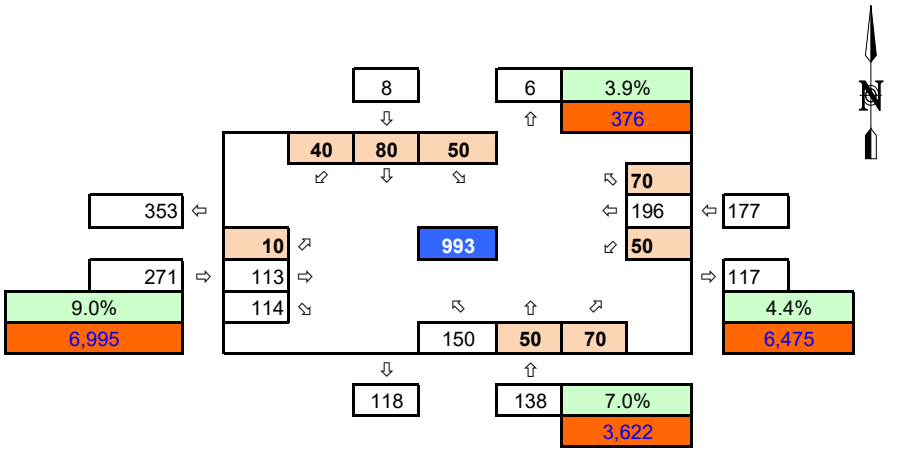
\\orafp01\CA_ORA\ORA_PLAN\195165003 - BNSF Feasibility Assessment\Traffic\Excel\Turn32 Interim
Int 2 PM

Int 3 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**
Intersection #:	3
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**



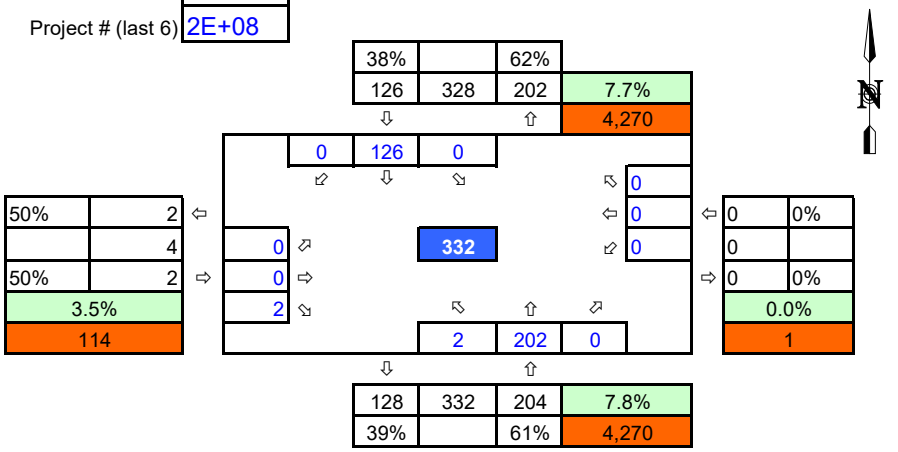
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

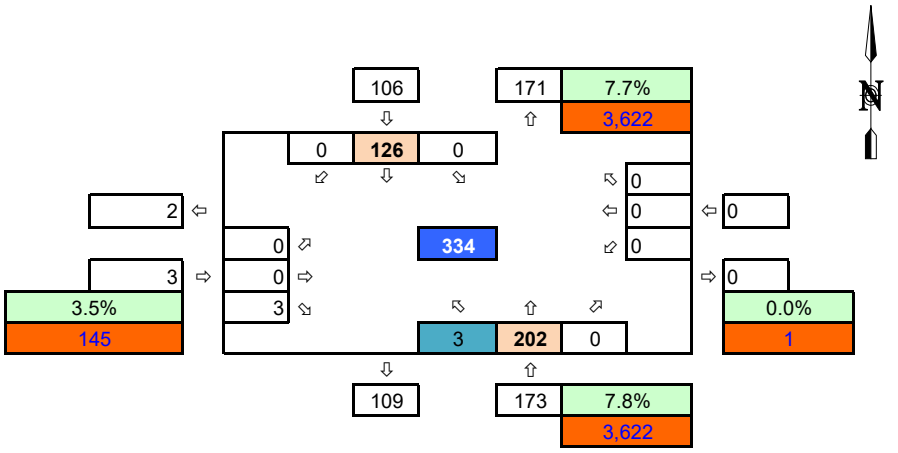
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 4 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**
Intersection #:	4
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**



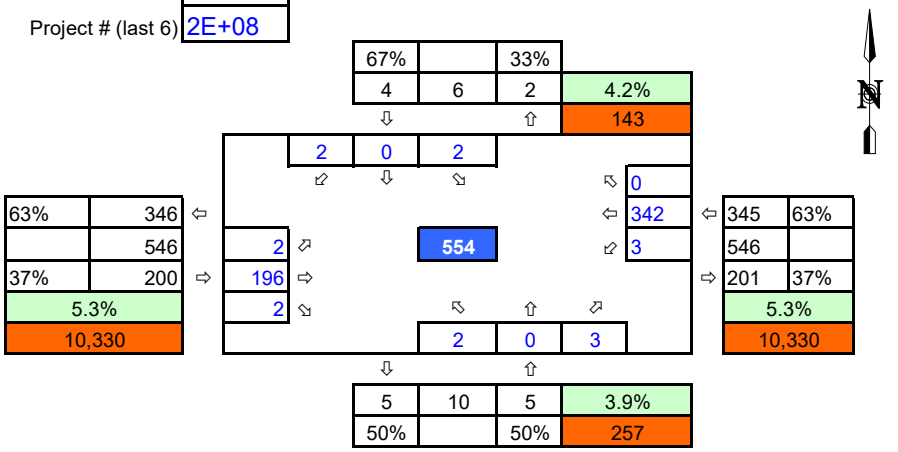
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

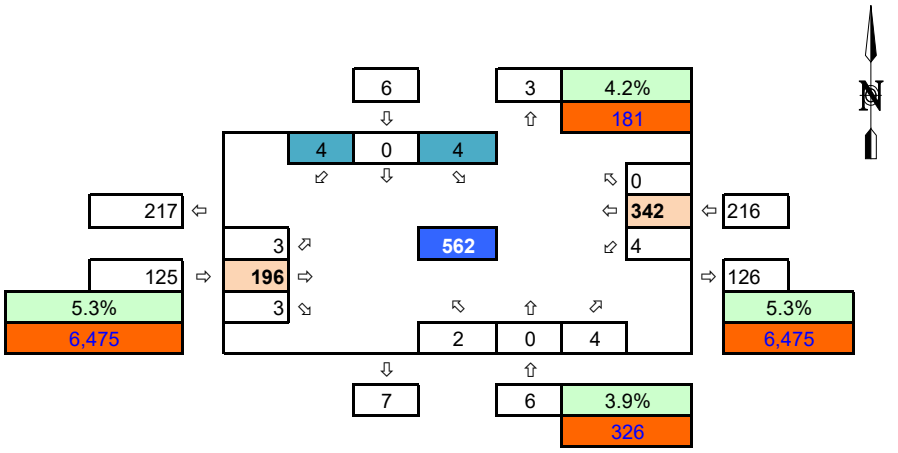
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 5 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**
Intersection #:	5
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**



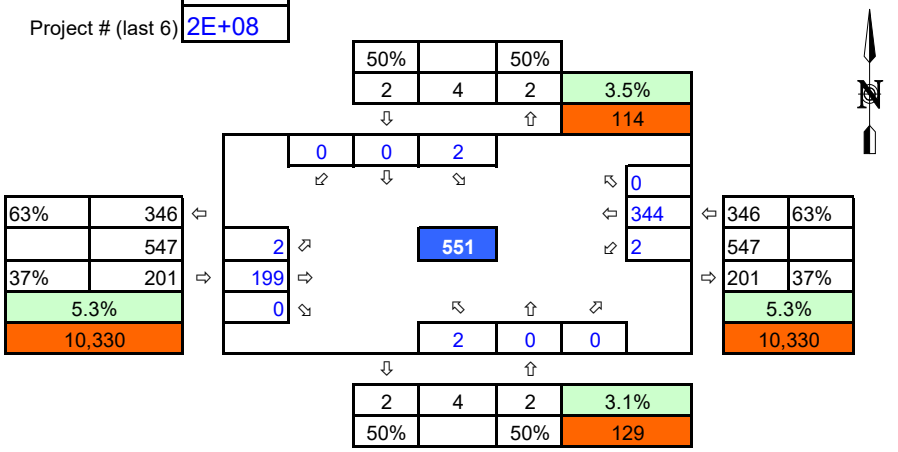
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

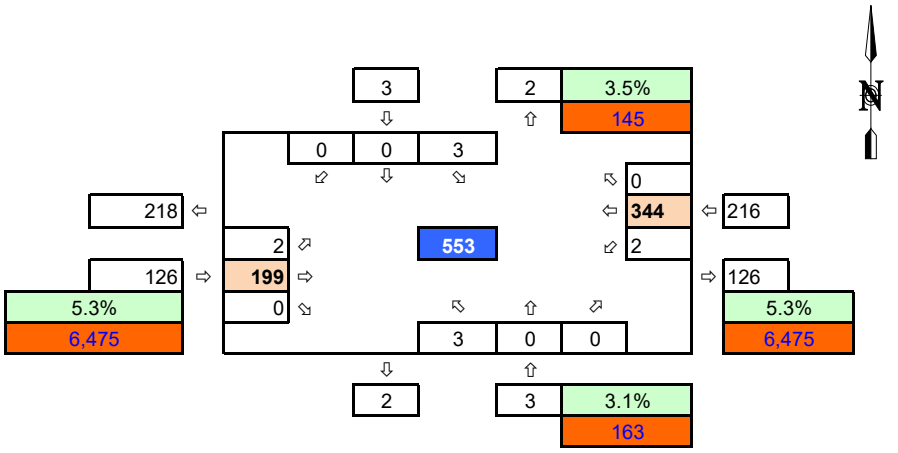
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 6 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**
Intersection #:	6
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**



LEGEND

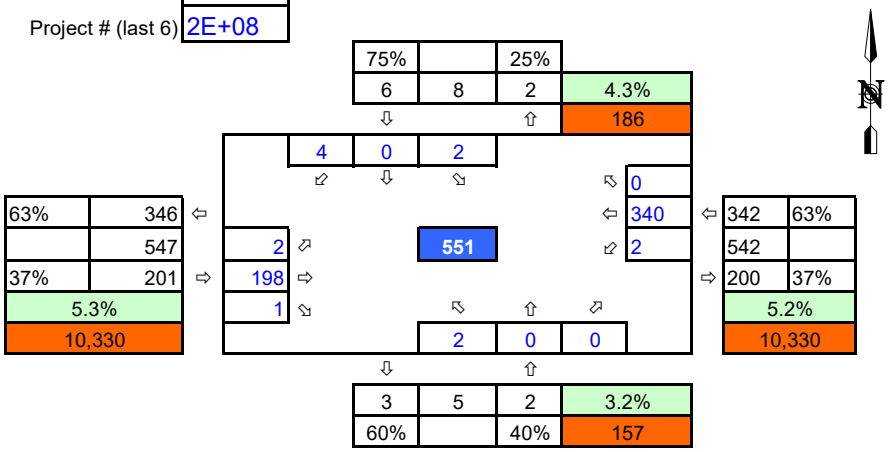
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

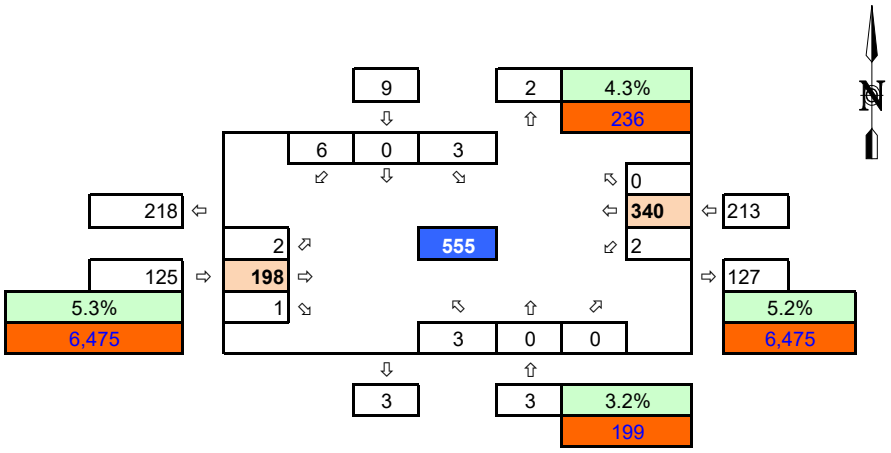
xx = predicted volume < baseline; volume manually increased.

Int 7 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**
Intersection #:	7
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**



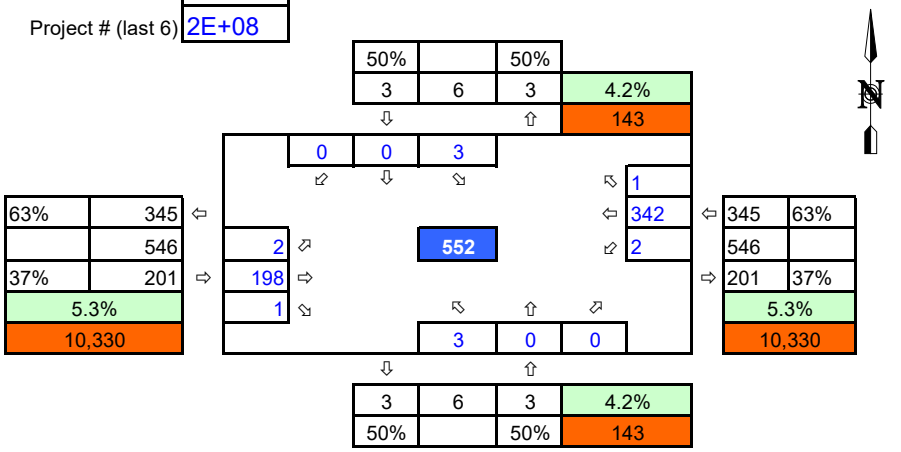
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

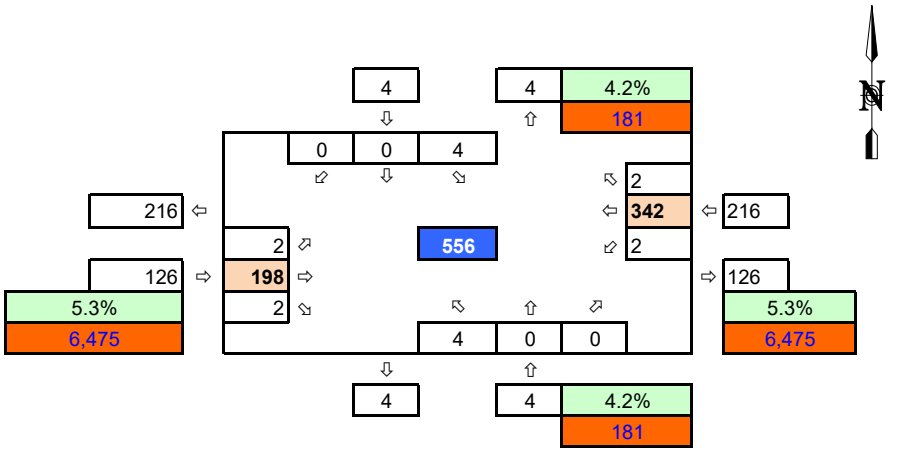
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 8 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**
Intersection #:	8
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**



LEGEND

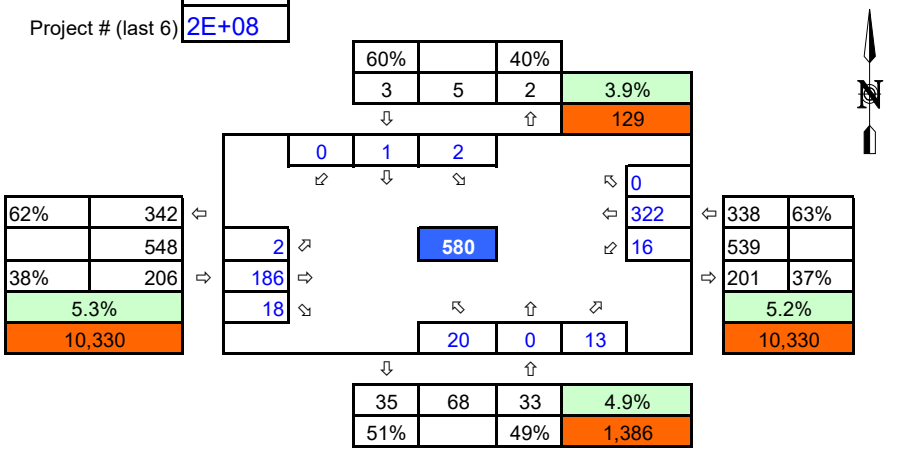
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

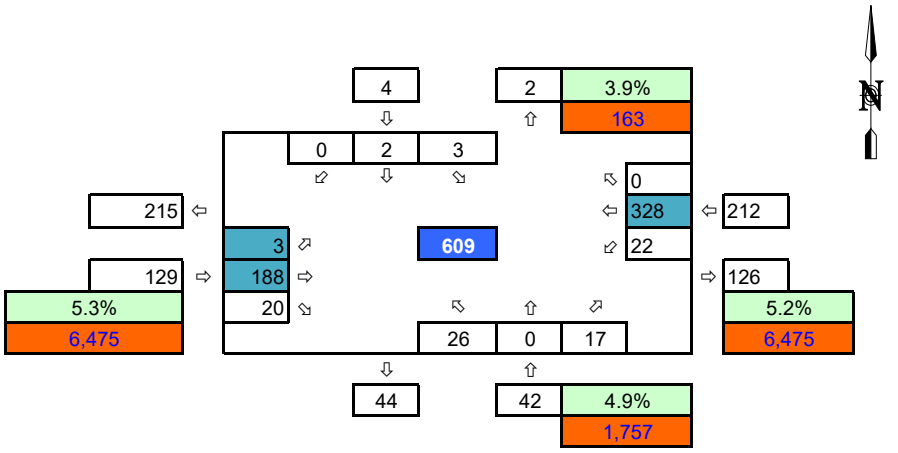
xx = predicted volume < baseline; volume manually increased.

Int 9 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**
Intersection #:	9
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**



LEGEND

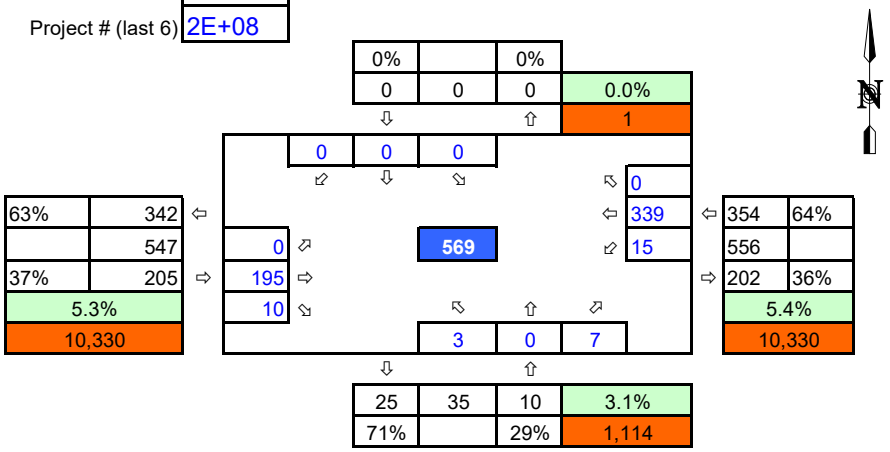
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

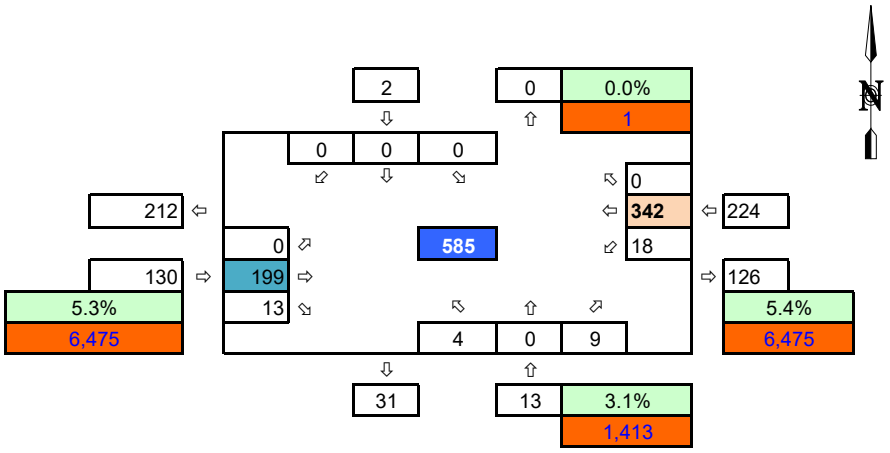
xx = predicted volume < baseline; volume manually increased.

Int 10 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**
Intersection #:	10
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**



LEGEND

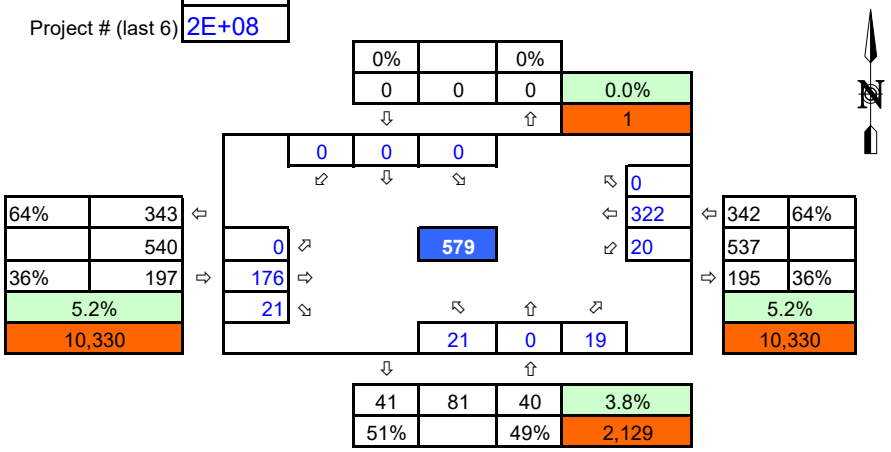
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

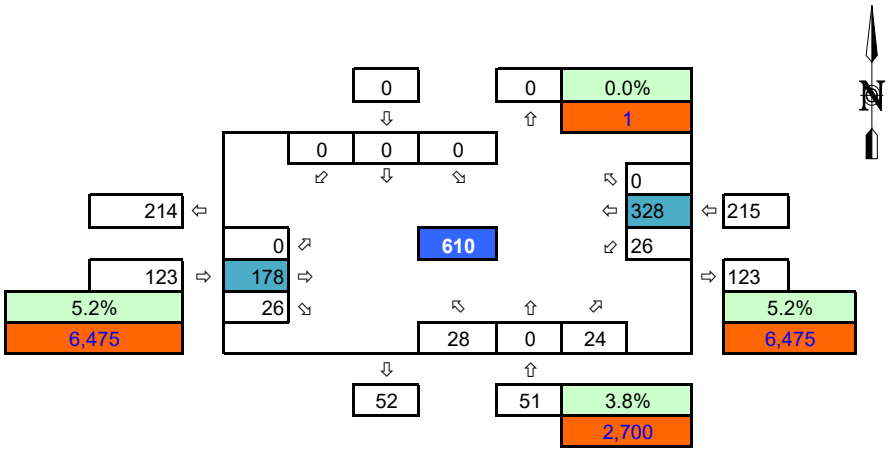
xx = predicted volume < baseline; volume manually increased.

Int 11 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**
Intersection #:	11
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**



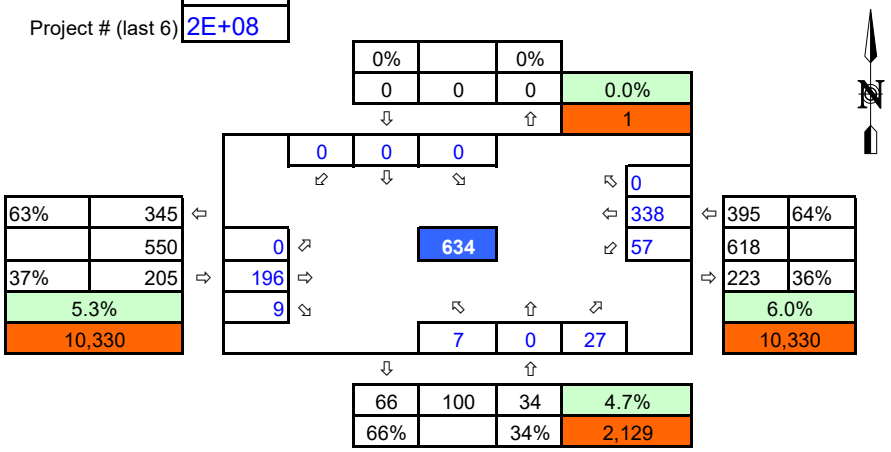
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

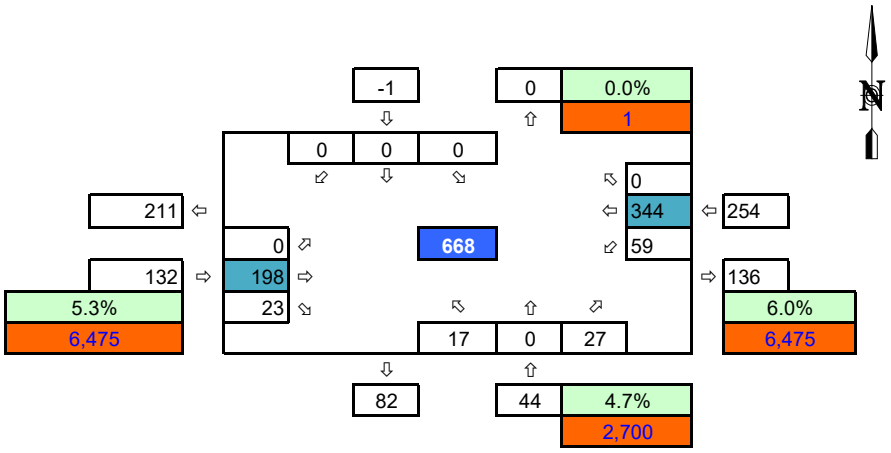
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 12 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**
Intersection #:	12
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**



LEGEND

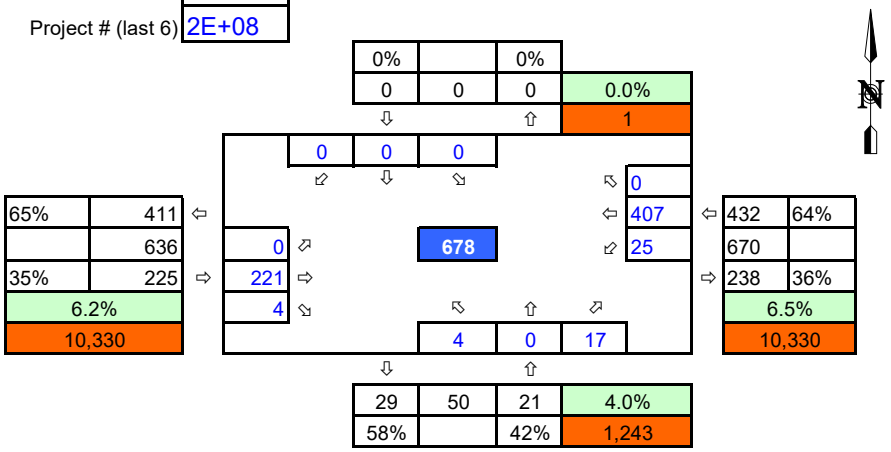
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

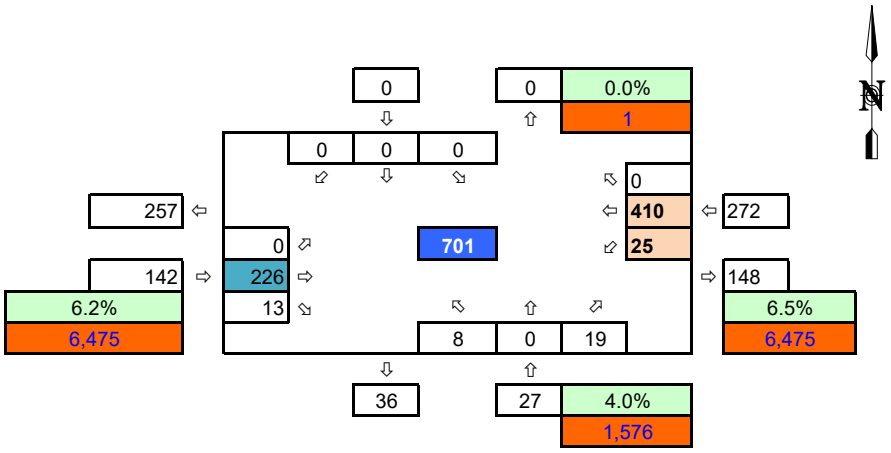
xx = predicted volume < baseline; volume manually increased.

Int 13 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**
Intersection #:	13
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**



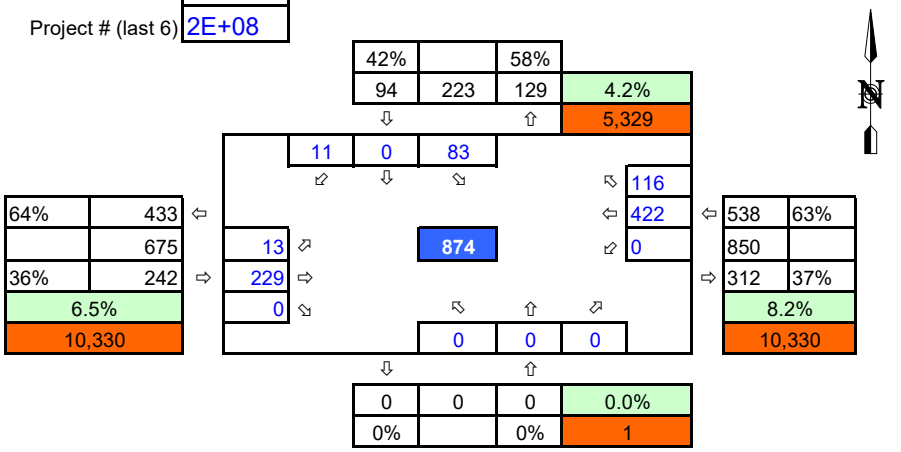
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

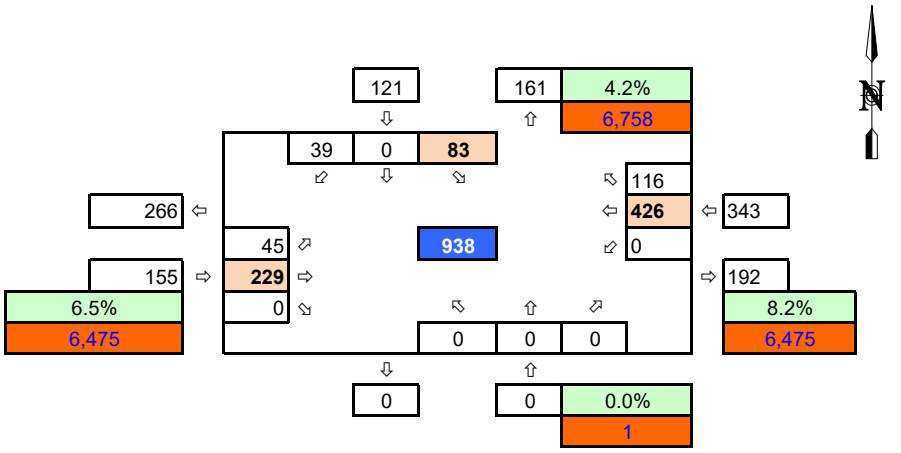
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 14 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**
Intersection #:	14
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**



LEGEND

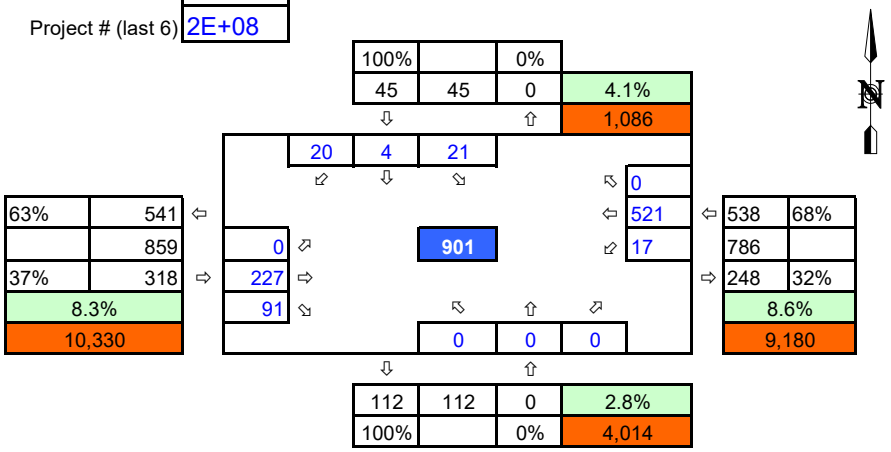
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

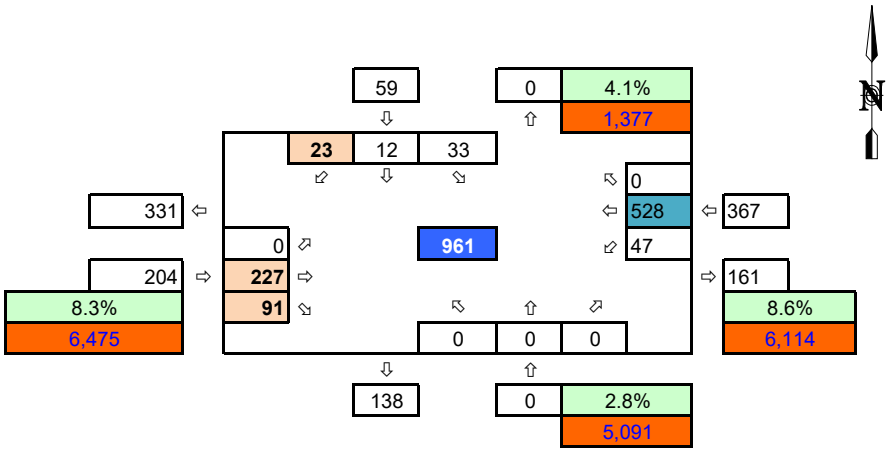
xx = predicted volume < baseline; volume manually increased.

Int 15 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**
Intersection #:	15
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**



LEGEND

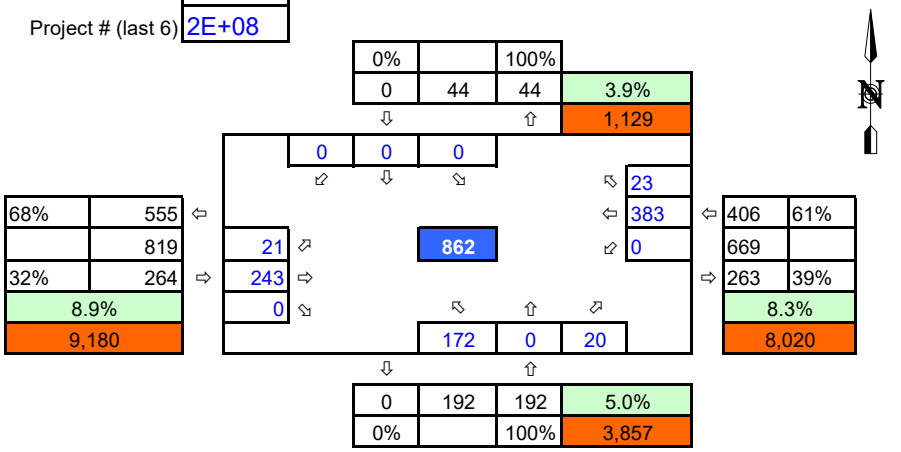
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

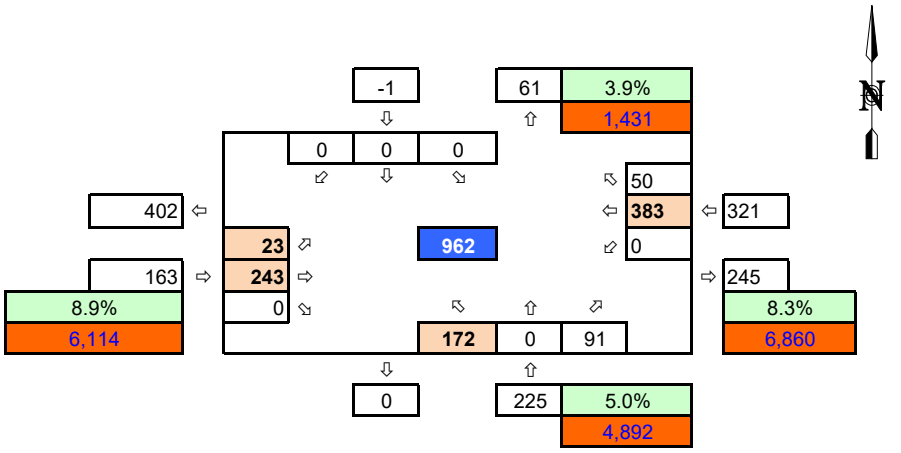
xx = predicted volume < baseline; volume manually increased.

Int 16 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**
Intersection #:	16
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**



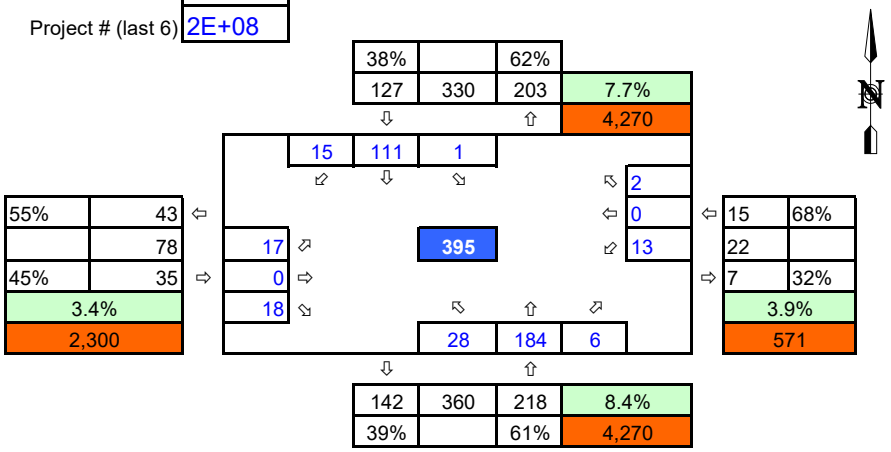
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

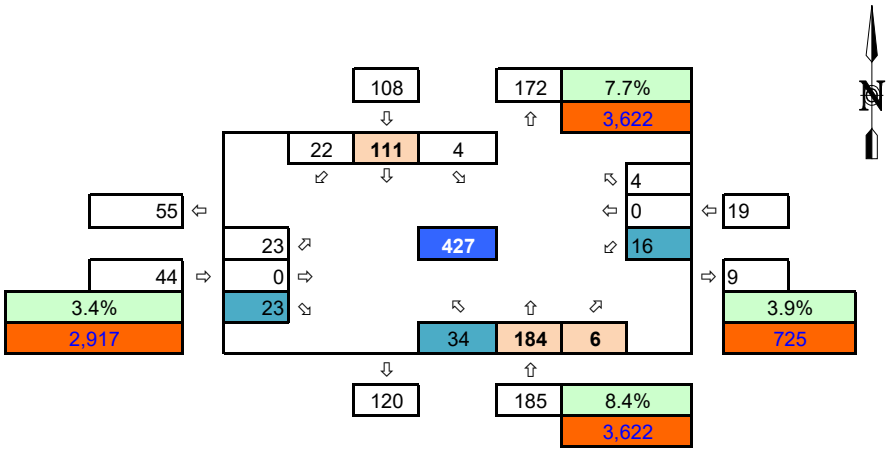
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 17 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**
Intersection #:	17
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**



LEGEND

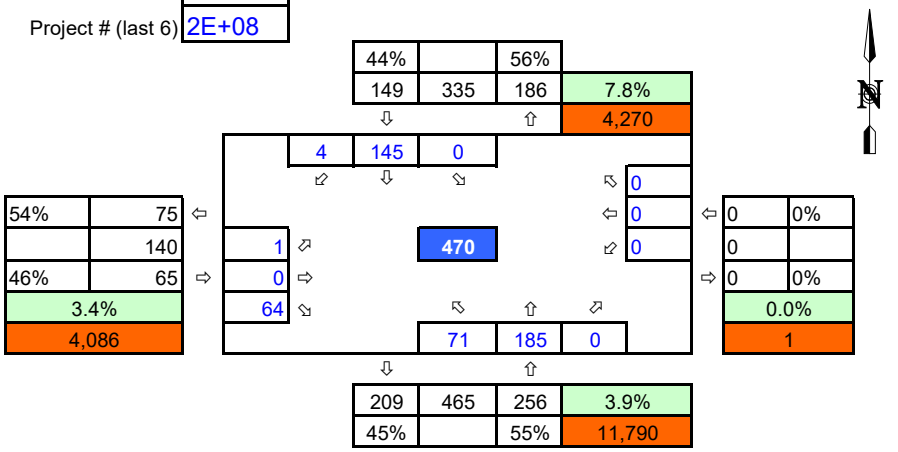
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

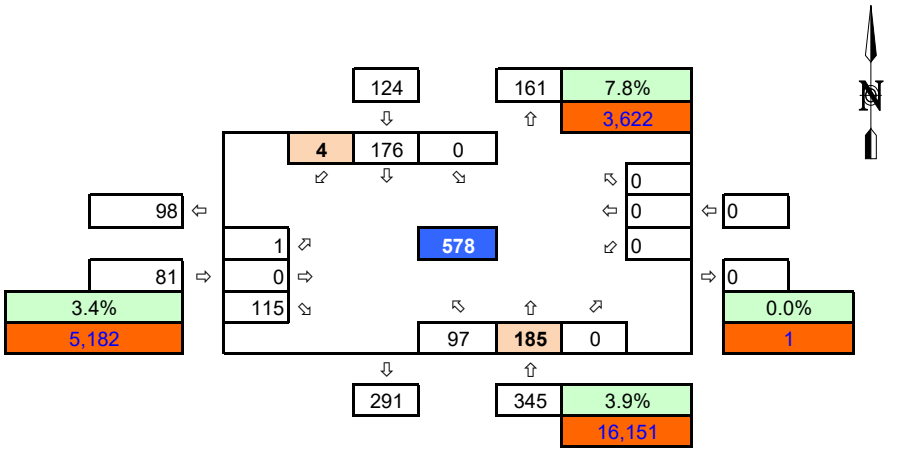
xx = predicted volume < baseline; volume manually increased.

Int 18 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**
Intersection #:	18
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**



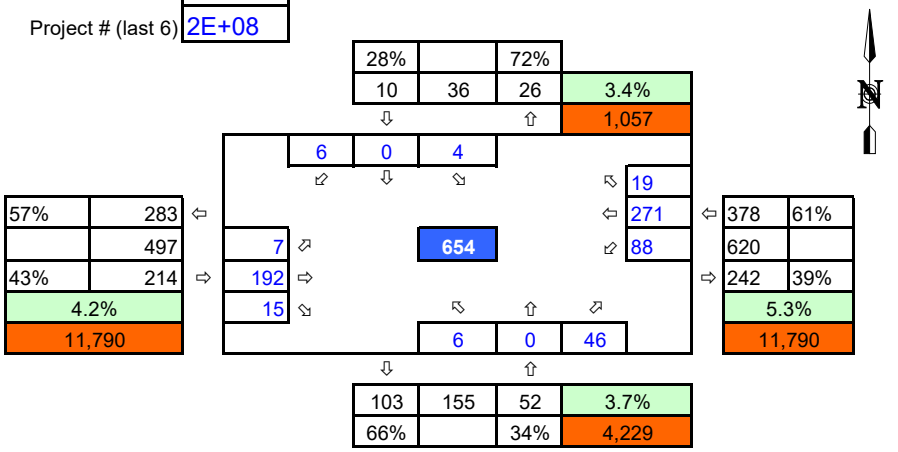
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

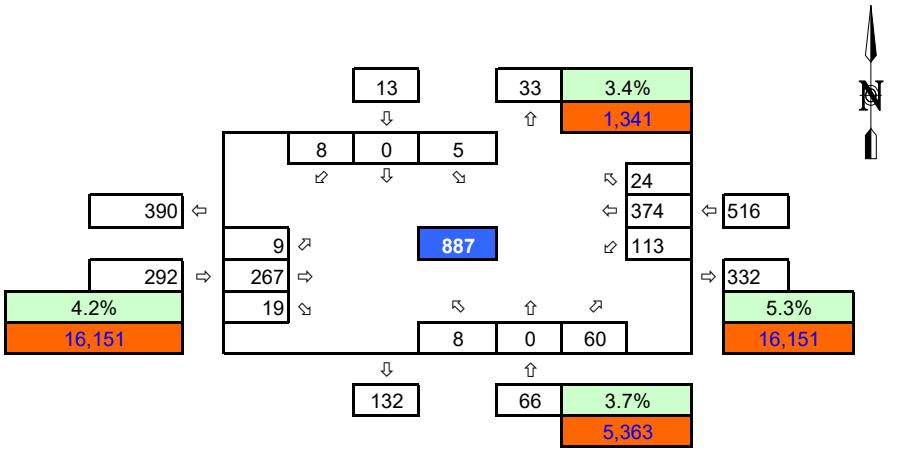
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 19 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**
Intersection #:	19
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**



LEGEND

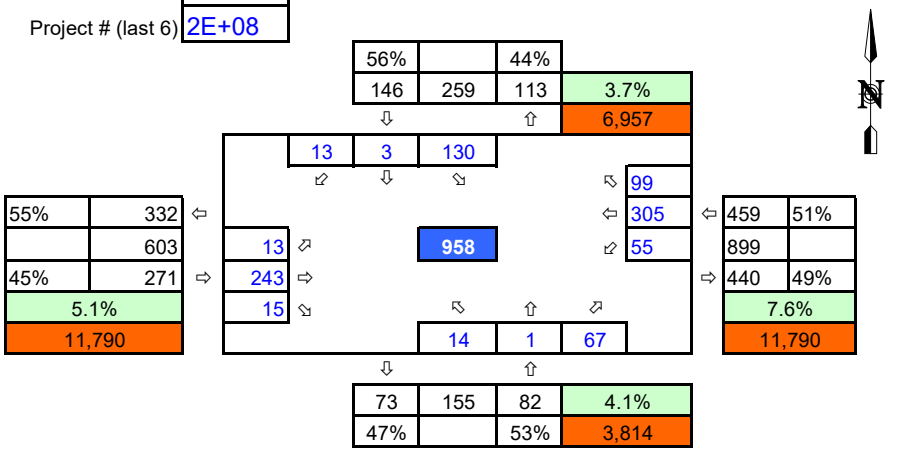
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

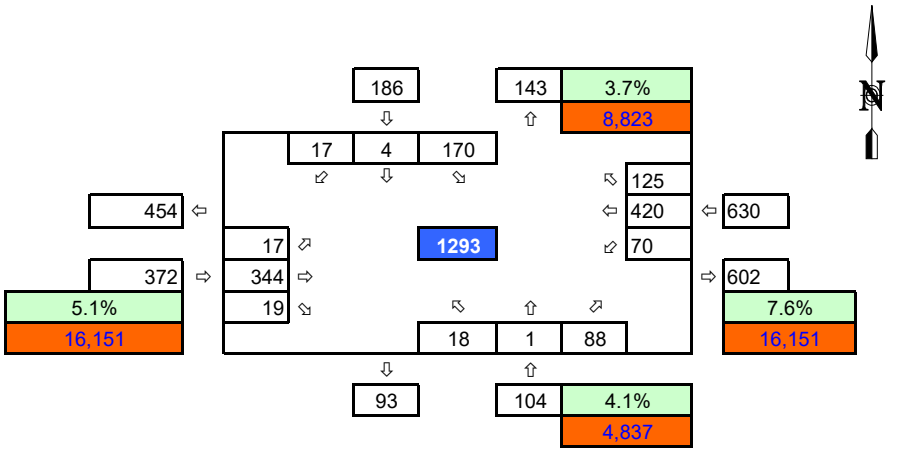
xx = predicted volume < baseline; volume manually increased.

Int 20 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**
Intersection #:	20
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**



LEGEND

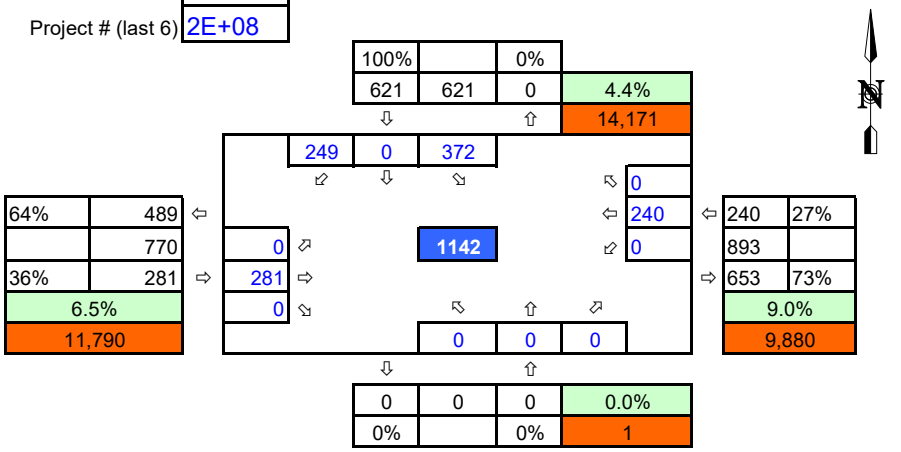
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

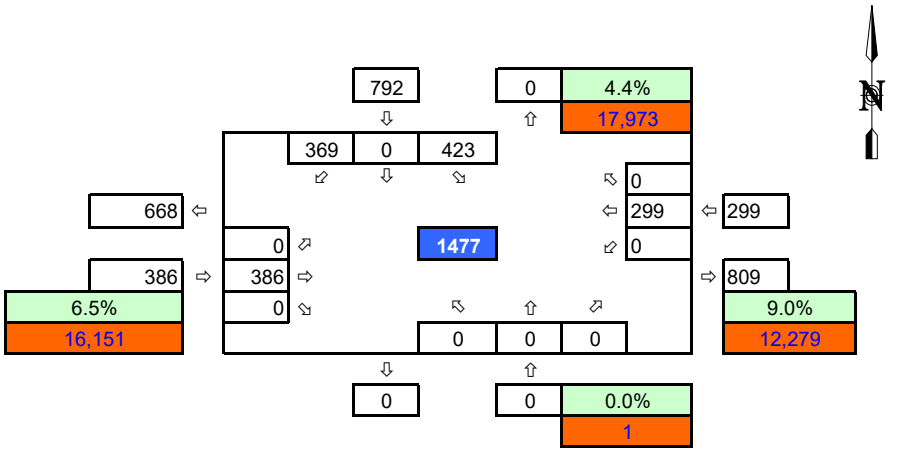
xx = predicted volume < baseline; volume manually increased.

Int 21 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	21
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**



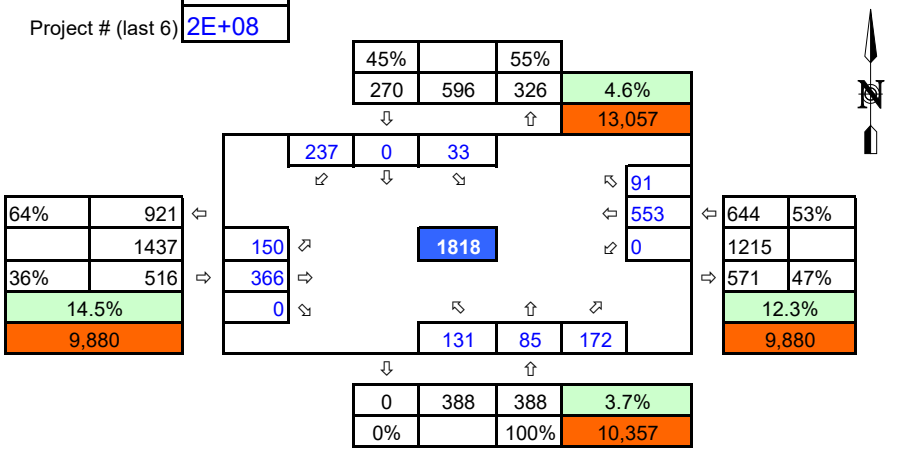
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

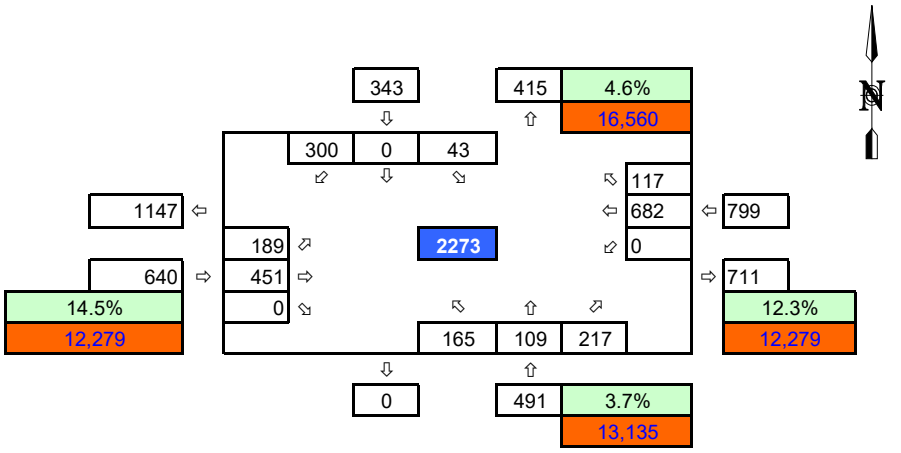
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 22 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	22
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**



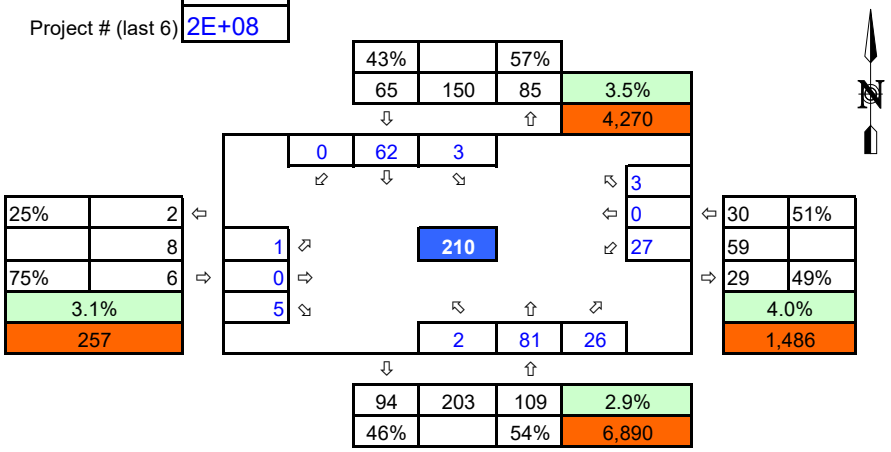
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

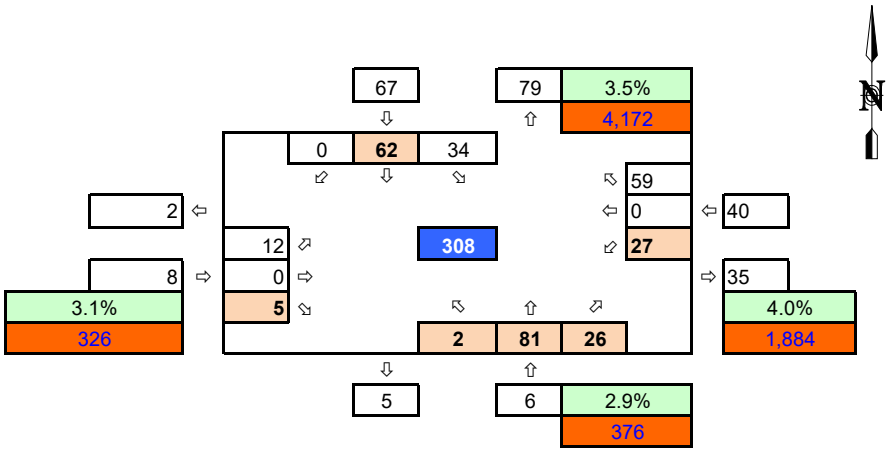
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 23 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**
Intersection #:	23
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**



LEGEND

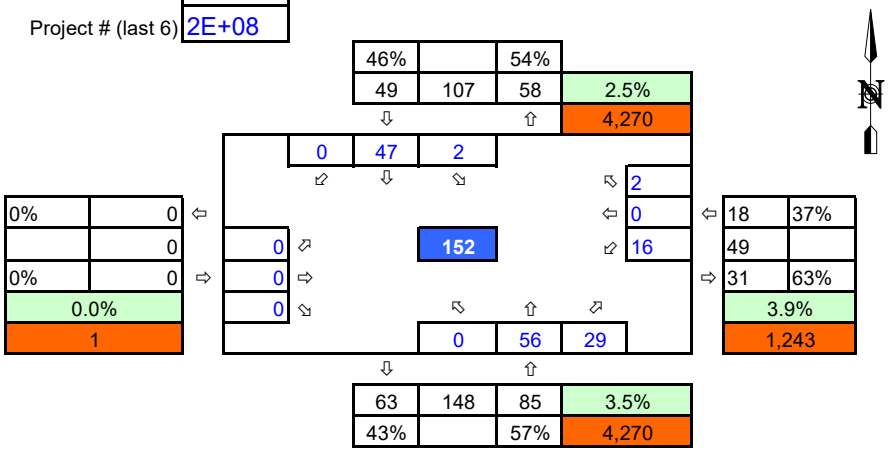
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

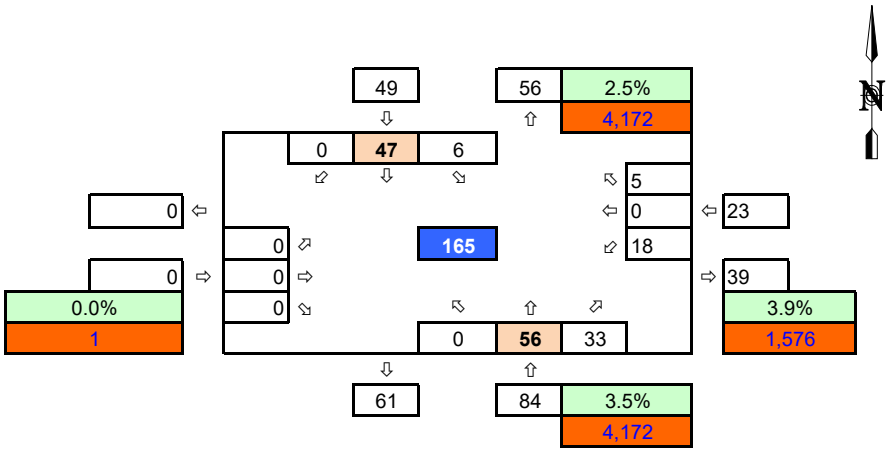
xx = predicted volume < baseline; volume manually increased.

Int 24 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**
Intersection #:	24
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**



LEGEND

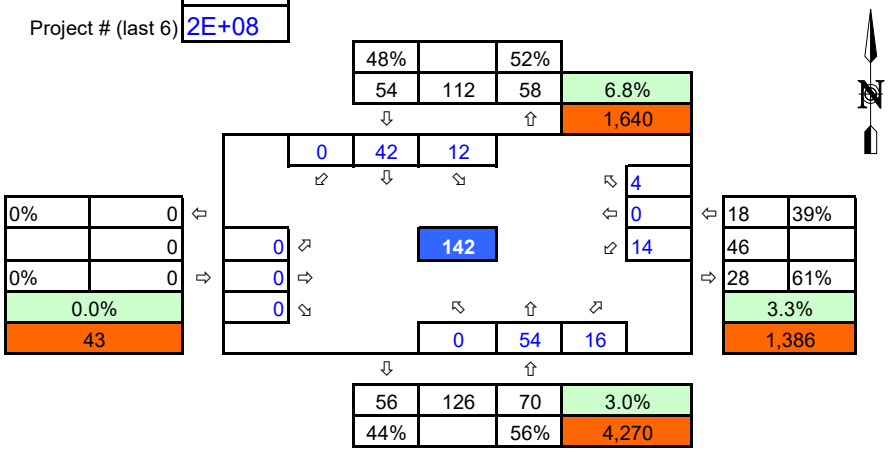
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

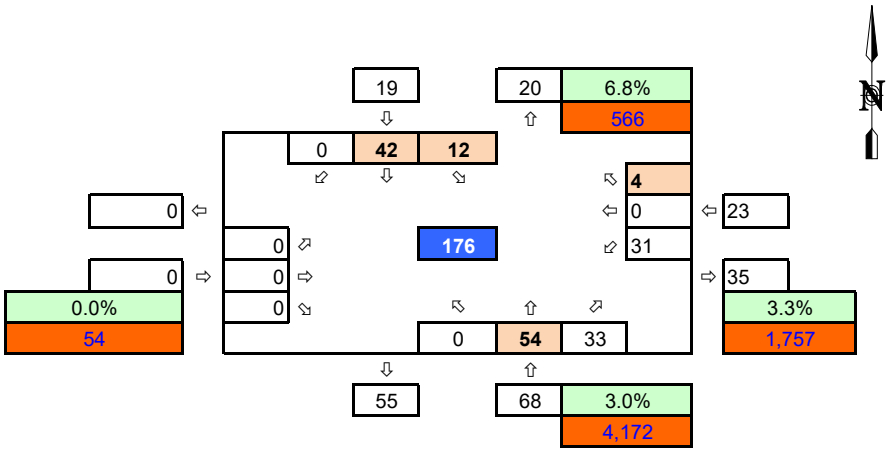
xx = predicted volume < baseline; volume manually increased.

Int 25 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**
Intersection #:	25
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**



LEGEND

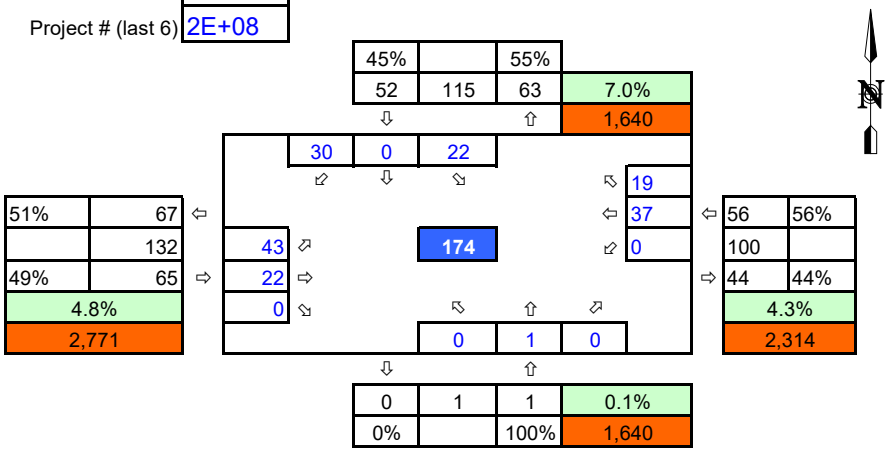
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

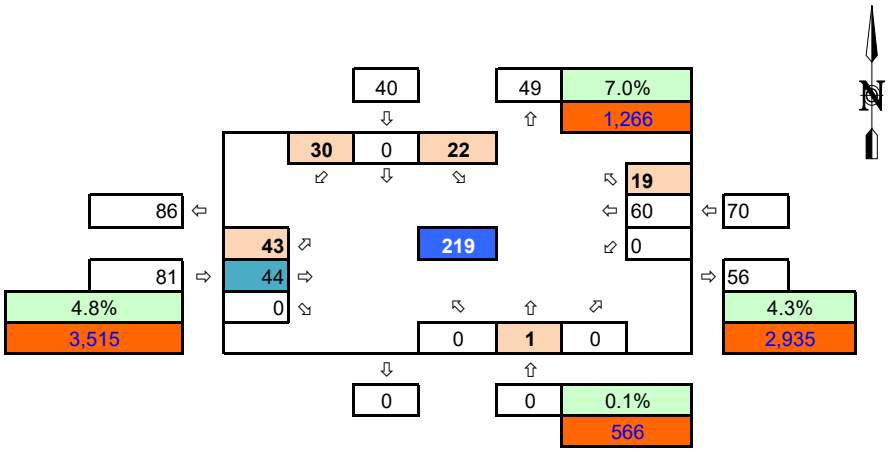
xx = predicted volume < baseline; volume manually increased.

Int 26 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**
Intersection #:	26
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**



LEGEND

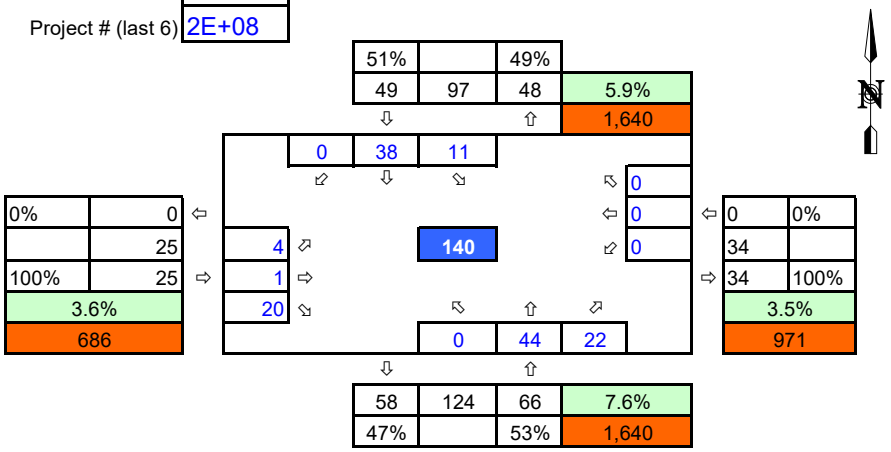
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

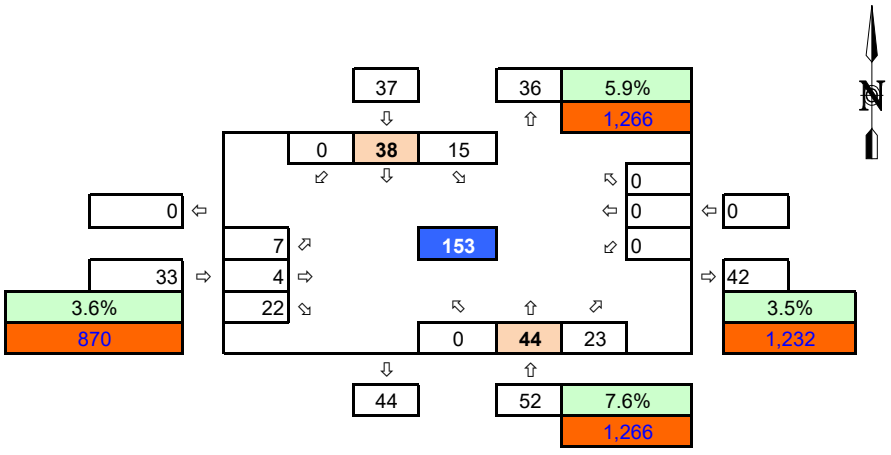
xx = predicted volume < baseline; volume manually increased.

Int 27 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**
Intersection #:	27
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**



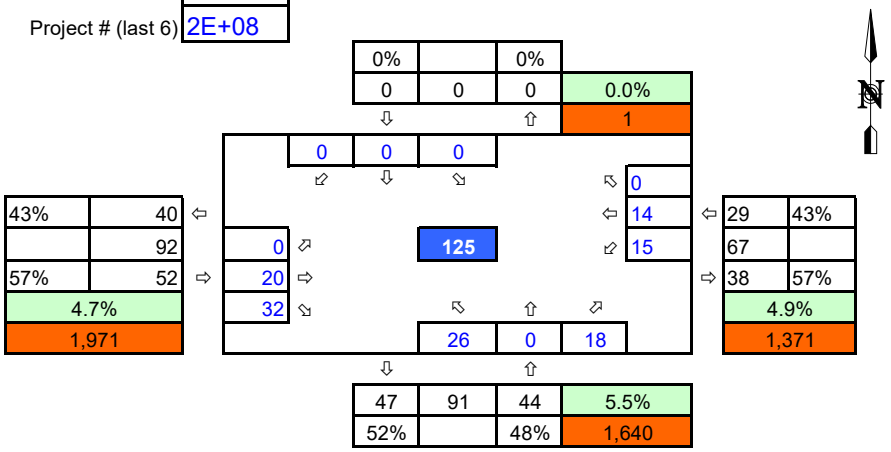
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

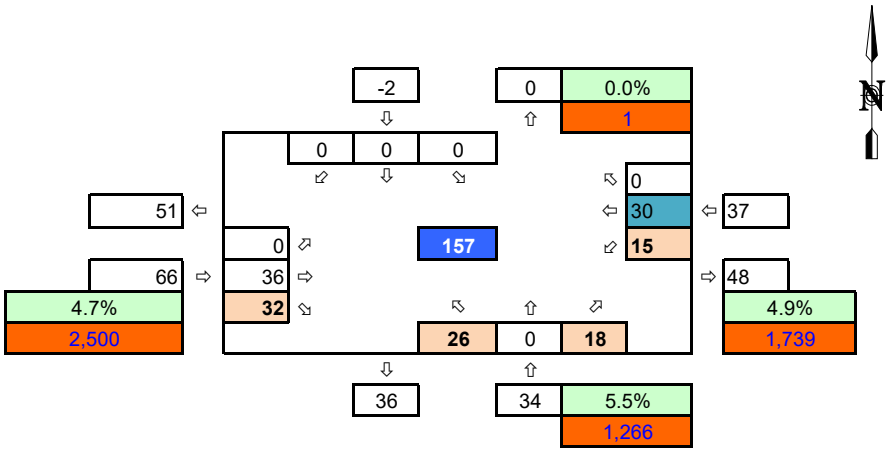
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 28 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**
Intersection #:	28
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**



LEGEND

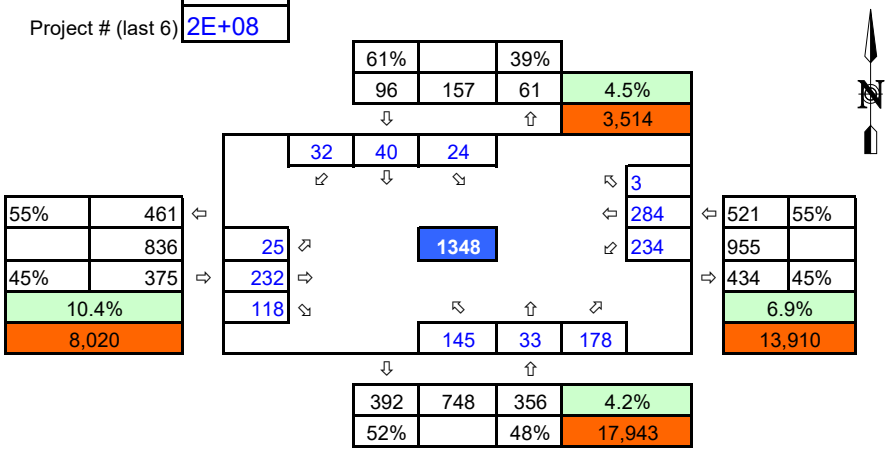
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

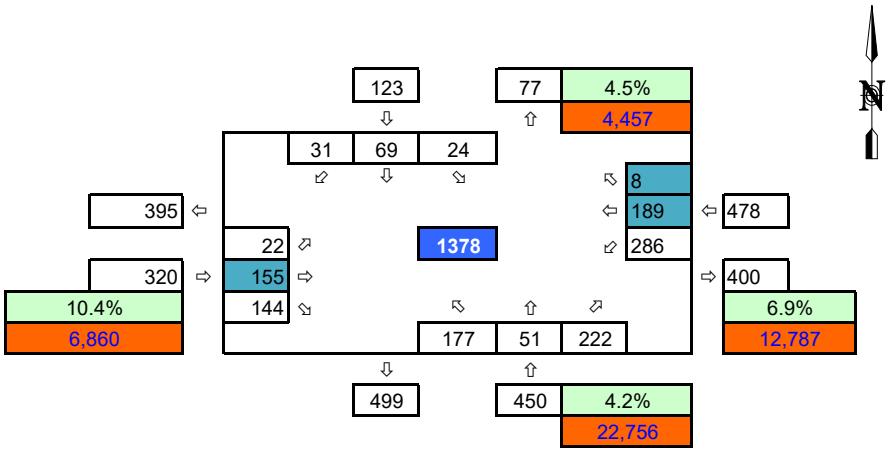
xx = predicted volume < baseline; volume manually increased.

Int 29 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**
Intersection #:	29
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**



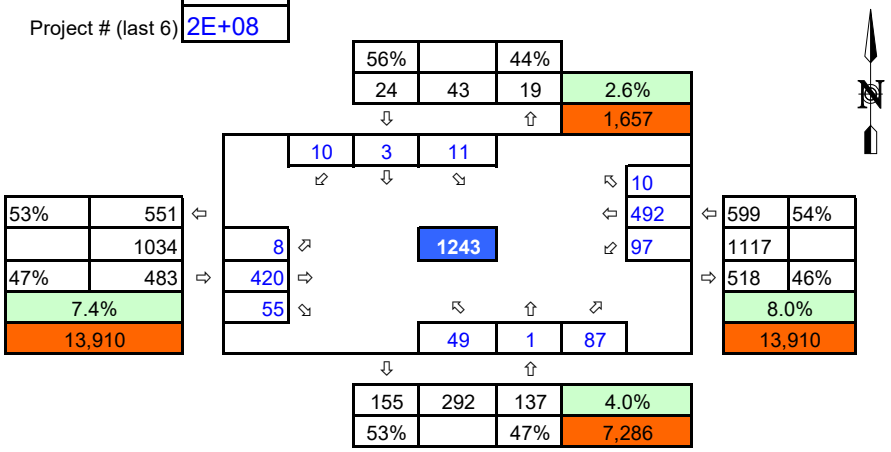
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

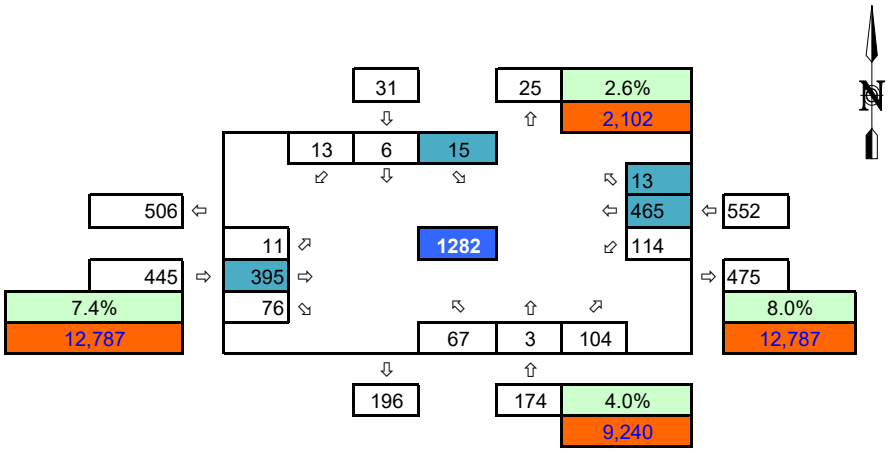
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 30 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**
Intersection #:	30
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**



LEGEND

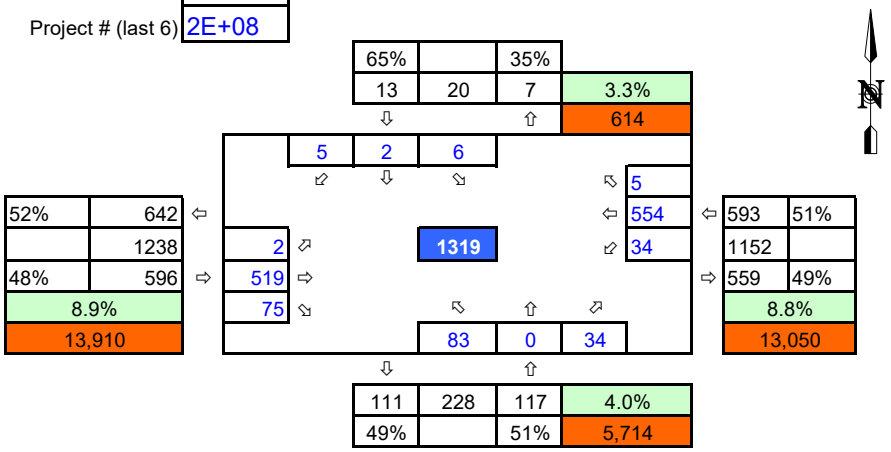
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

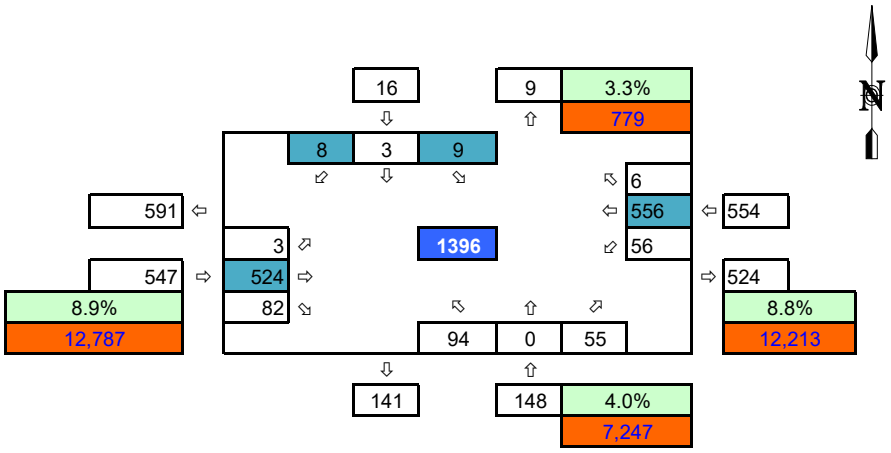
xx = predicted volume < baseline; volume manually increased.

Int 31 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**
Intersection #:	31
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**



LEGEND

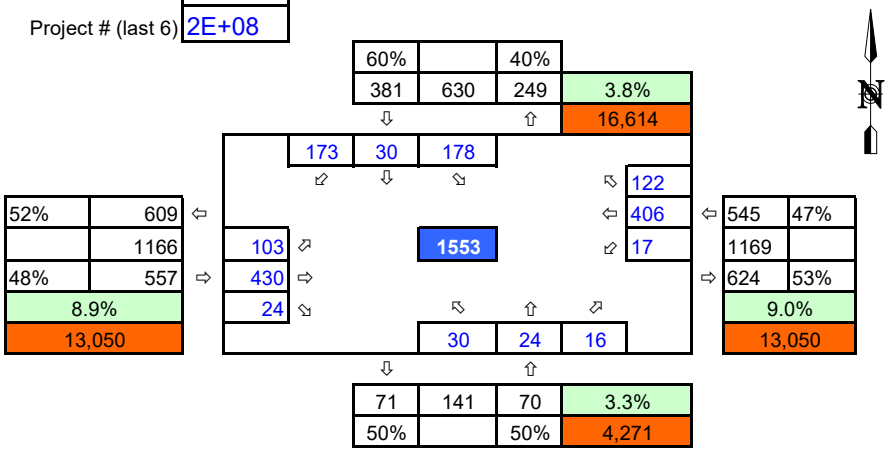
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

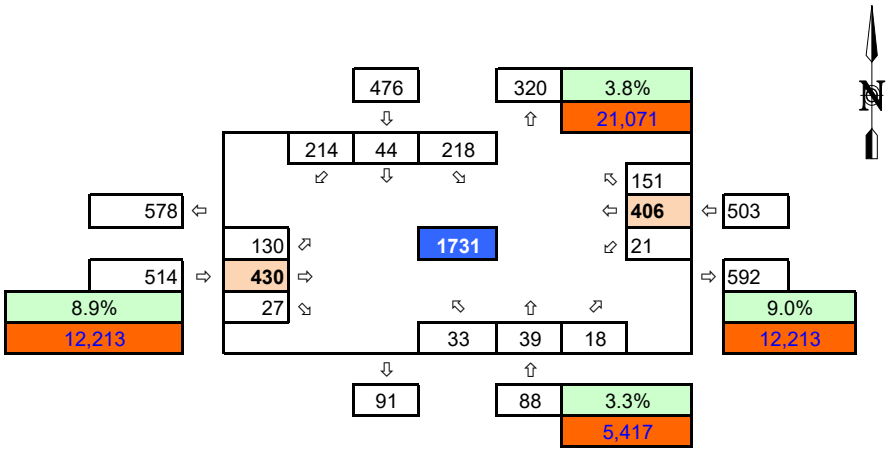
xx = predicted volume < baseline; volume manually increased.

Int 32 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**
Intersection #:	32
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**



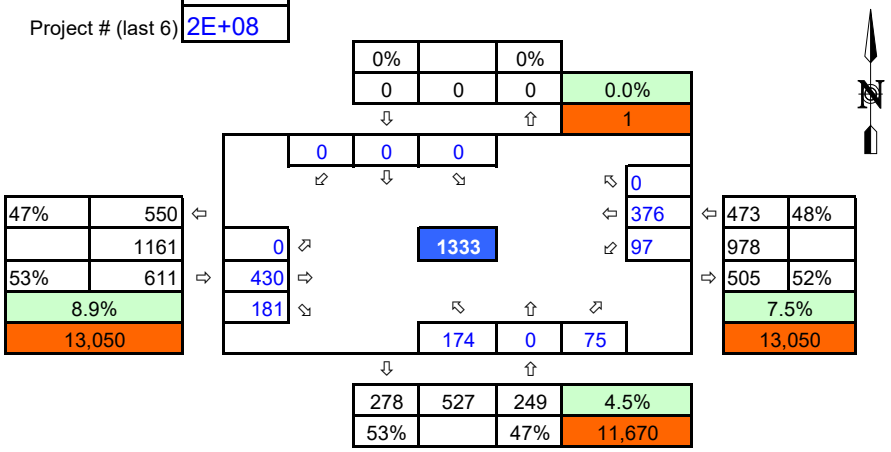
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

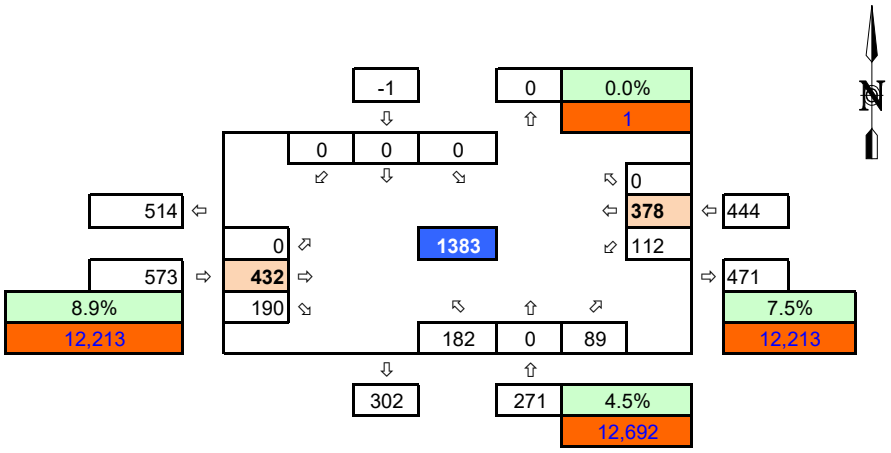
xx = turning movement no longer
xx = predicted volume < baseline; volume manually increased.

Int 33 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**
Intersection #:	33
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**



LEGEND

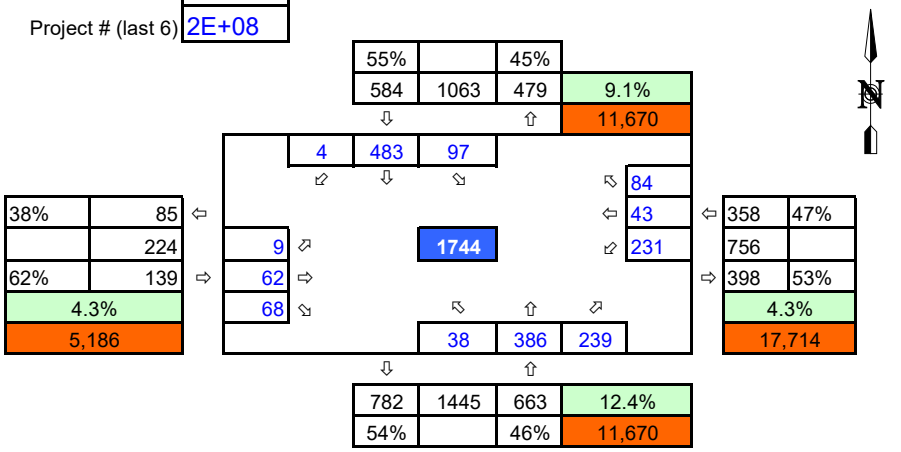
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

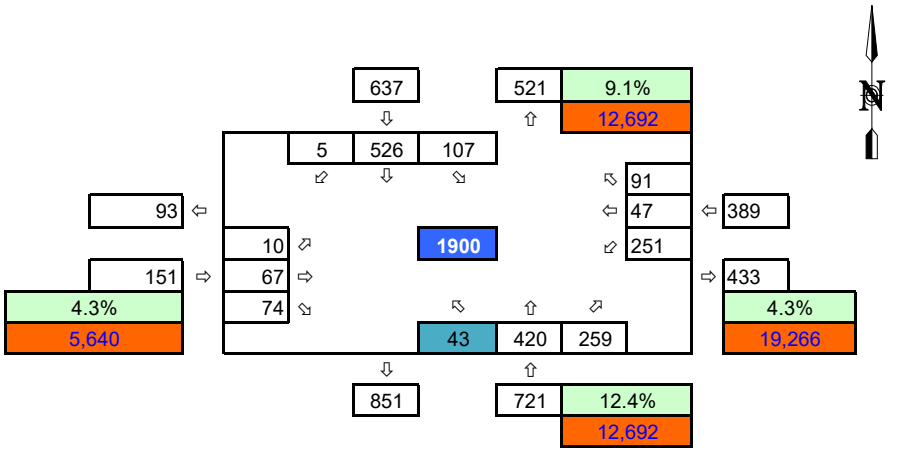
xx = predicted volume < baseline; volume manually increased.

Int 34 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**
Intersection #:	34
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**



LEGEND

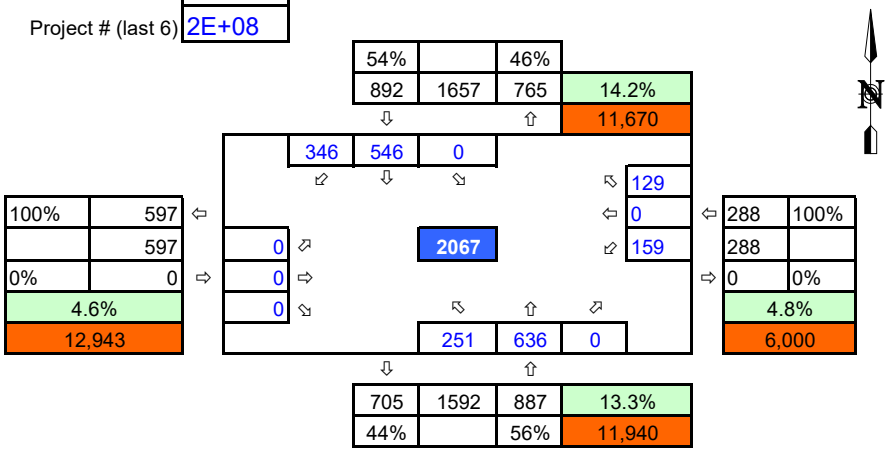
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

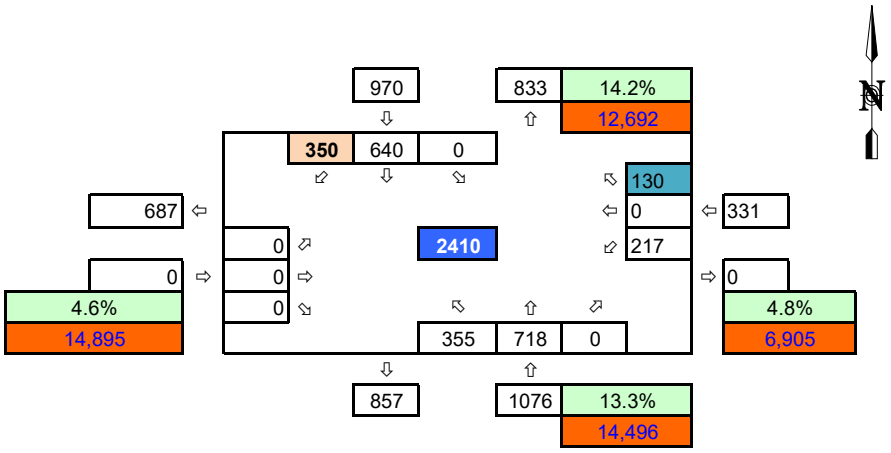
xx = predicted volume < baseline; volume manually increased.

Int 35 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**
Intersection #:	35
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**



LEGEND

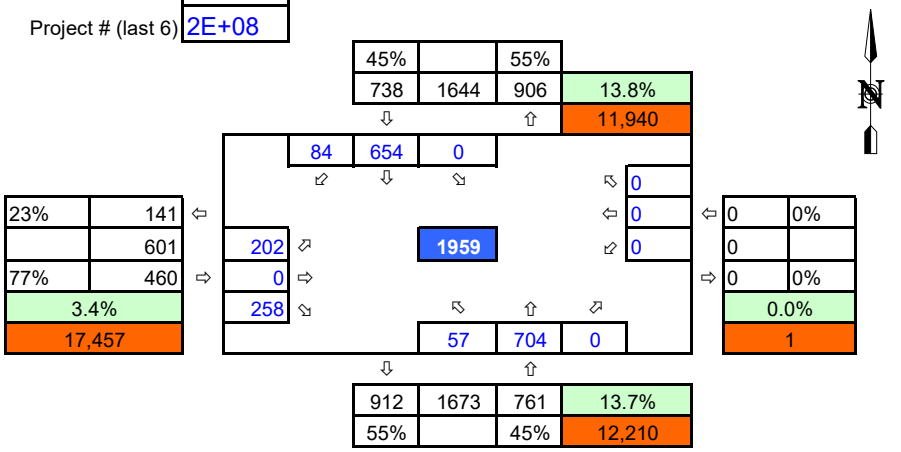
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

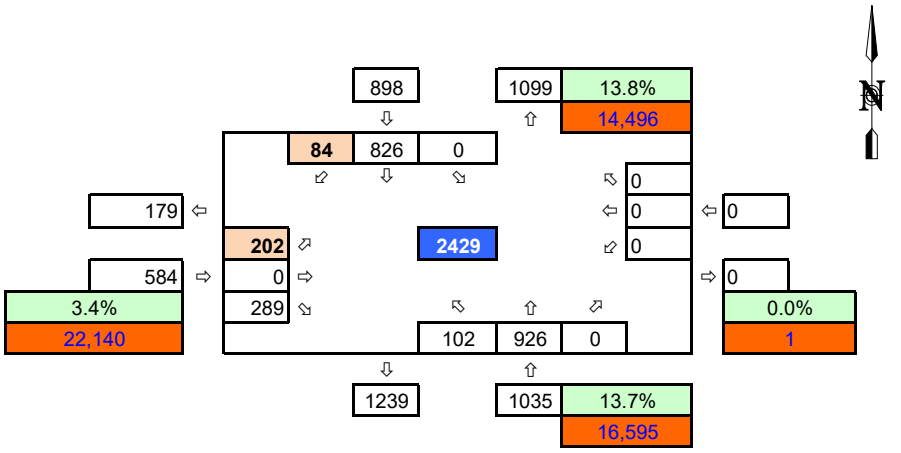
xx = predicted volume < baseline; volume manually increased.

Int 36 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**
Intersection #:	36
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**



LEGEND

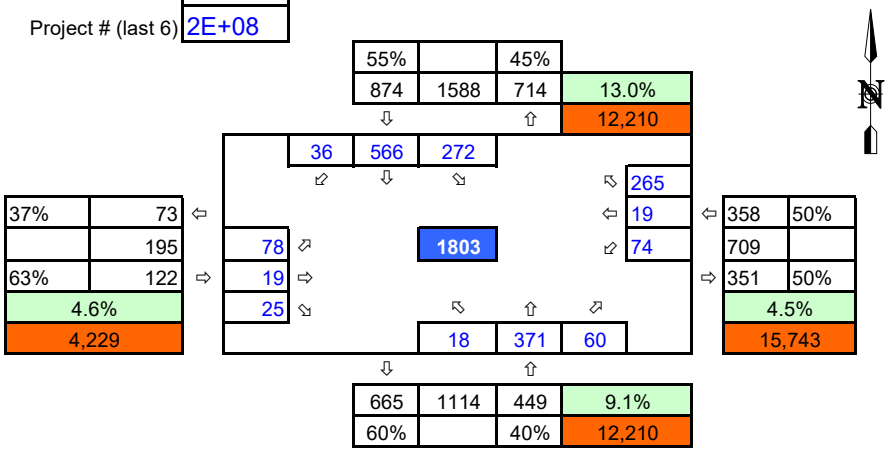
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

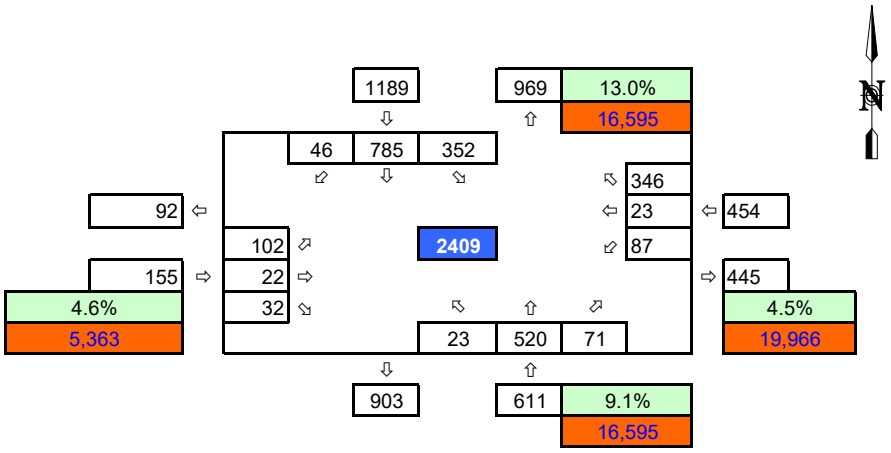
xx = predicted volume < baseline; volume manually increased.

Int 37 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**
Intersection #:	37
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**



LEGEND

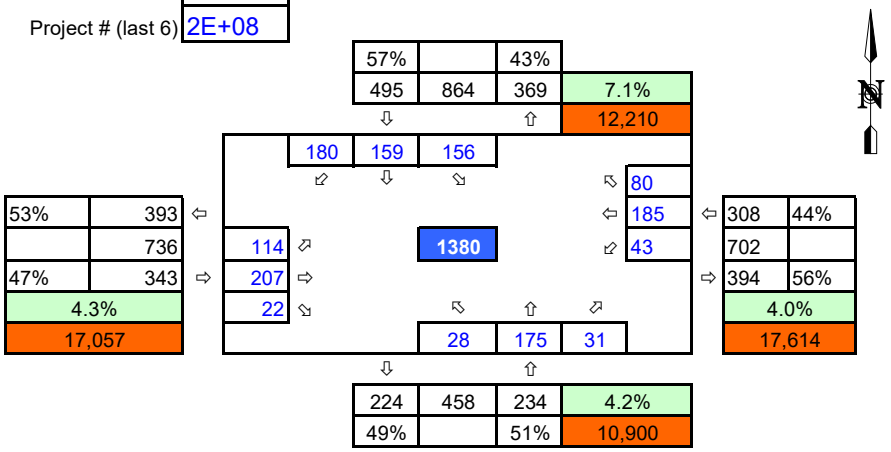
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

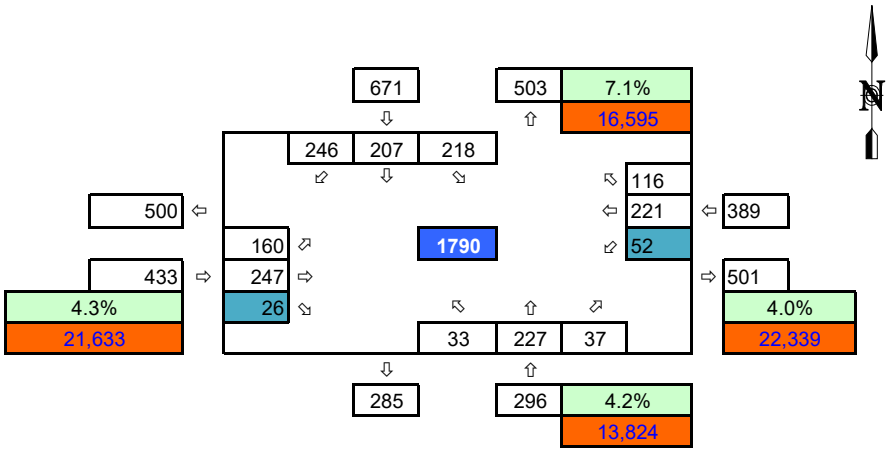
xx = predicted volume < baseline; volume manually increased.

Int 38 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**
Intersection #:	38
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**



LEGEND

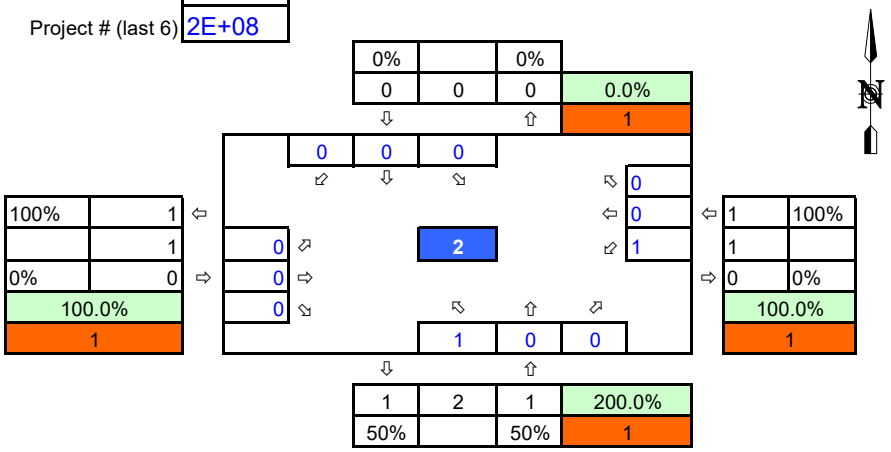
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

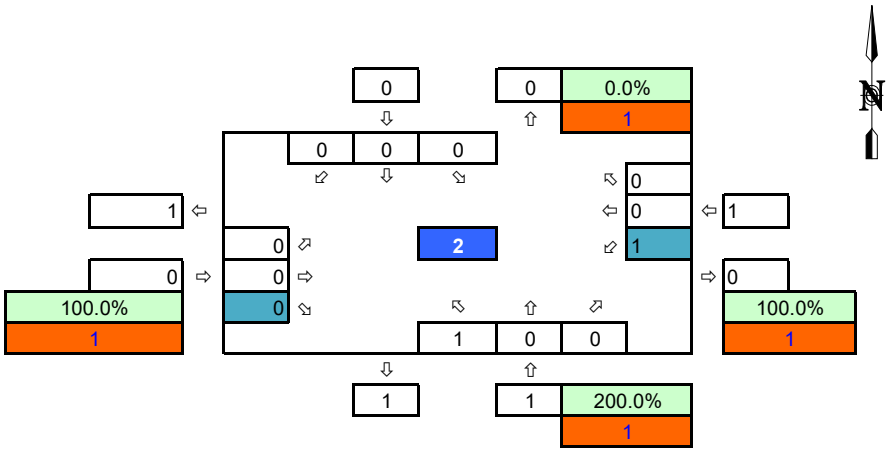
xx = predicted volume < baseline; volume manually increased.

Int 39 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**
Intersection #:	39
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**



LEGEND

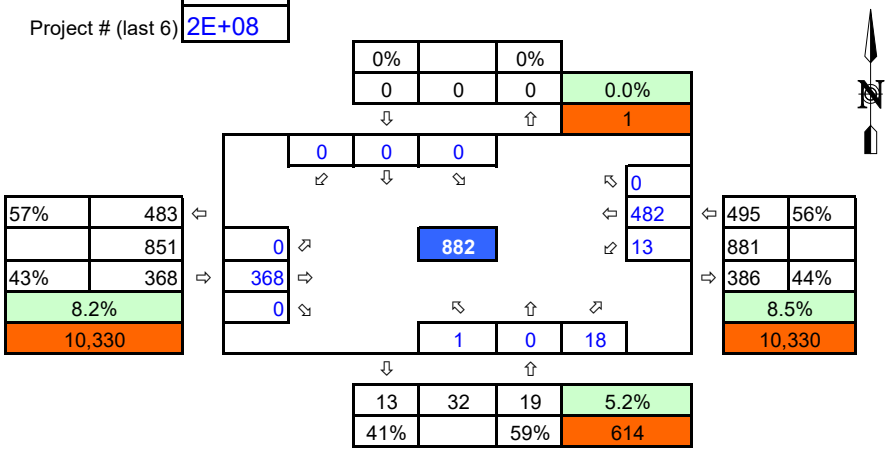
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

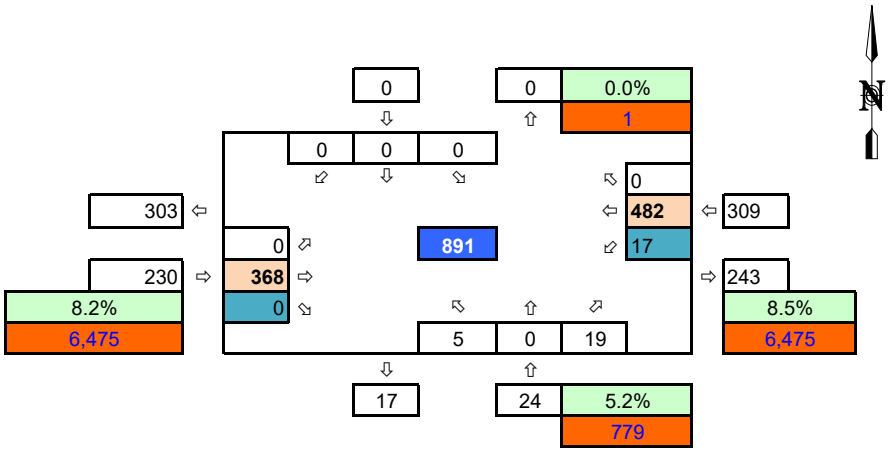
xx = predicted volume < baseline; volume manually increased.

Int 40 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	40
Project # (last 6)	2E+08



Scenario:	**Interim Year Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**



LEGEND

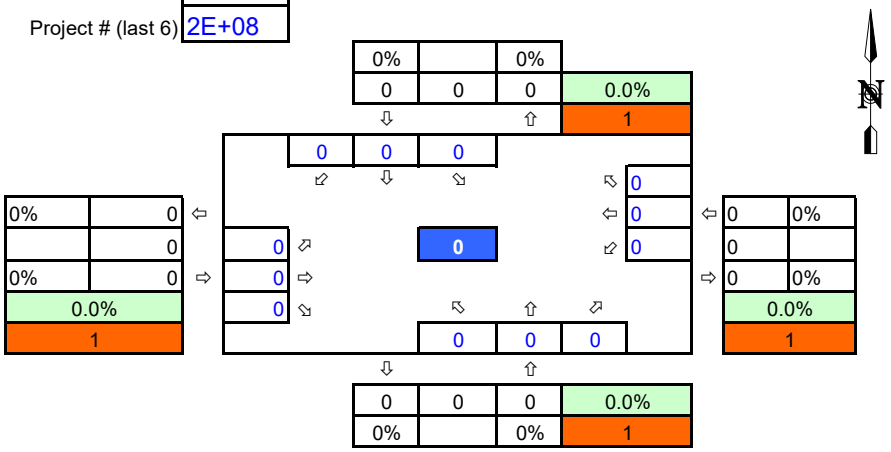
Existing K-Factor	xx%
ADT Volume	xx

xx = turning movement no longer

xx = predicted volume < baseline; volume manually increased.

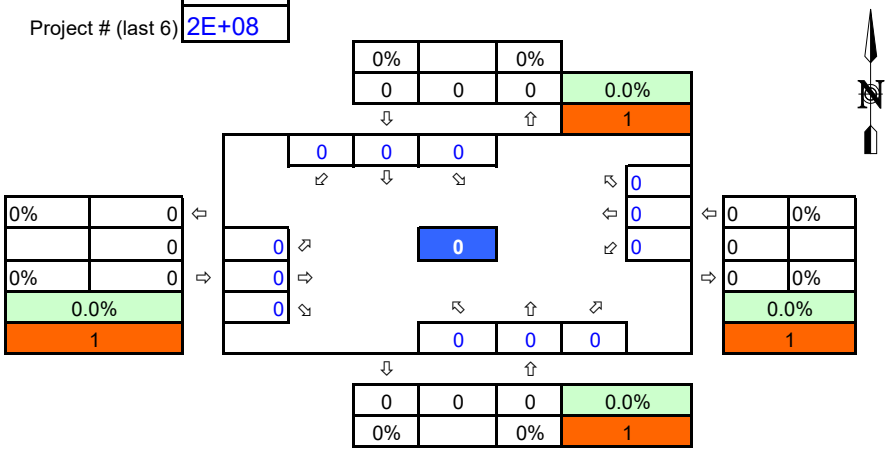
Int 41 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**
Intersection #:	41
Project # (last 6)	2E+08


0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0
0% 0 0 0 0% 0 0 0 0

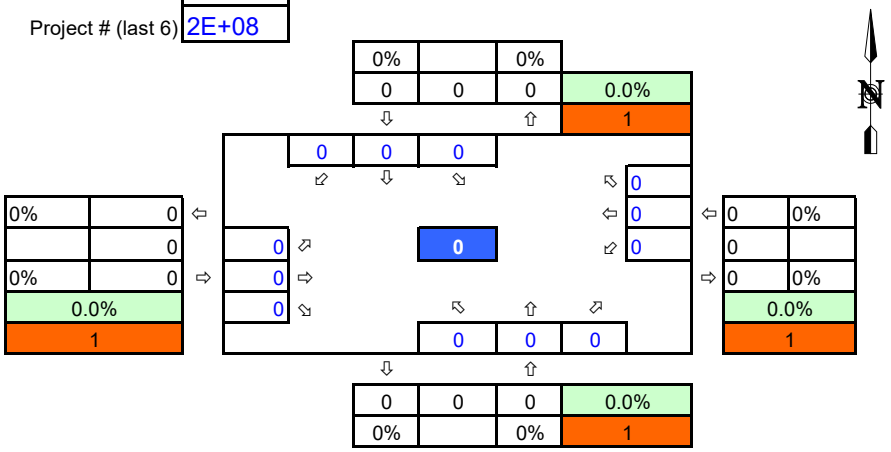
Int 42 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**A St / Jiggs Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	42
Project # (last 6)	2E+08


0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0
0% 0 0 0 0% 0 0 0 0

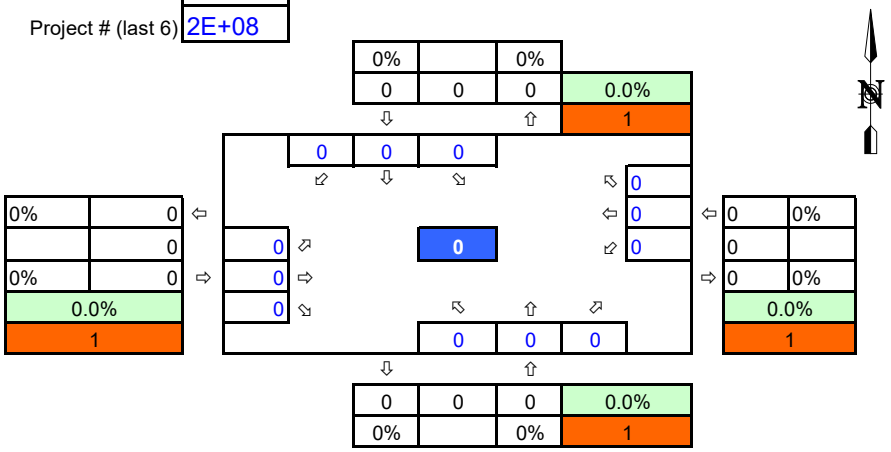
Int 43 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**B St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	43
Project # (last 6)	2E+08


0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0
0% 0 0 0 0% 0 0 0 0

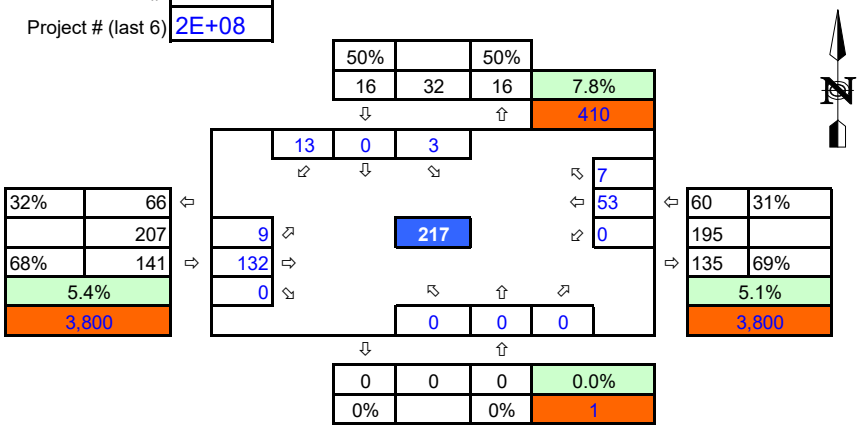
Int 44 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**C St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	44
Project # (last 6)	2E+08

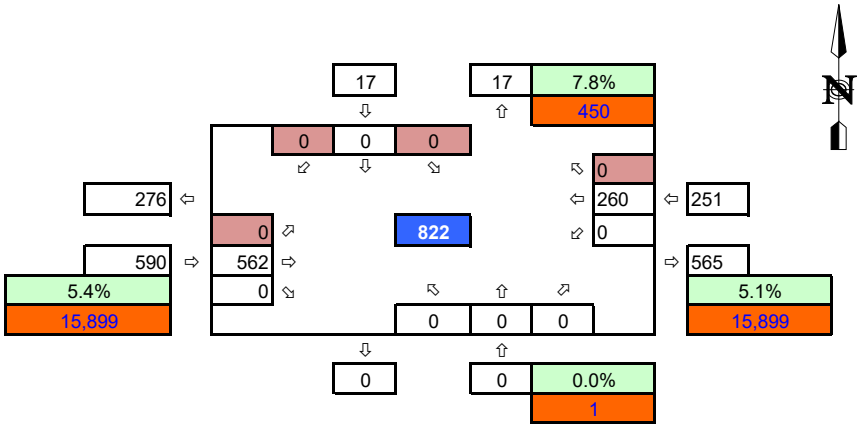

0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0
0% 0 0 0 0% 0 0 0 0

Int 1 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**
Intersection #:	1
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**



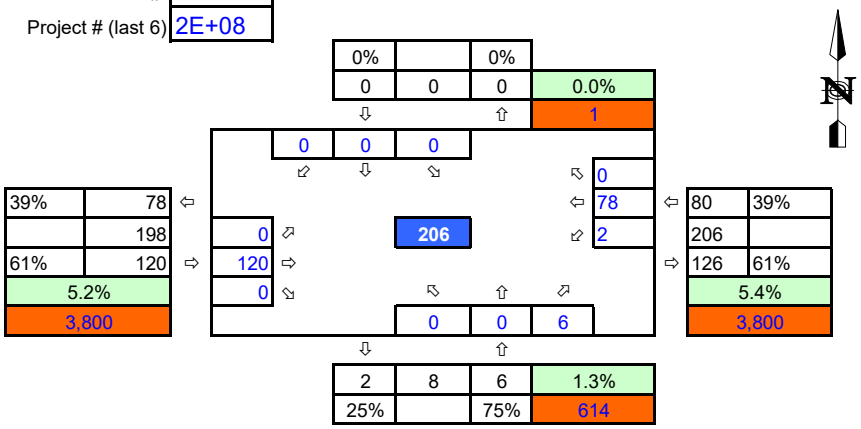
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

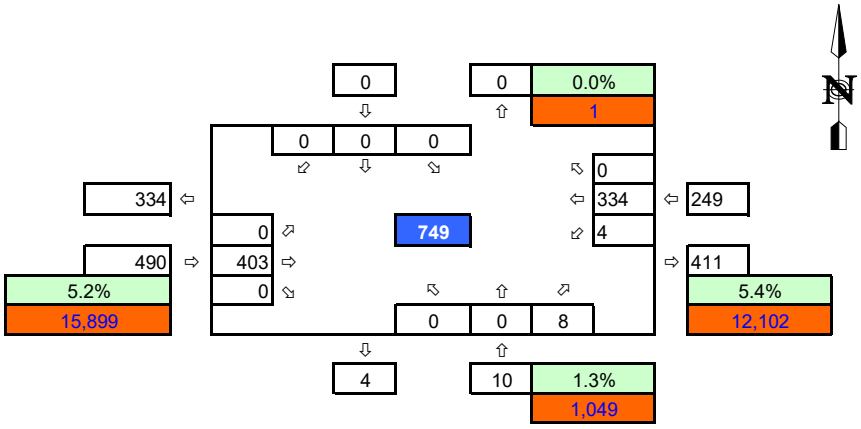
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 2 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**
Intersection #:	2
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**



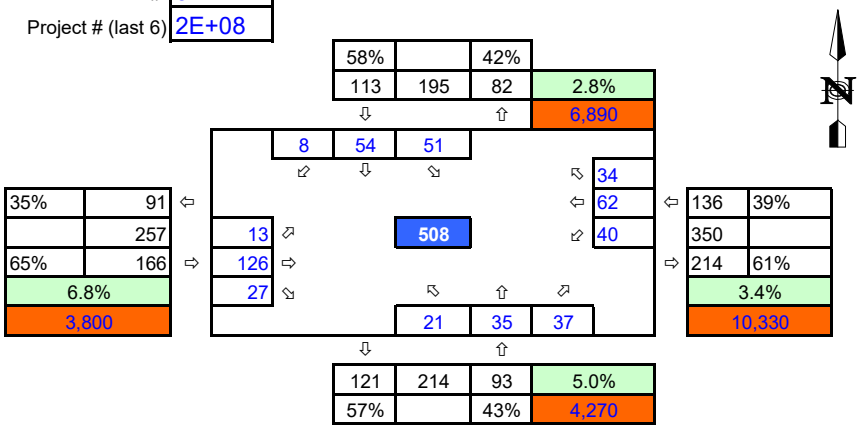
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

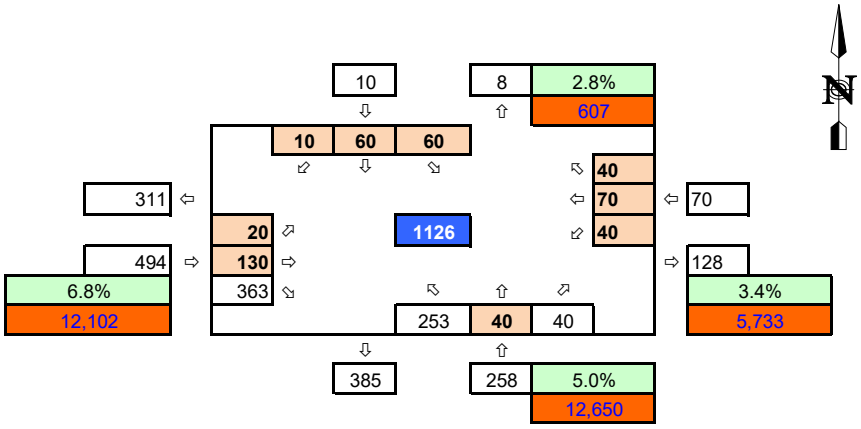
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 3 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**
Intersection #:	3
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**



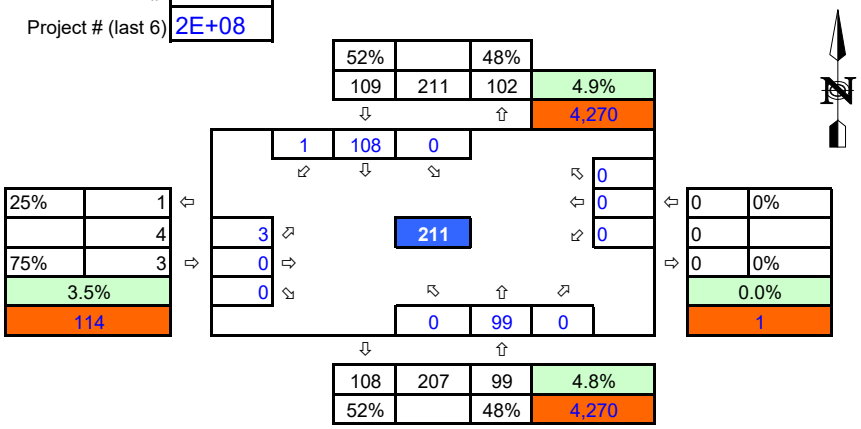
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

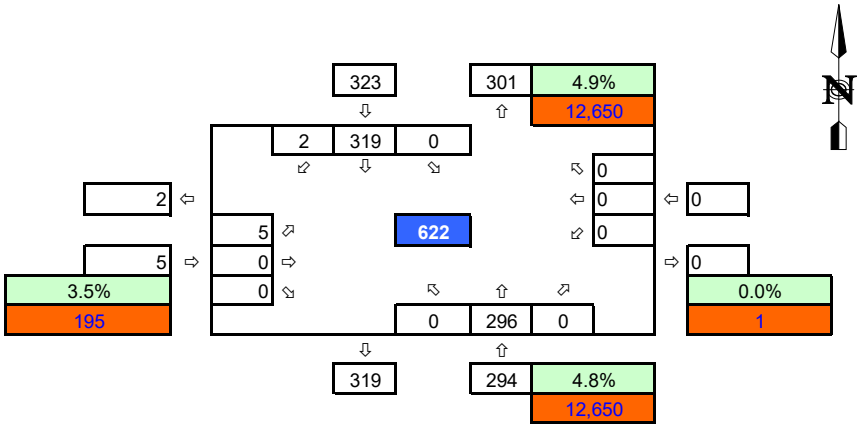
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 4 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**
Intersection #:	4
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**



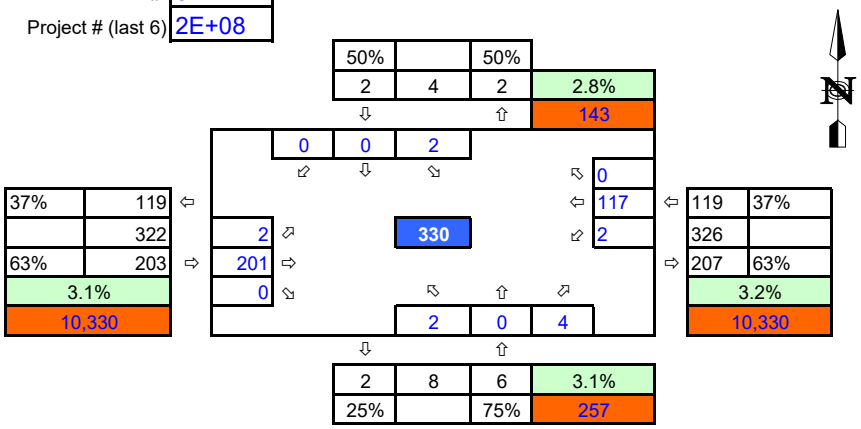
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

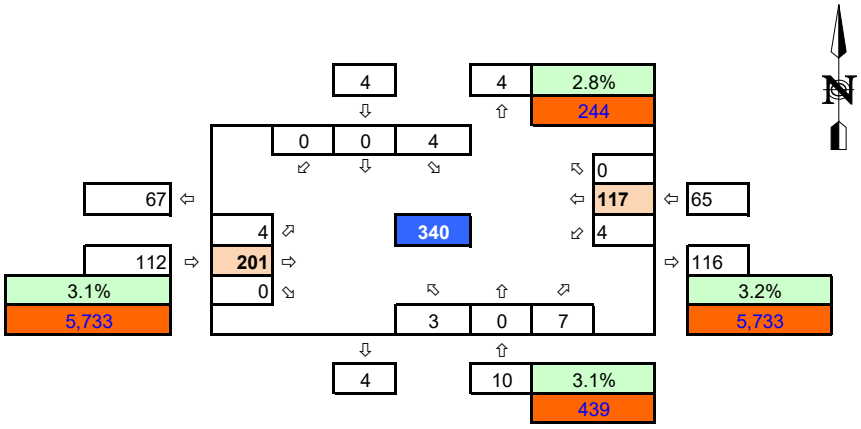
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 5 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**
Intersection #:	5
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**



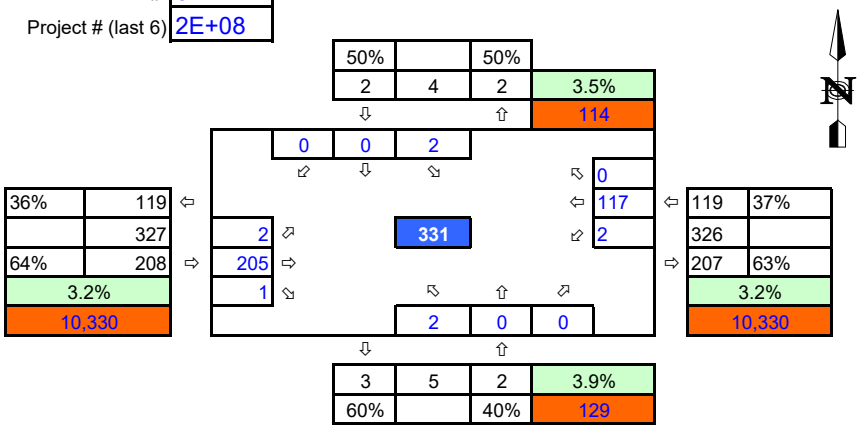
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

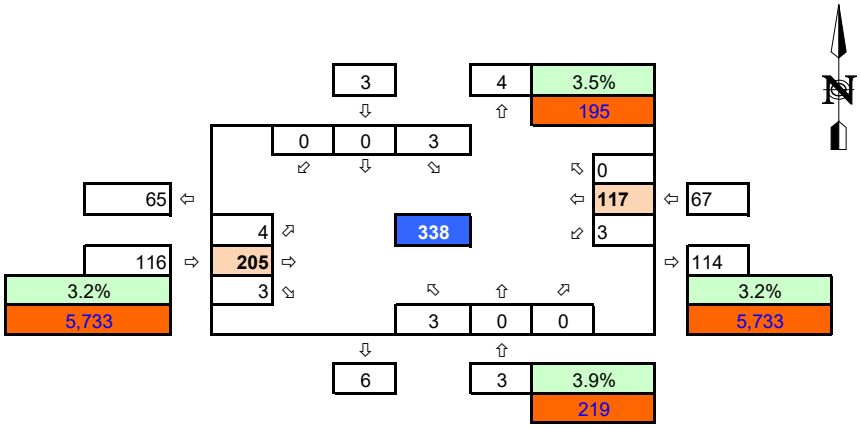
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 6 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**
Intersection #:	6
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**



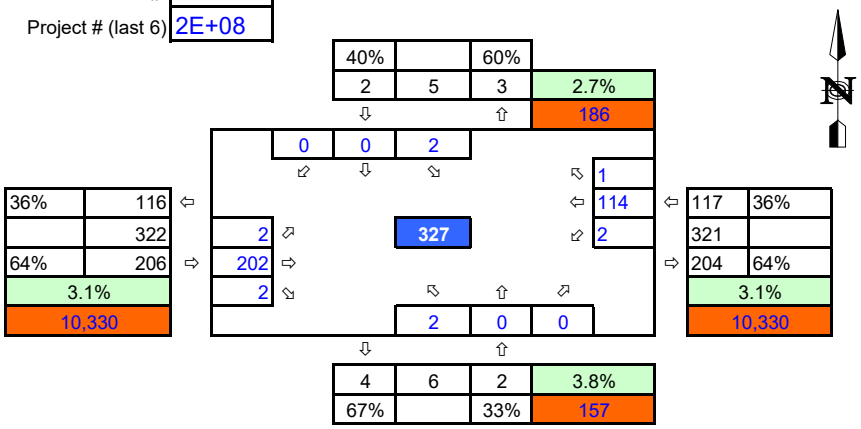
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

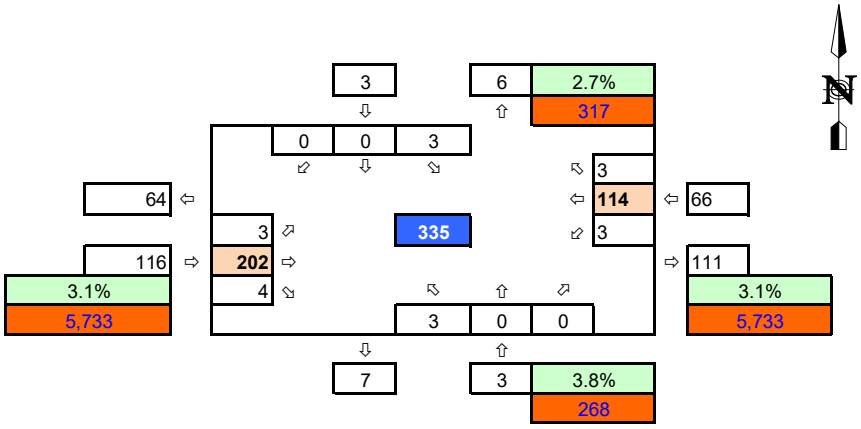
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 7 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**
Intersection #:	7
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**



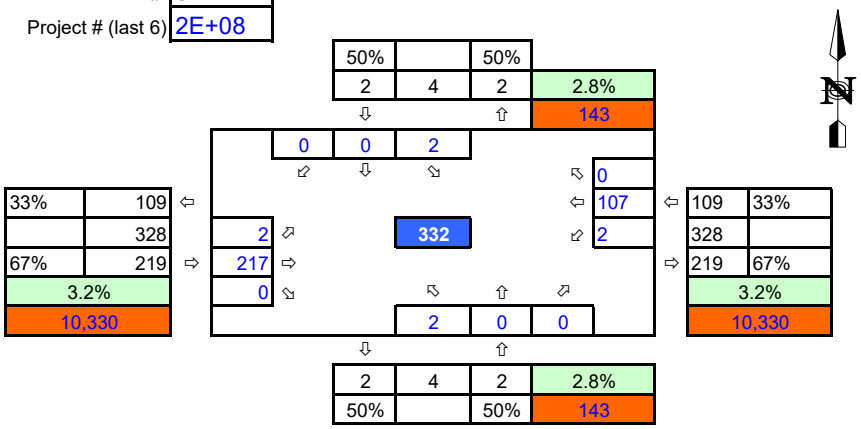
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

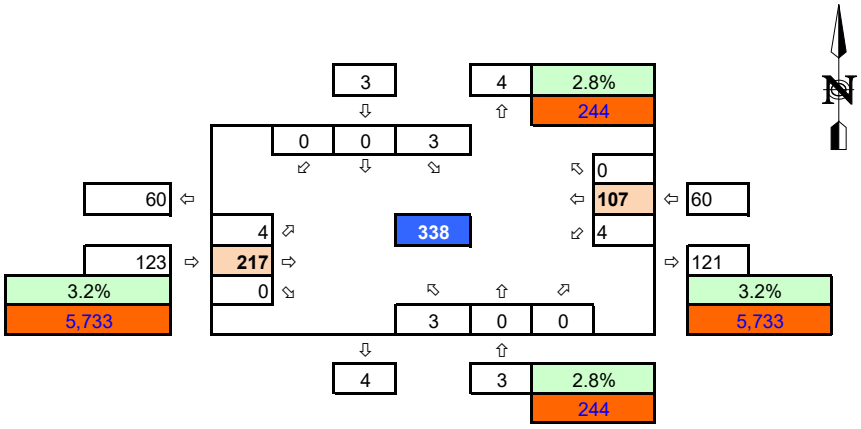
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 8 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**
Intersection #:	8
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**



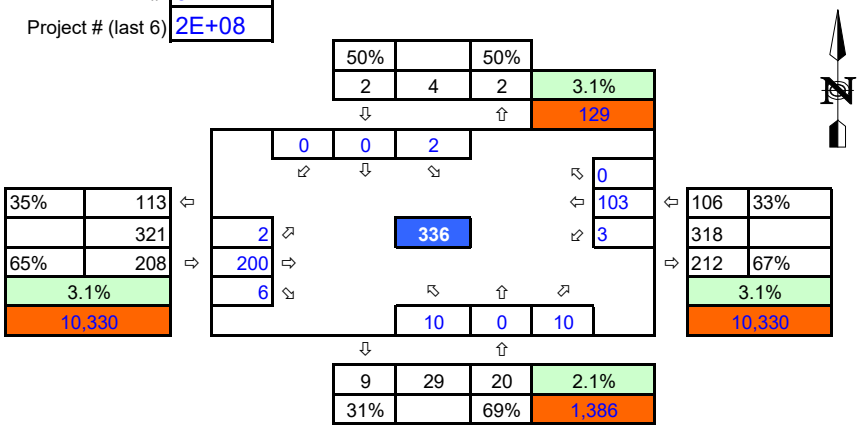
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

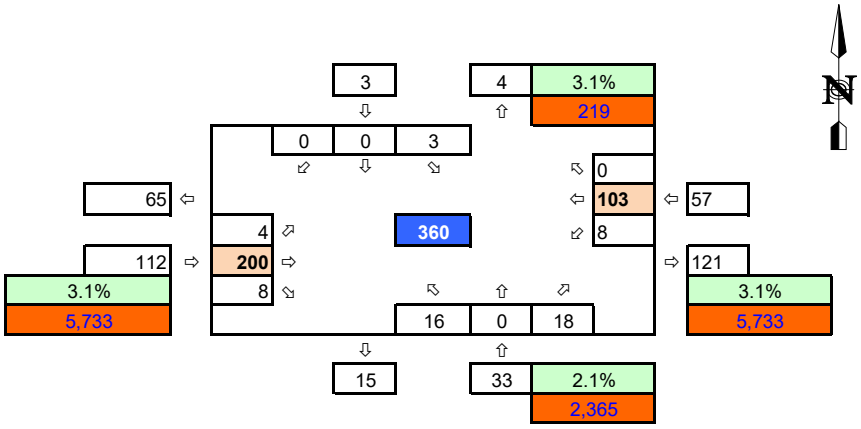
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 9 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**
Intersection #:	9
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**



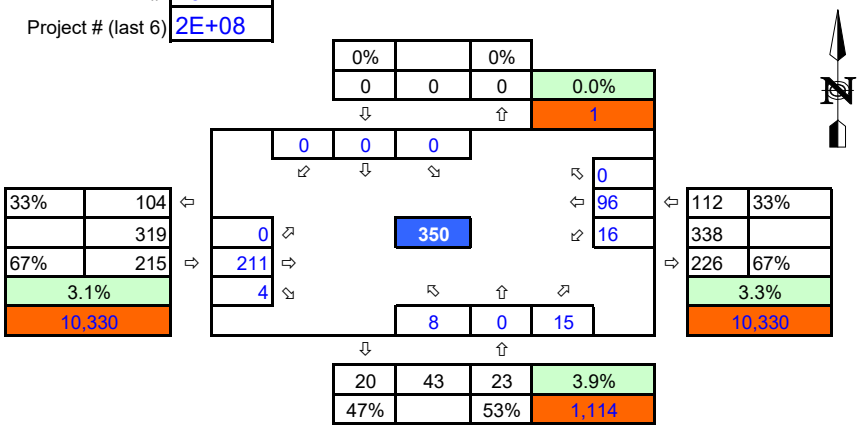
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

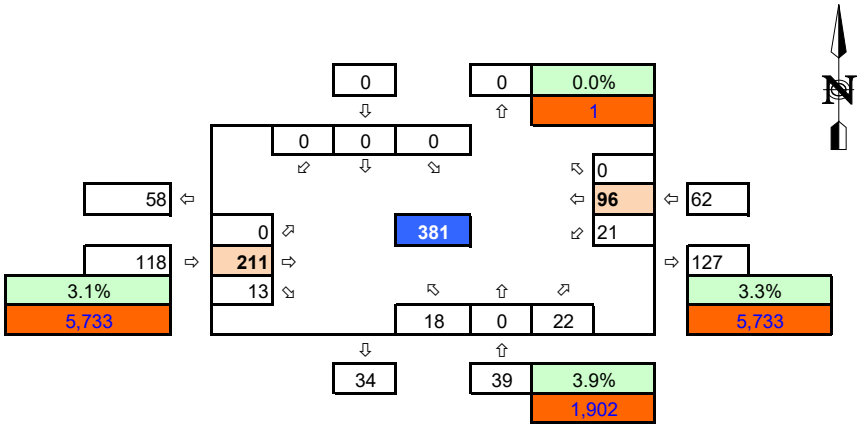
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 10 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**
Intersection #:	10
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**



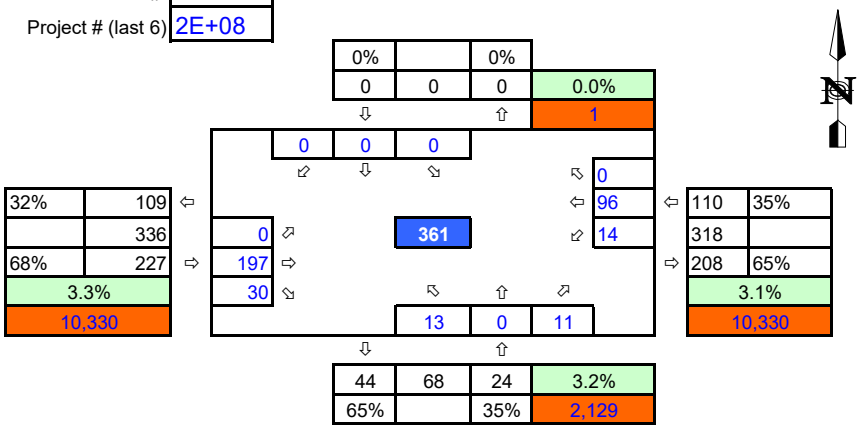
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

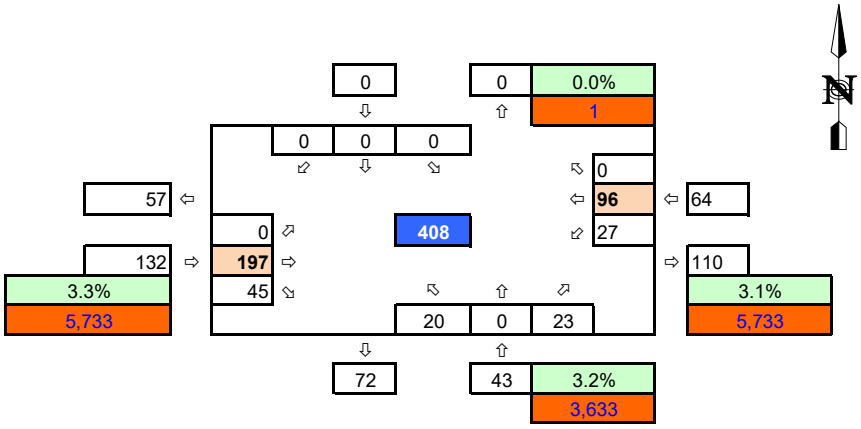
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 11 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**
Intersection #:	11
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**



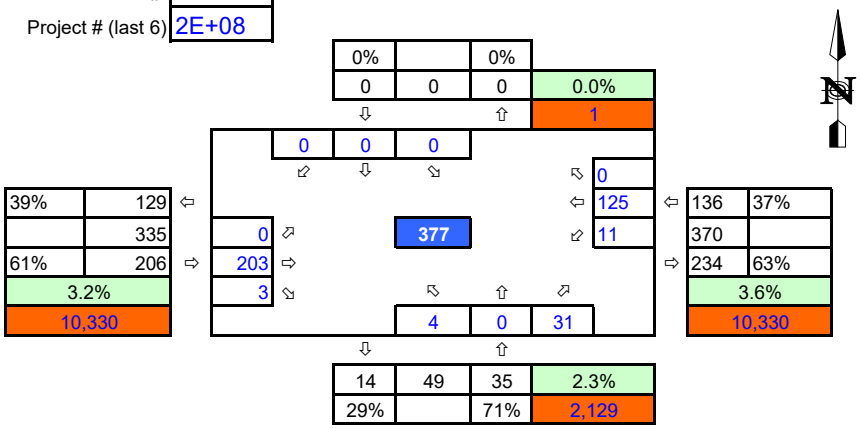
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

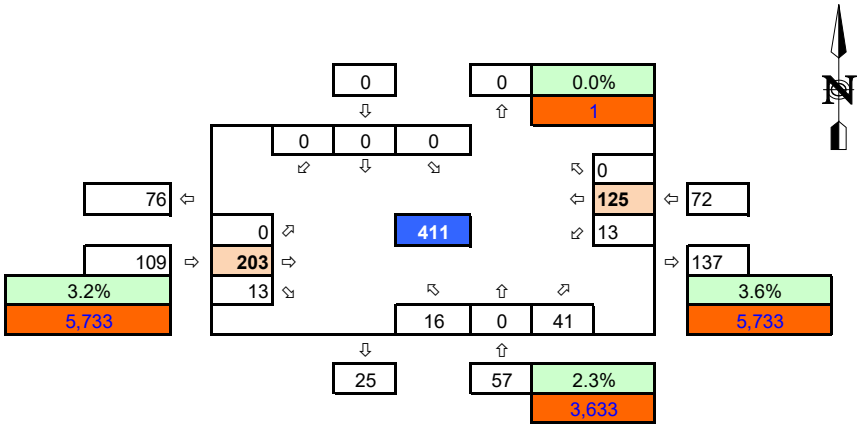
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 12 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**
Intersection #:	12
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**



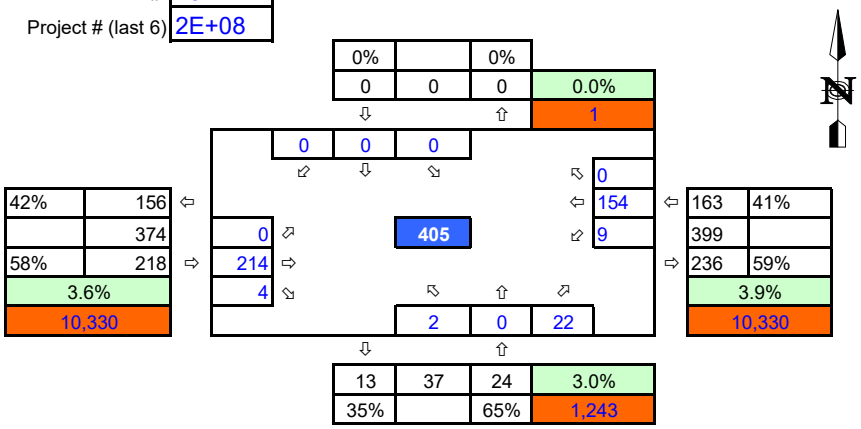
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

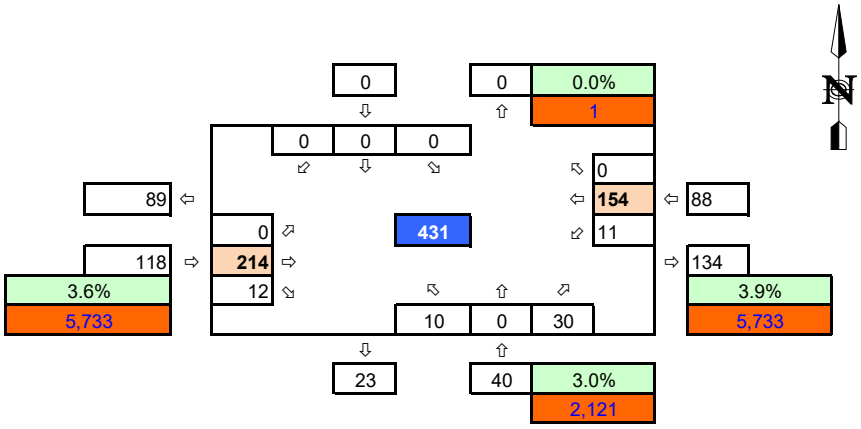
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 13 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**
Intersection #:	13
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**



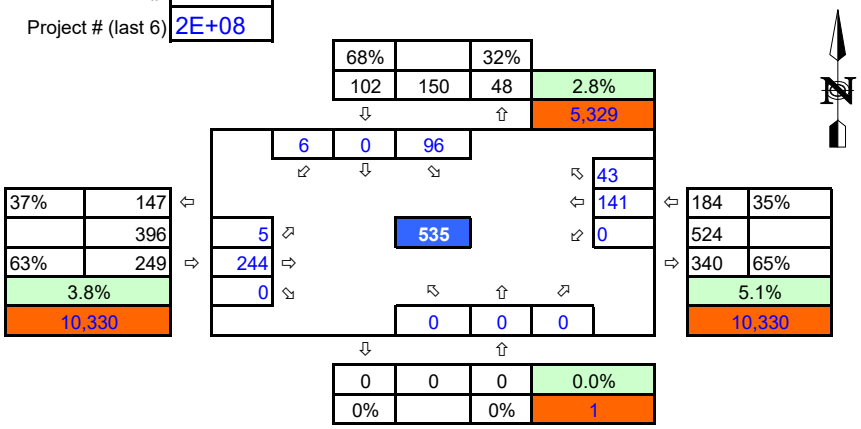
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

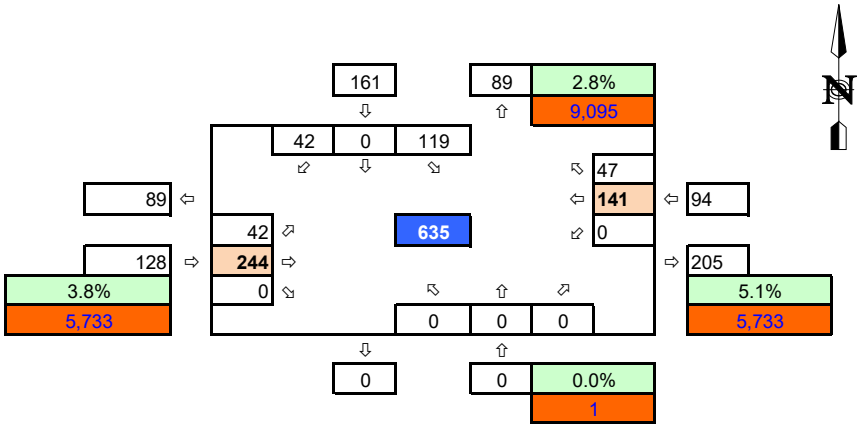
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 14 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**
Intersection #:	14
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**



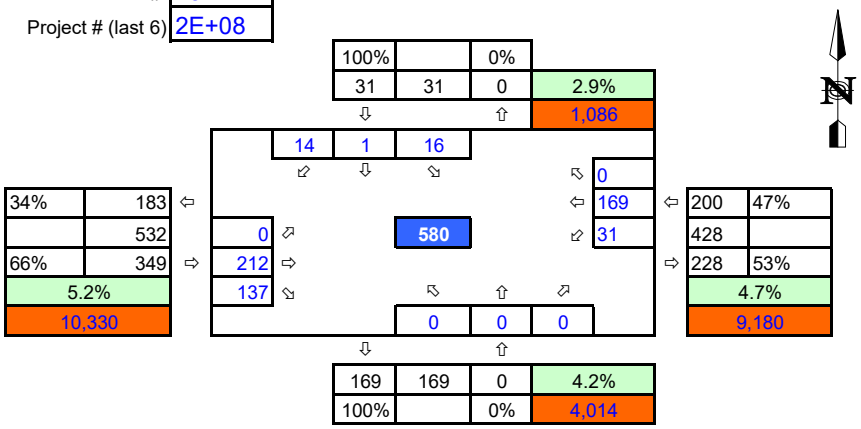
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

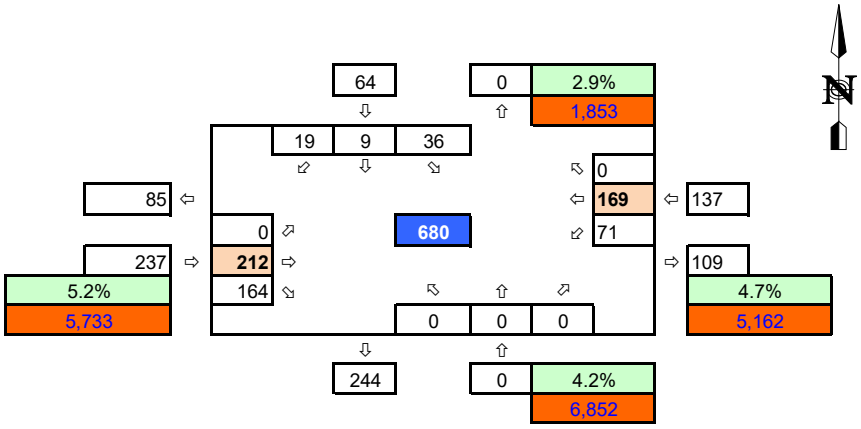
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 15 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**
Intersection #:	15
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**



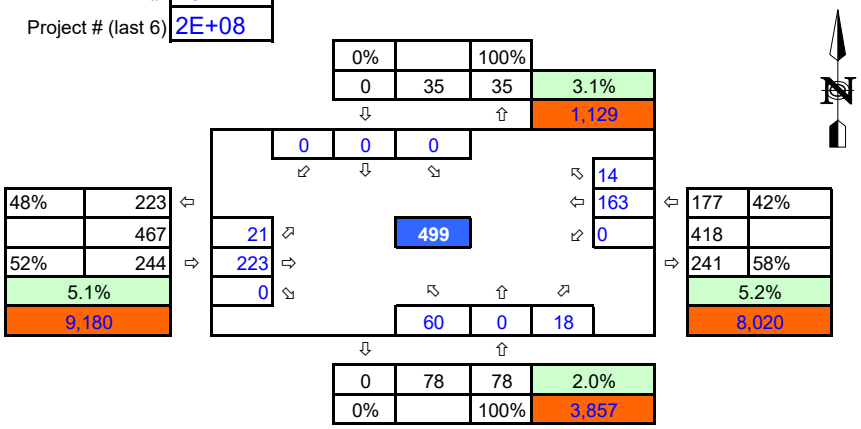
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

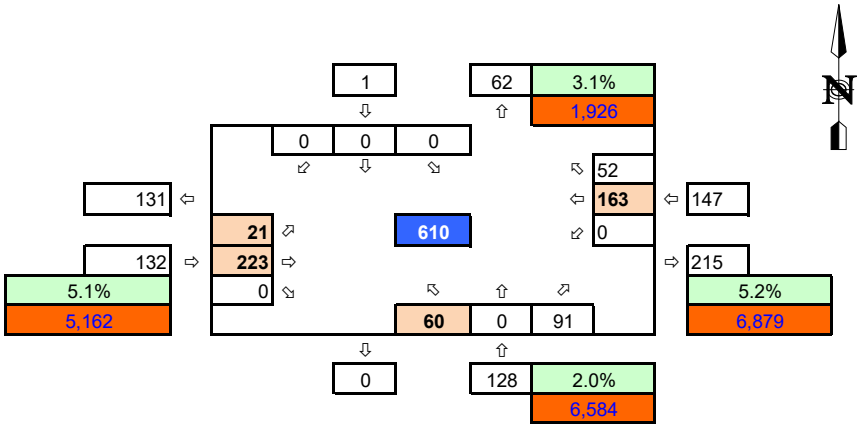
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 16 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**
Intersection #:	16
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**



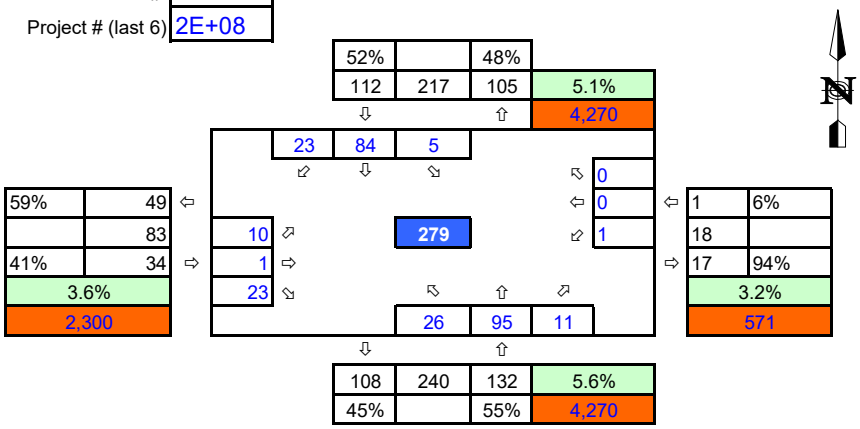
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

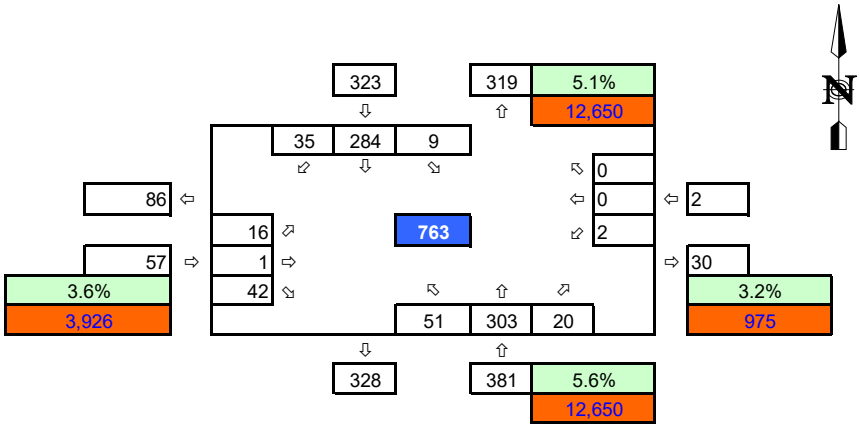
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 17 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**
Intersection #:	17
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**



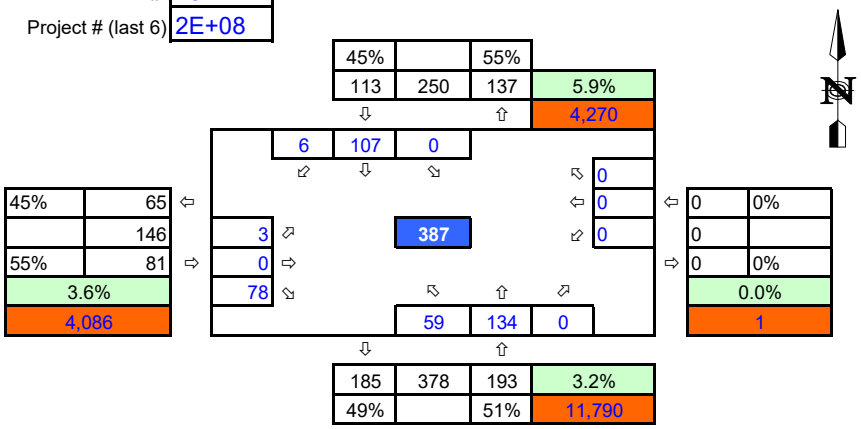
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

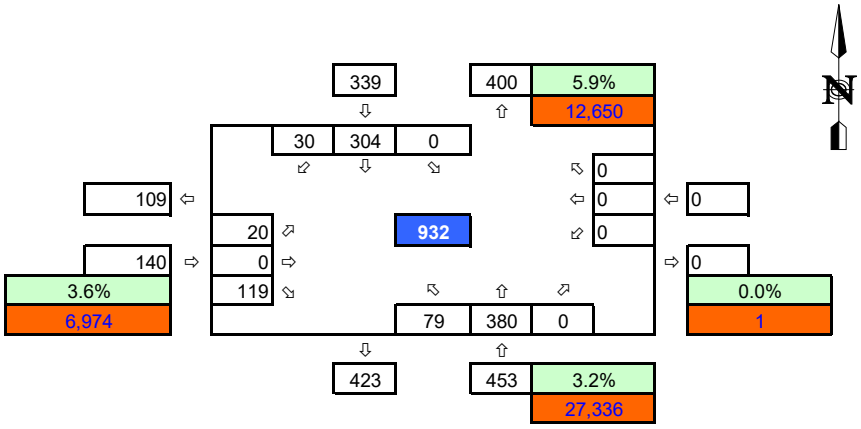
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 18 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**
Intersection #:	18
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**



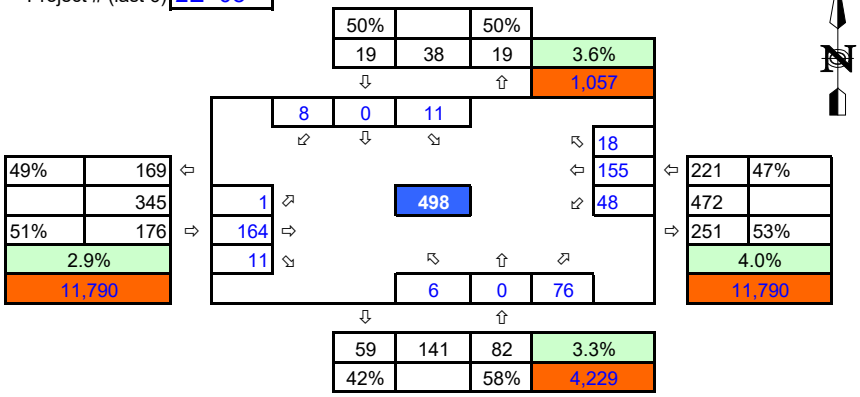
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

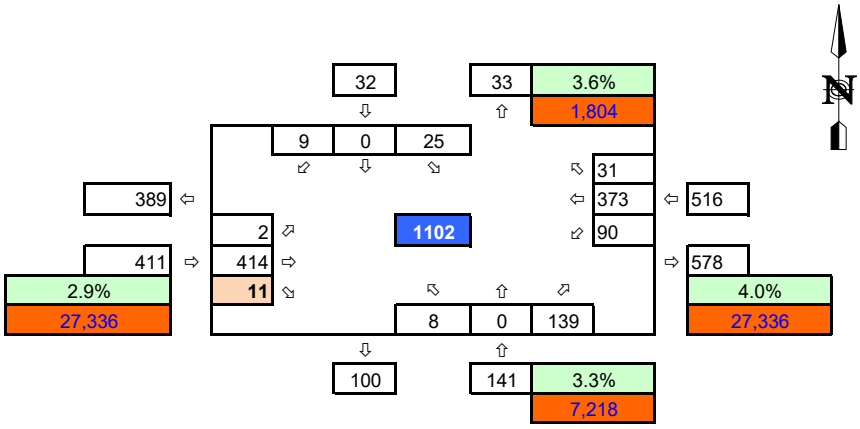
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 19 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**
Intersection #:	19
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**



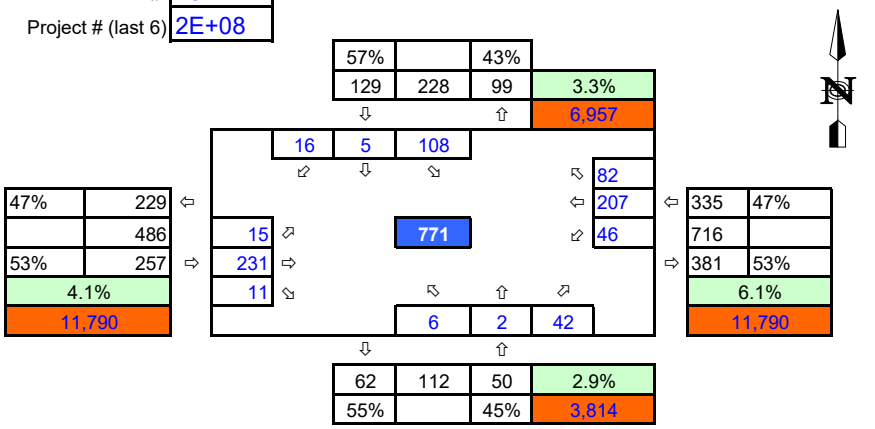
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

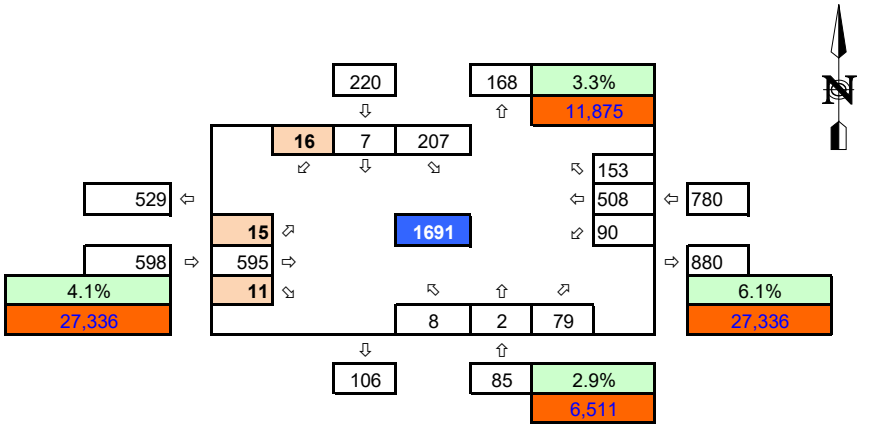
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 20 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**
Intersection #:	20
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

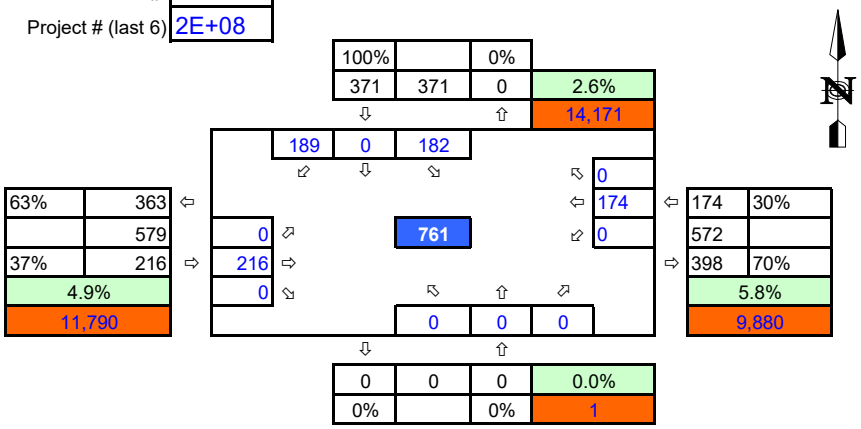
xx = turning movement no longer exists.

xx = predicted volume < baseline; volume manually increased.

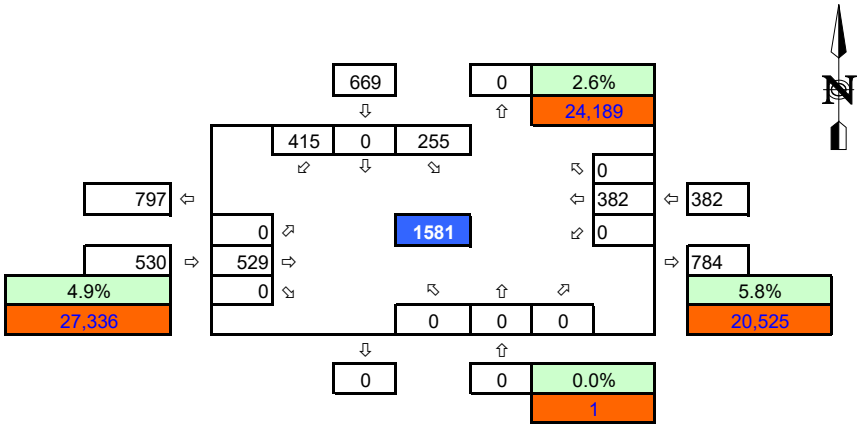
xx = volume manually incresed to ensure HY > OY

Int 21 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	21
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**



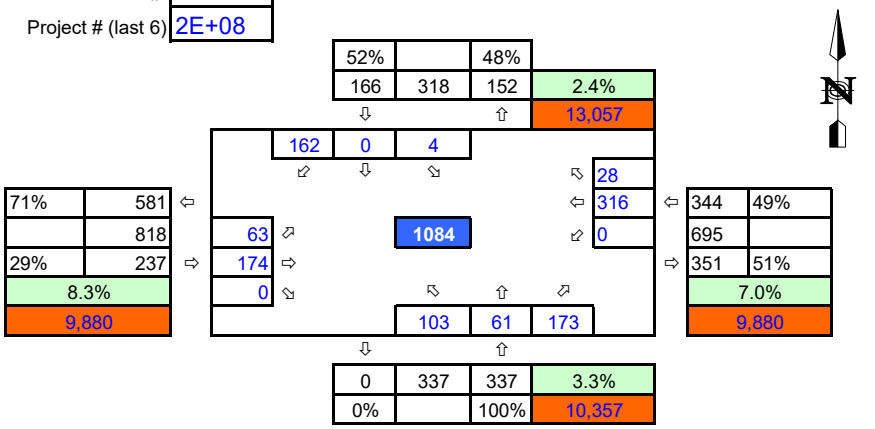
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

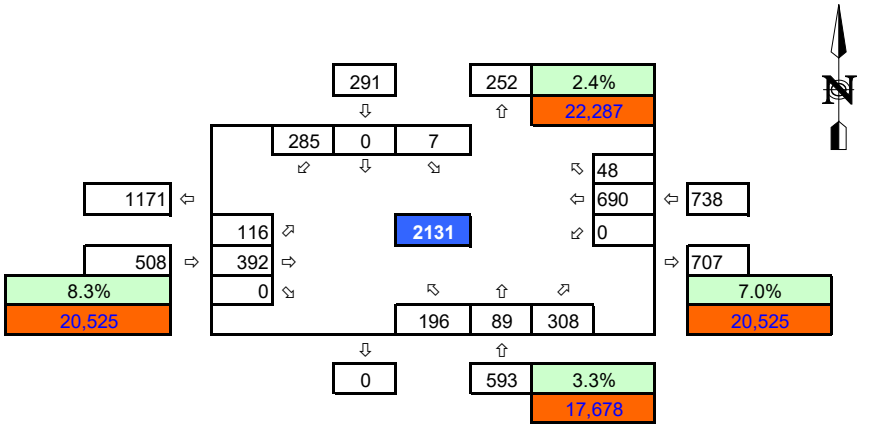
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 22 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	22
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

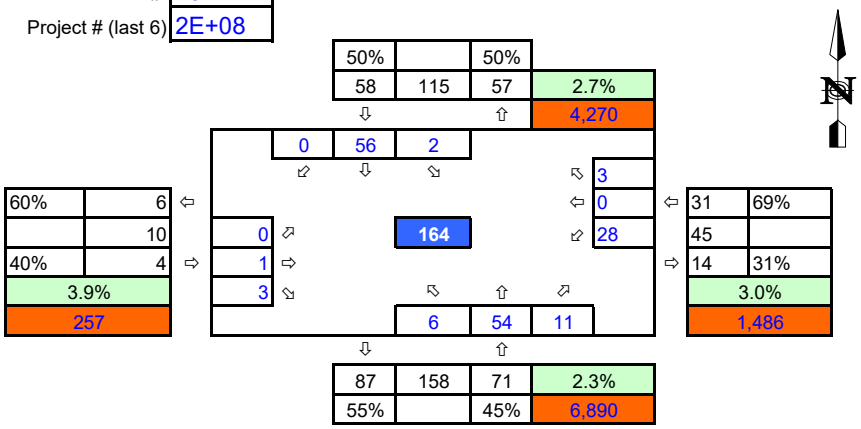
xx = turning movement no longer exists.

xx = predicted volume < baseline; volume manually increased.

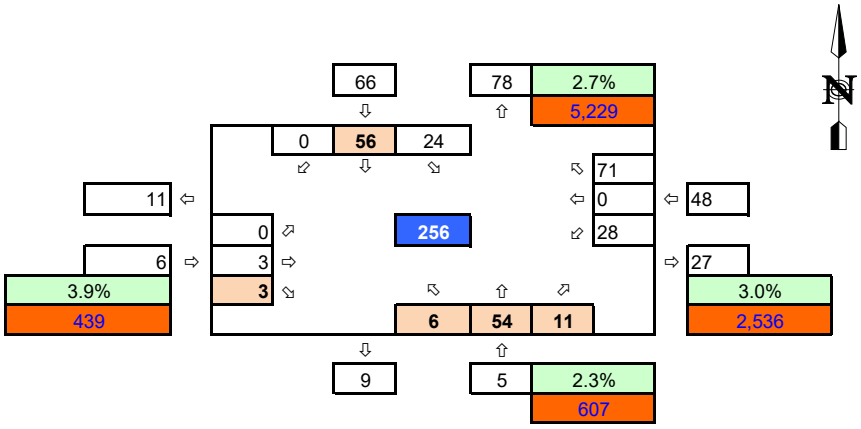
xx = volume manually incresed to ensure HY > OY

Int 23 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**
Intersection #:	23
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**



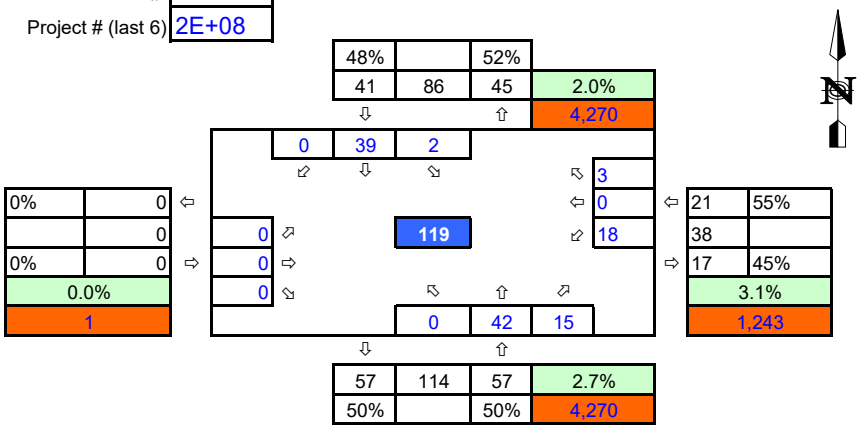
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

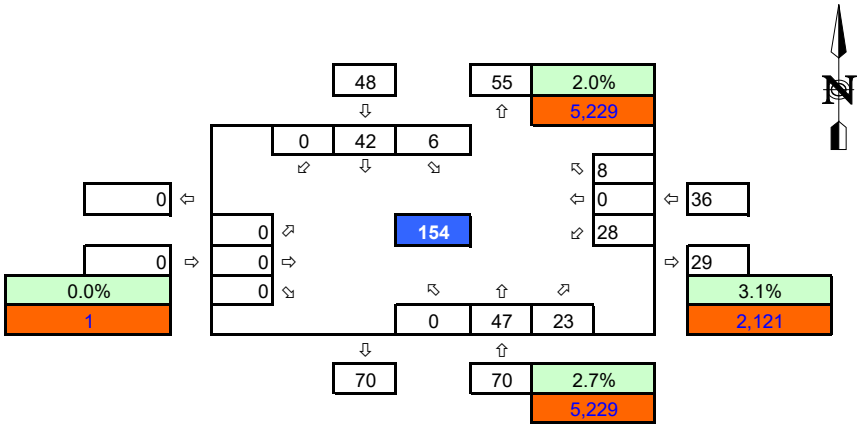
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 24 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**
Intersection #:	24
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**



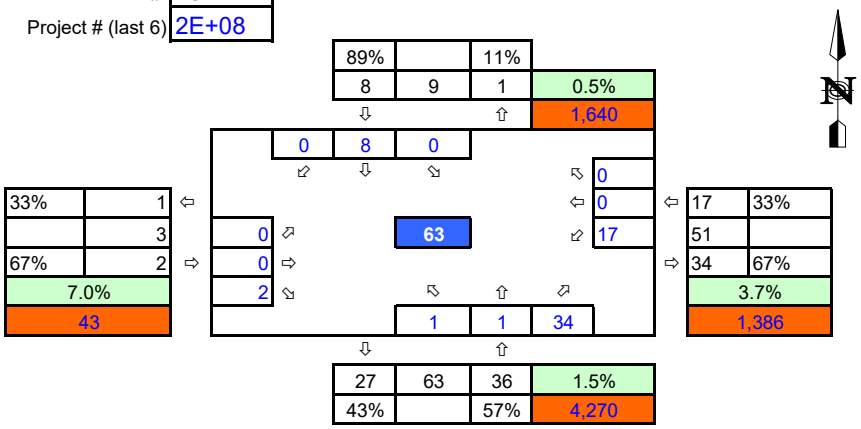
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

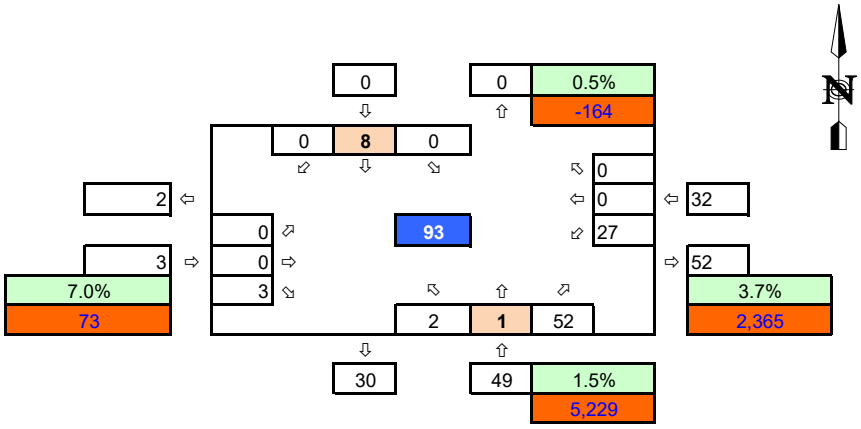
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 25 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**
Intersection #:	25
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**



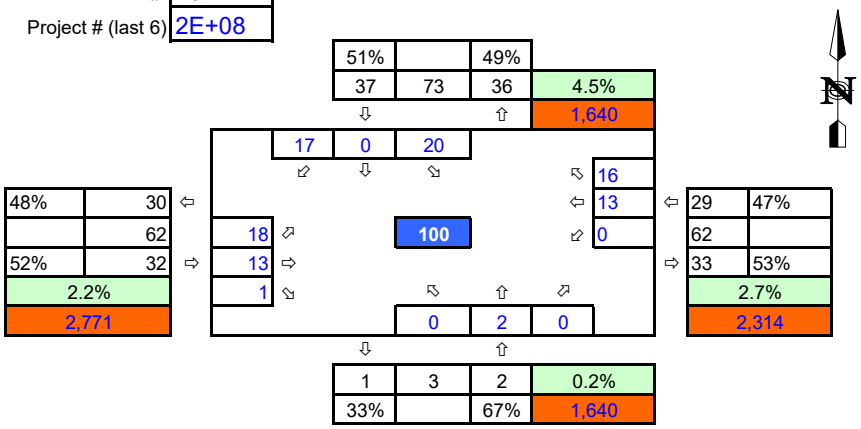
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

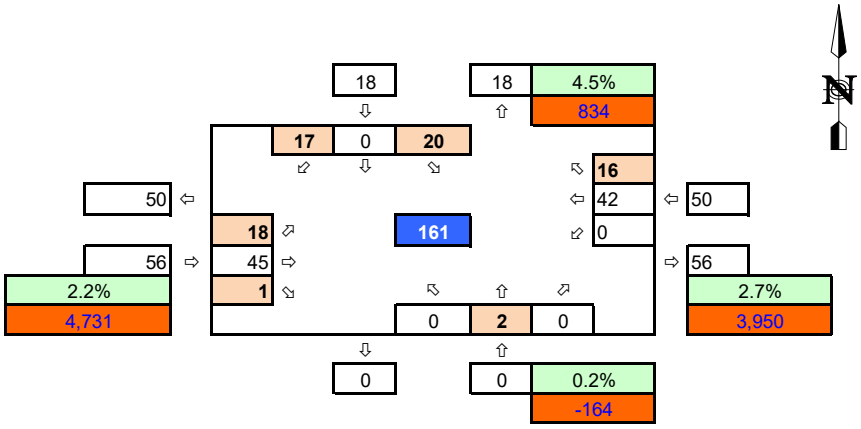
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 26 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**
Intersection #:	26
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**



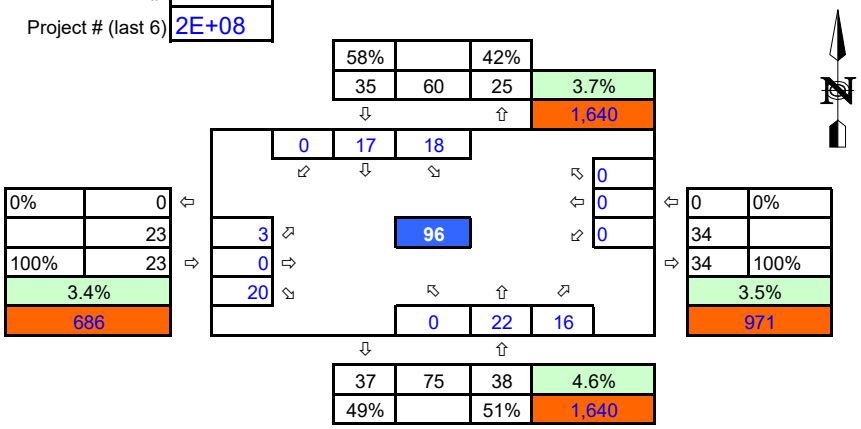
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

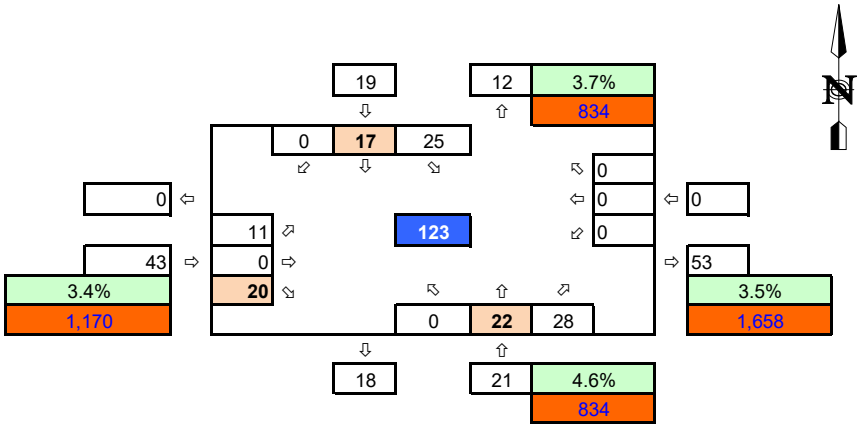
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 27 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**
Intersection #:	27
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**



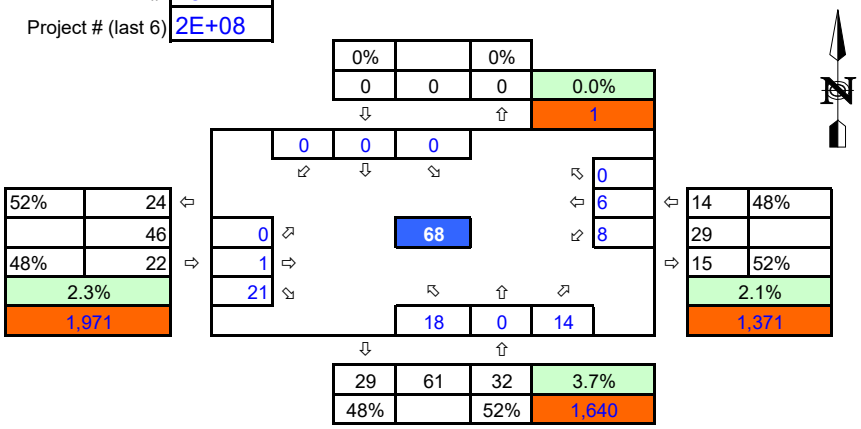
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

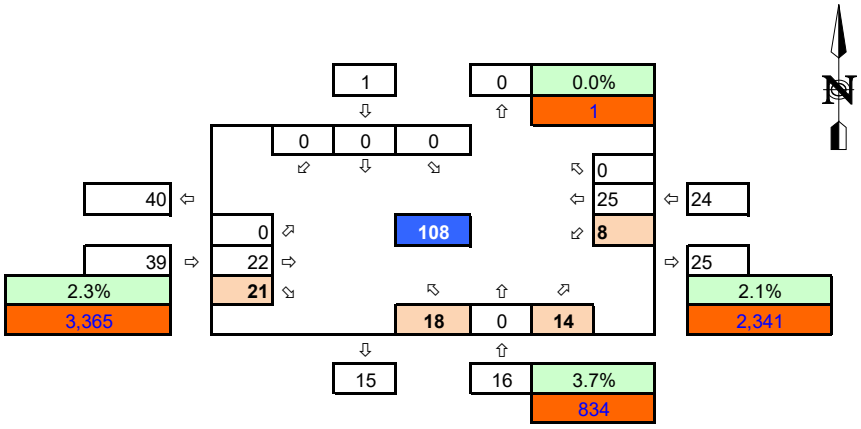
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 28 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**
Intersection #:	28
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**



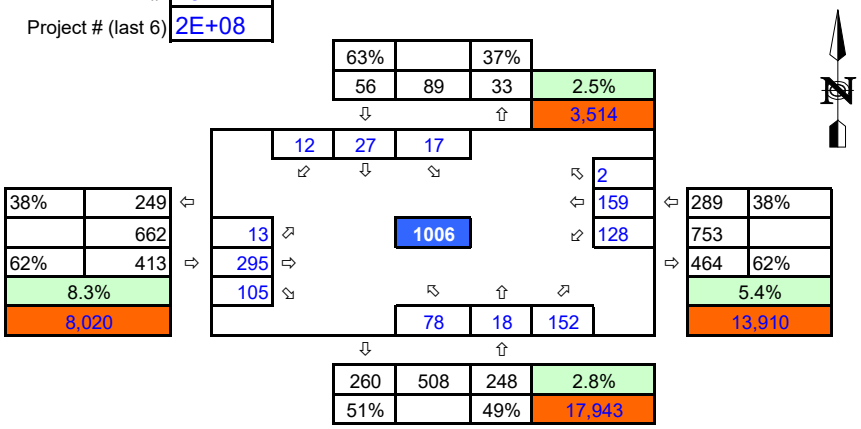
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

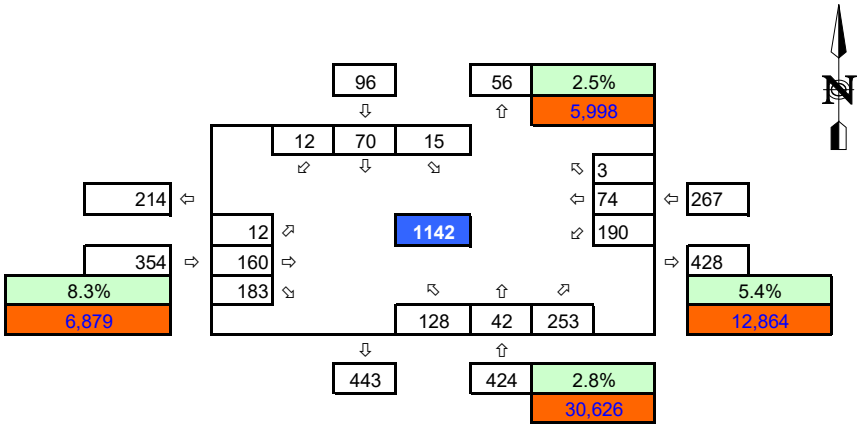
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 29 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**
Intersection #:	29
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**



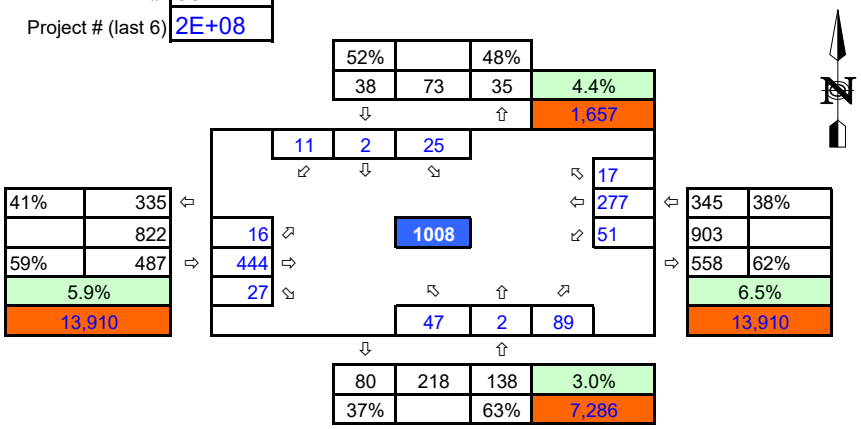
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

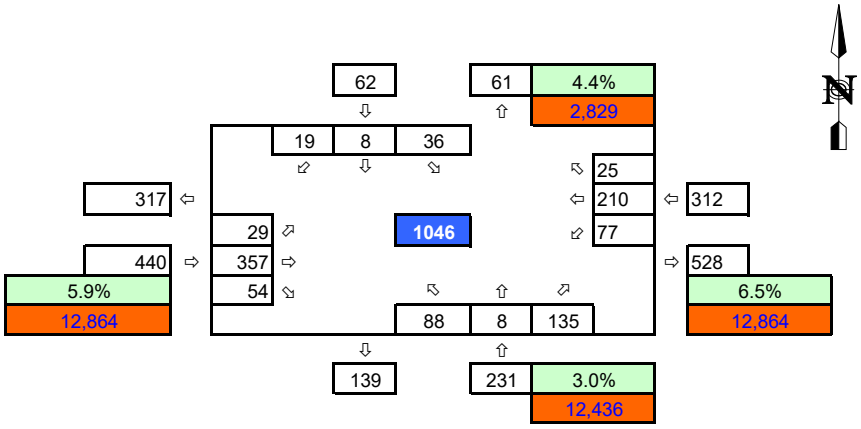
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 30 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**
Intersection #:	30
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**



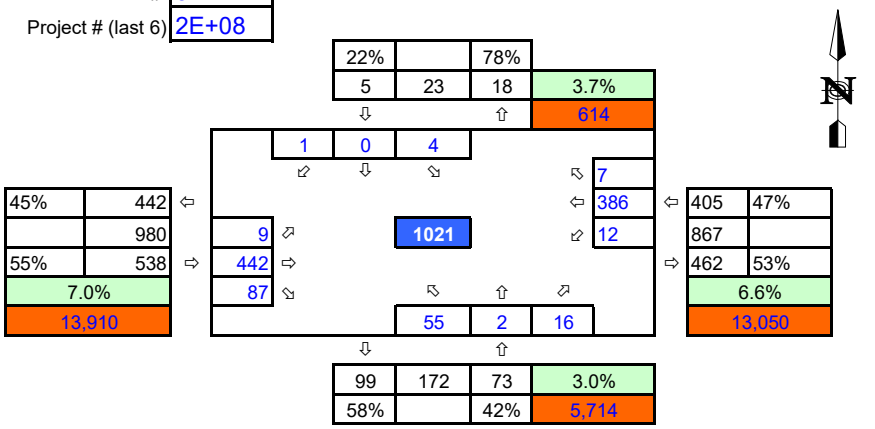
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

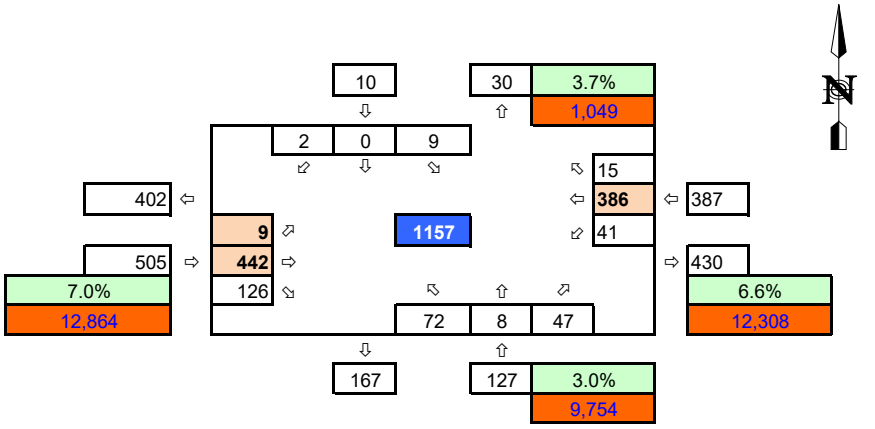
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 31 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**
Intersection #:	31
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**



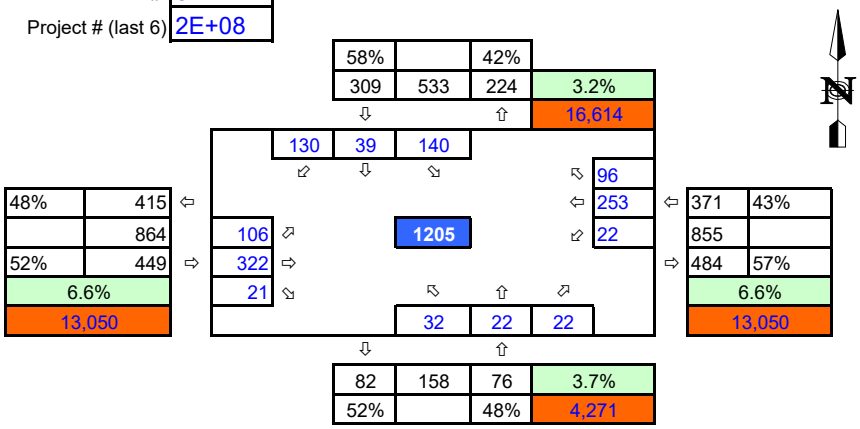
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

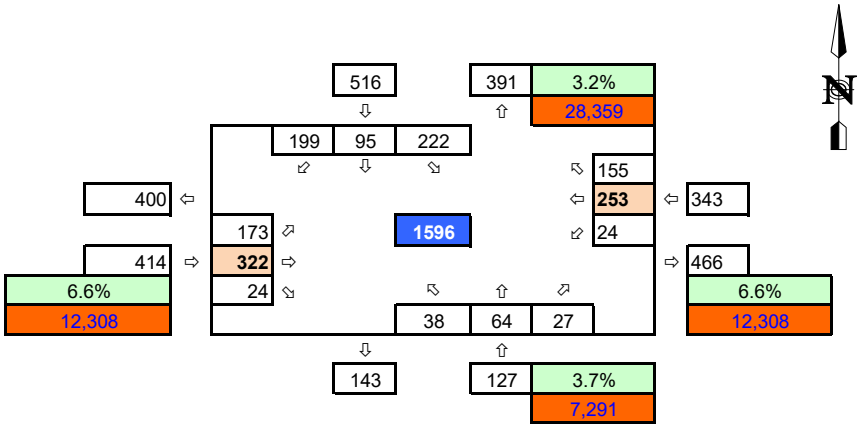
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 32 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**
Intersection #:	32
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

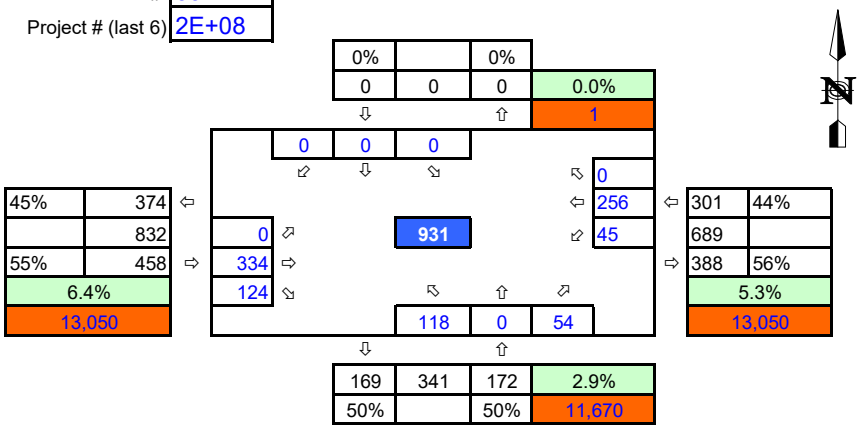
xx = turning movement no longer exists.

xx = predicted volume < baseline; volume manually increased.

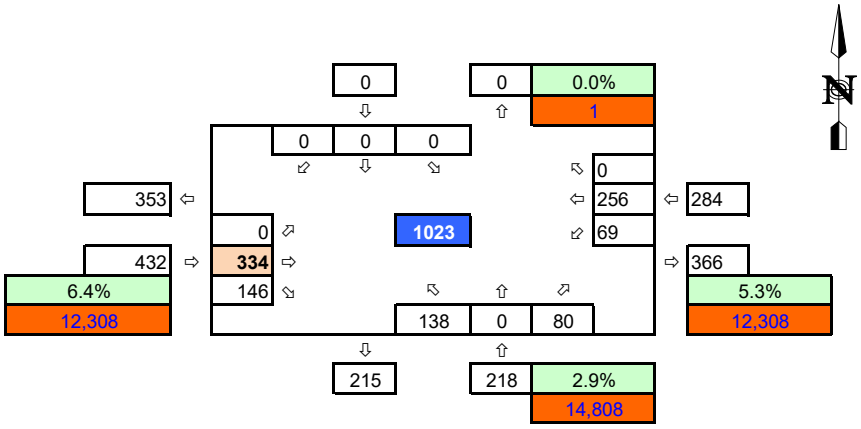
xx = volume manually incresed to ensure HY > OY

Int 33 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**
Intersection #:	33
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**



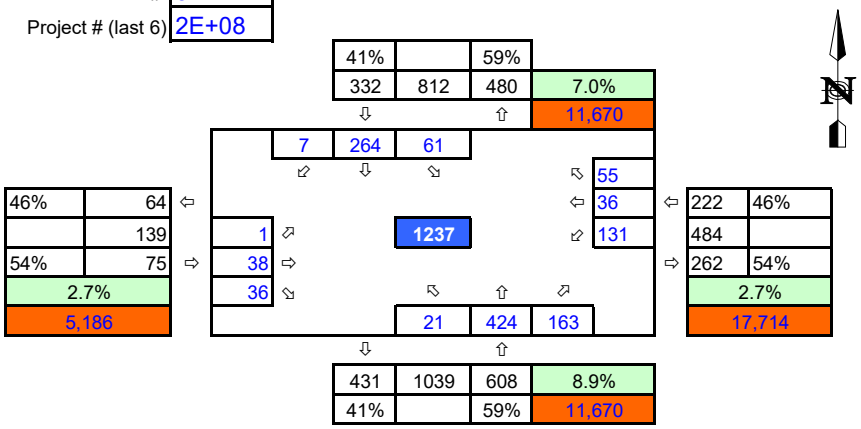
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

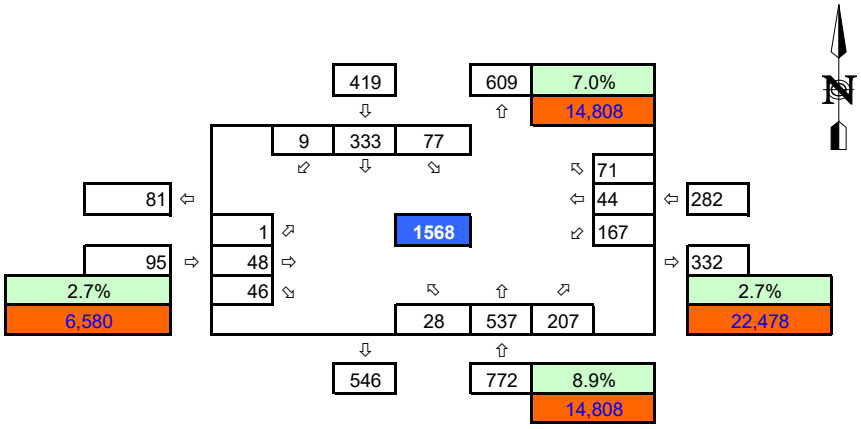
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 34 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**
Intersection #:	34
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**



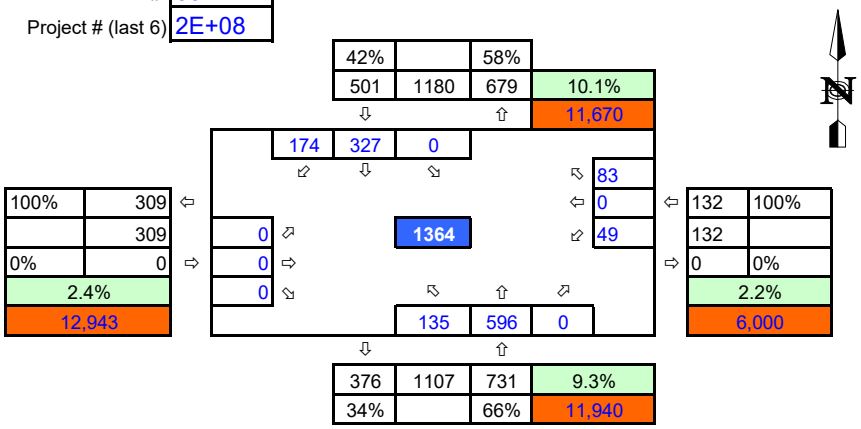
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

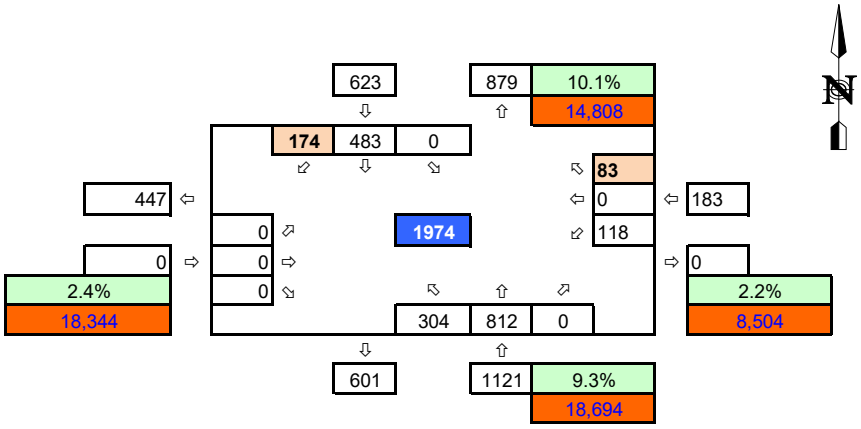
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 35 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**
Intersection #:	35
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**



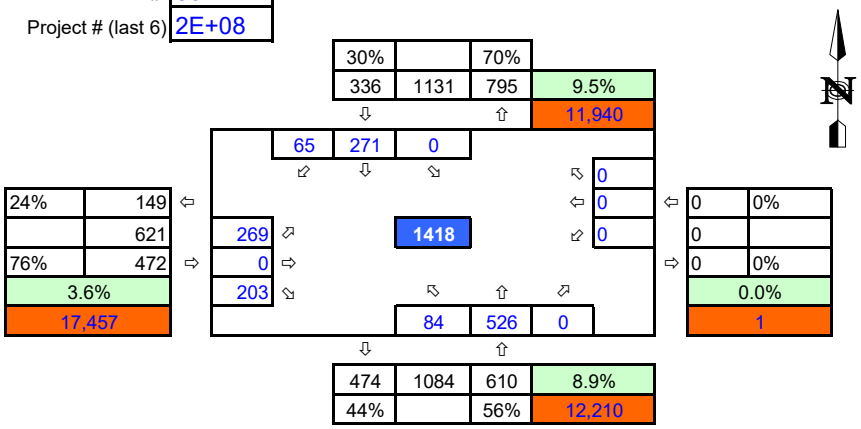
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

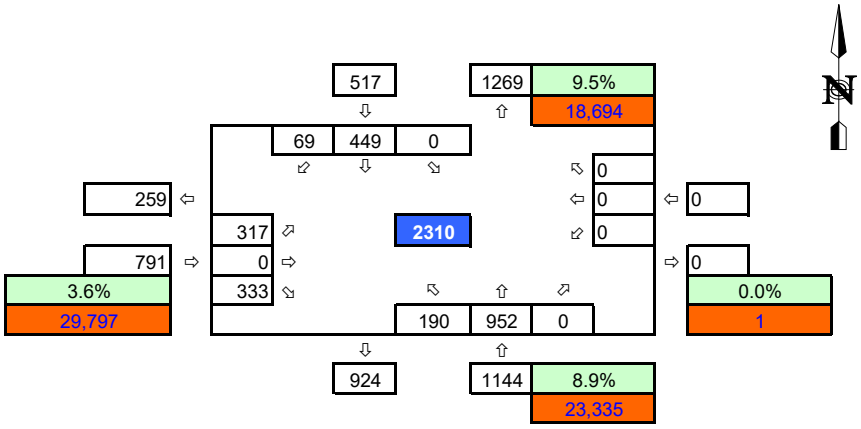
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 36 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**
Intersection #:	36
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**



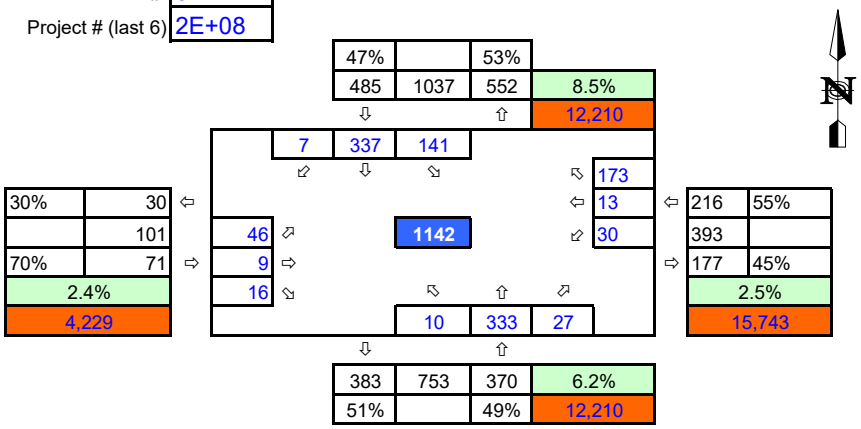
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

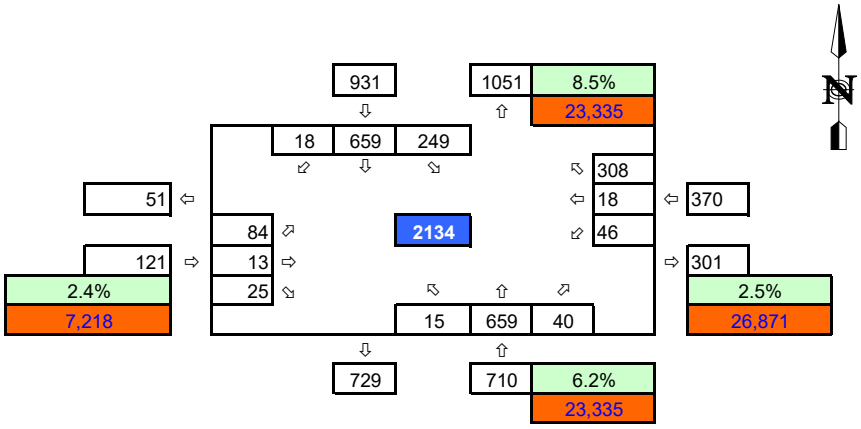
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 37 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**
Intersection #:	37
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**



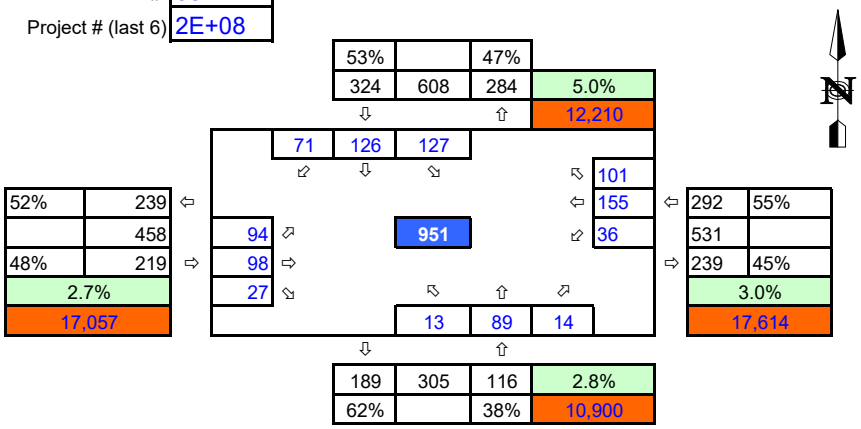
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

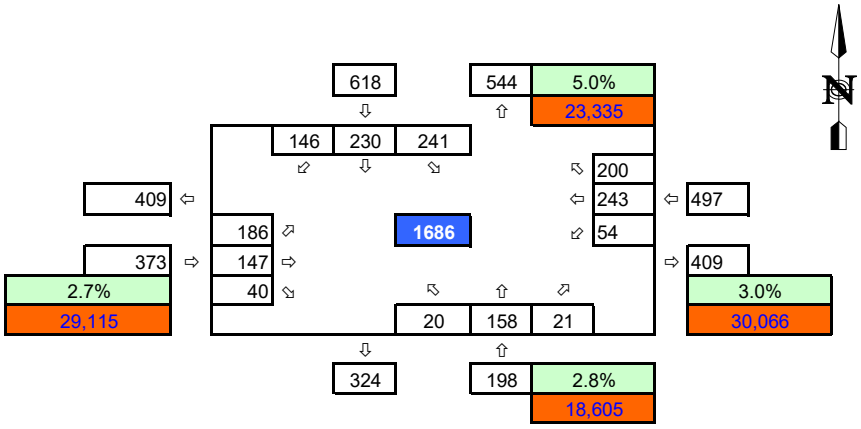
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 38 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**
Intersection #:	38
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**



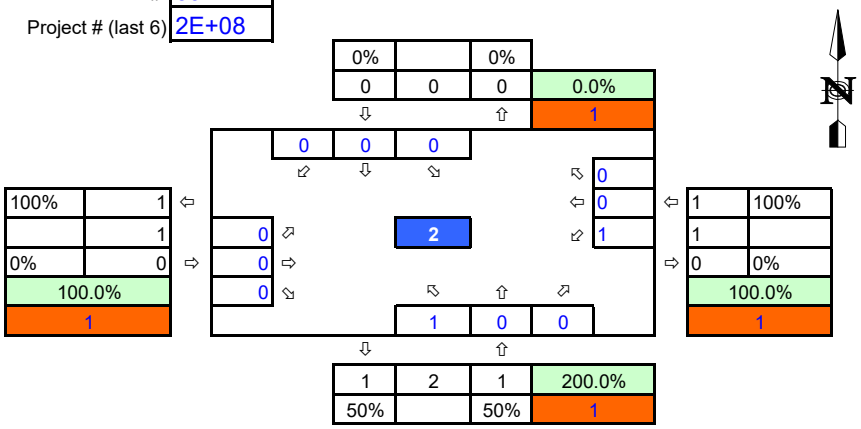
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

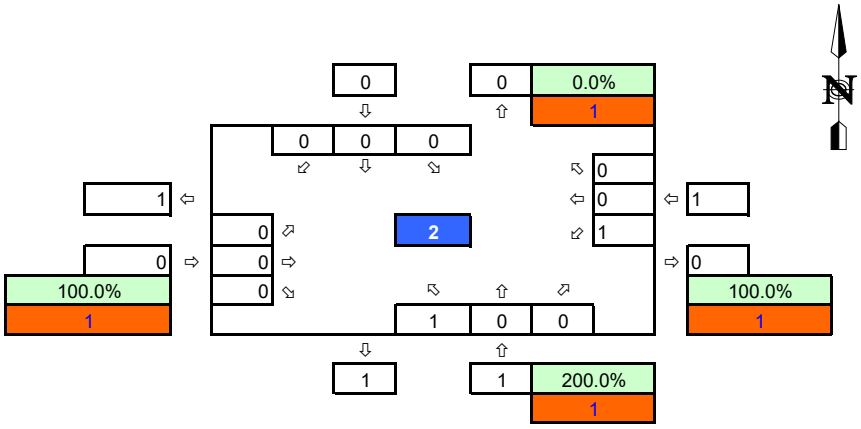
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 39 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	39
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**



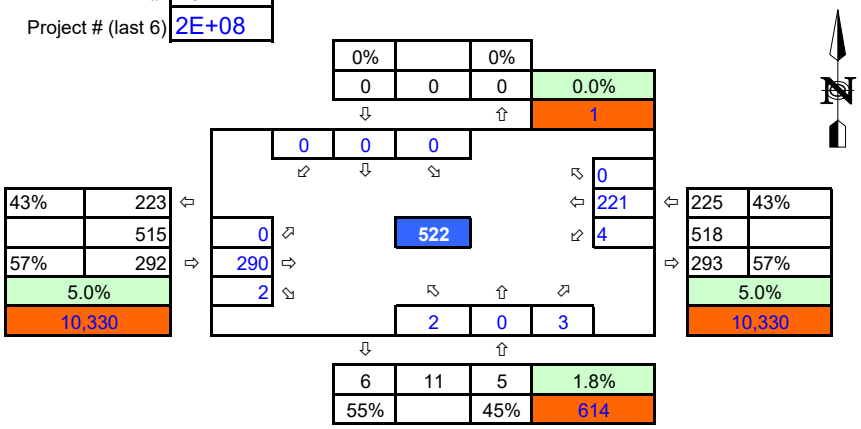
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

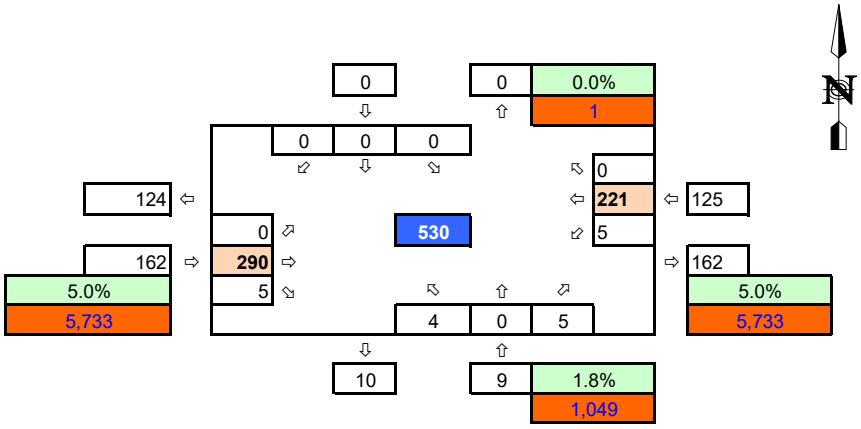
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 40 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**
Intersection #:	40
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**



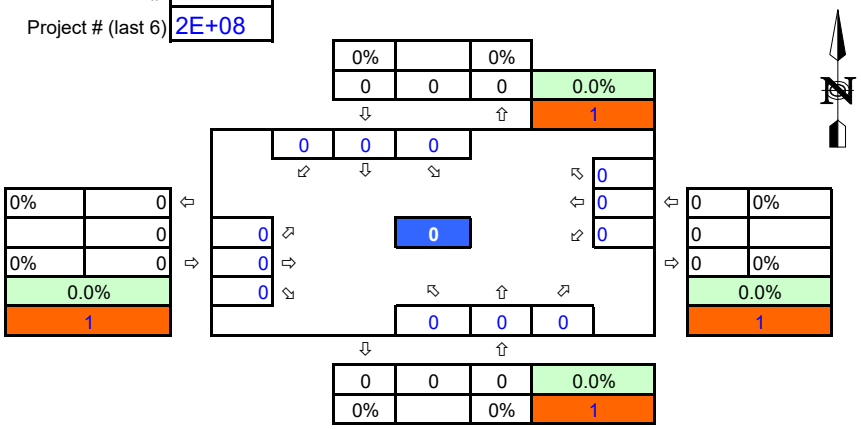
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

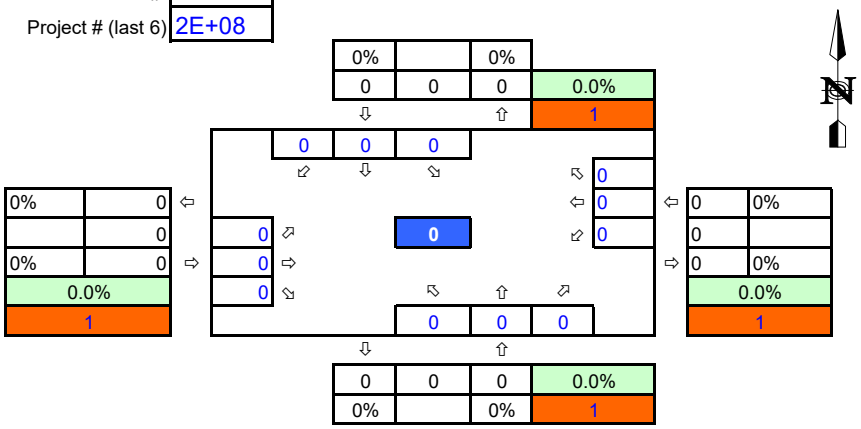
Int 41 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**A St / Jiggs Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	41
Project # (last 6)	2E+08

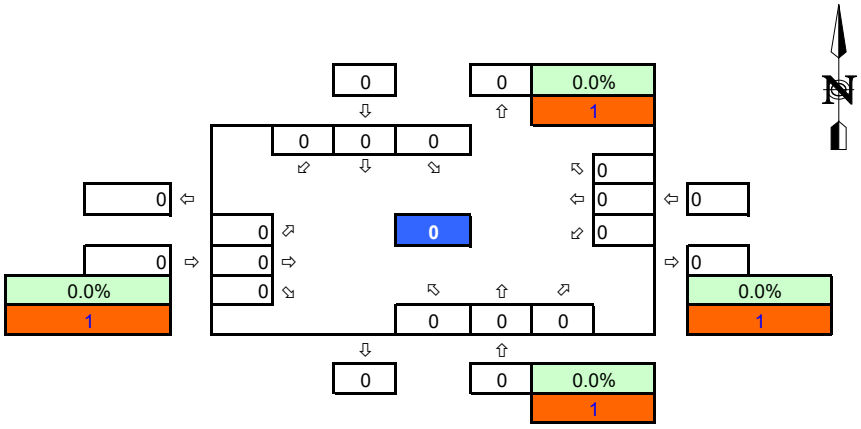

0% 0% 0 0 0 0.0% 1
0 0 0
0 0 0 0 0 0
0% 0 0% 0 0 0 0 0

Int 42 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**B St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	42
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**B St / 0**
E/W Street:	**Hinkley Rd**



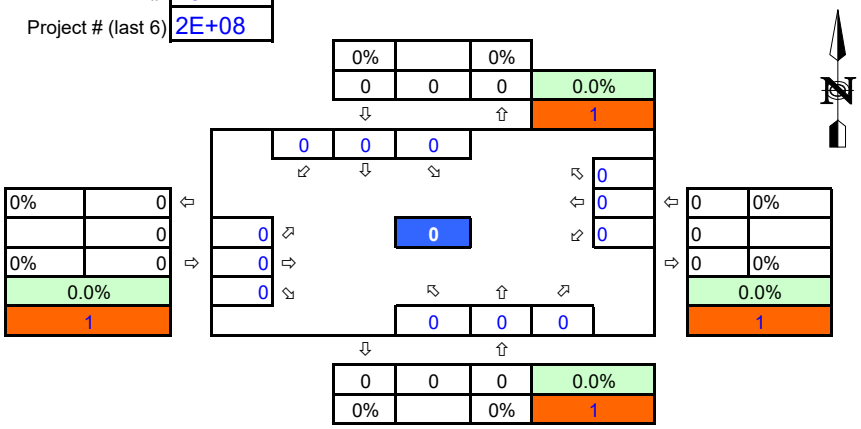
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

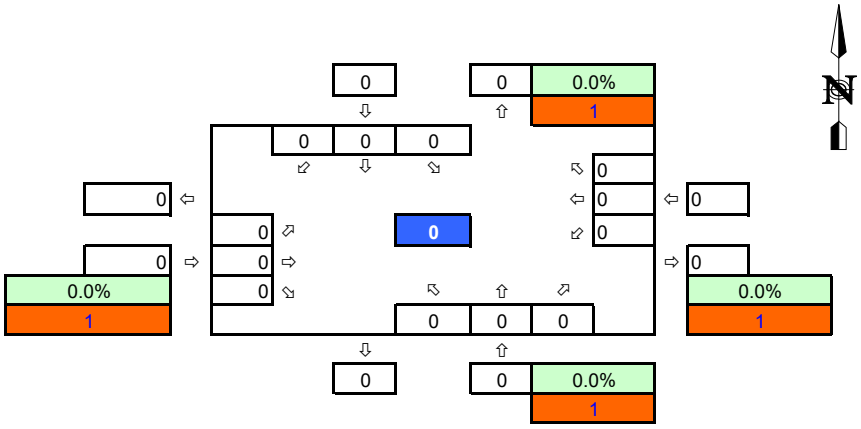
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 43 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**C St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	43
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**C St / 0**
E/W Street:	**Hinkley Rd**



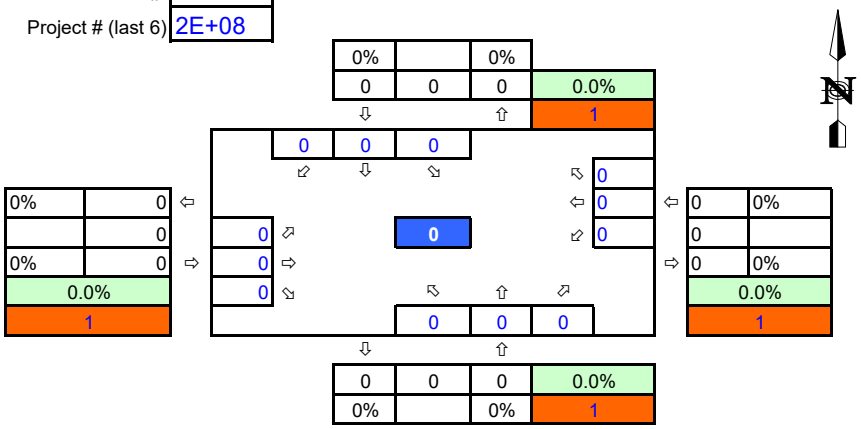
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

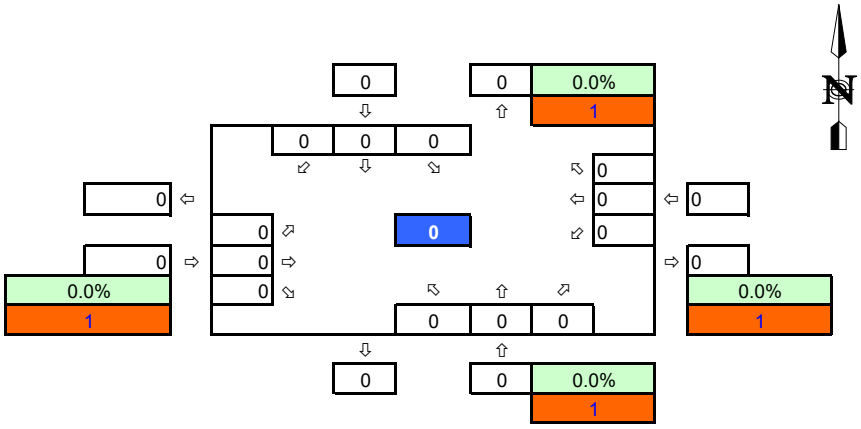
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 44 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**C St**
E/W Street:	**0 / F St**
Intersection #:	44
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**C St**
E/W Street:	**0 / F St**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

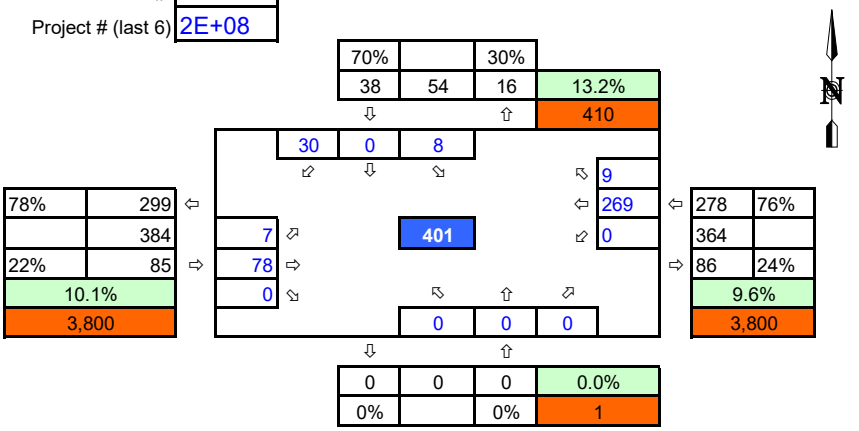
xx = turning movement no longer exists.

xx = predicted volume < baseline; volume manually increased.

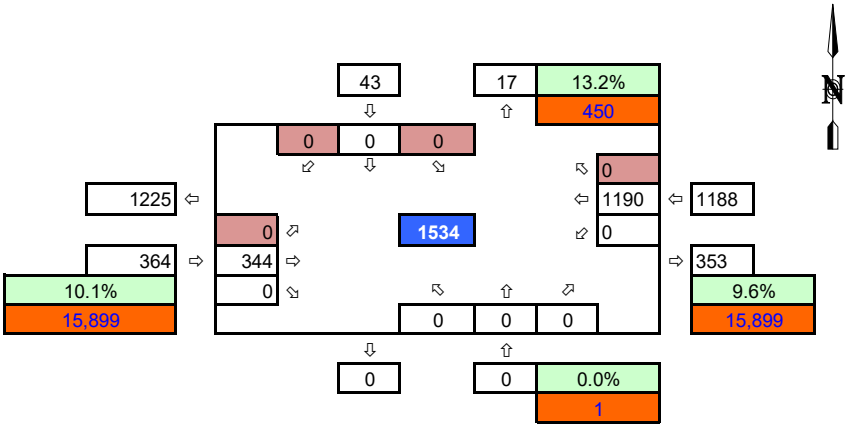
xx = volume manually incresed to ensure HY > OY

Int 1 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**
Intersection #:	1
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Hinkley Rd**
E/W Street:	**Main St**



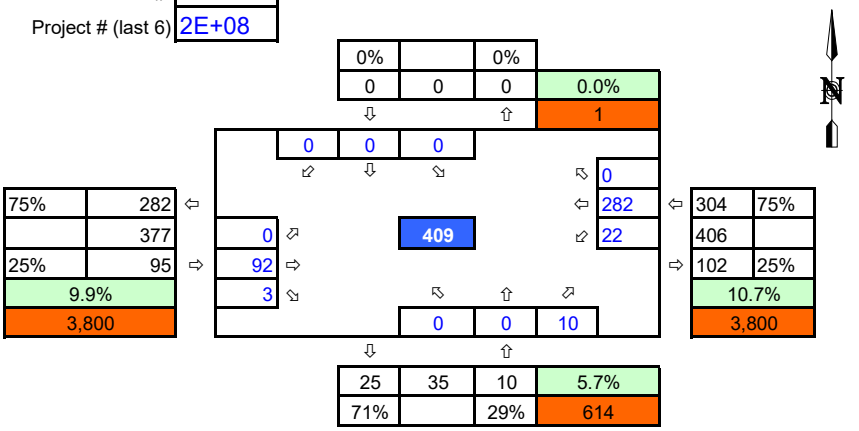
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

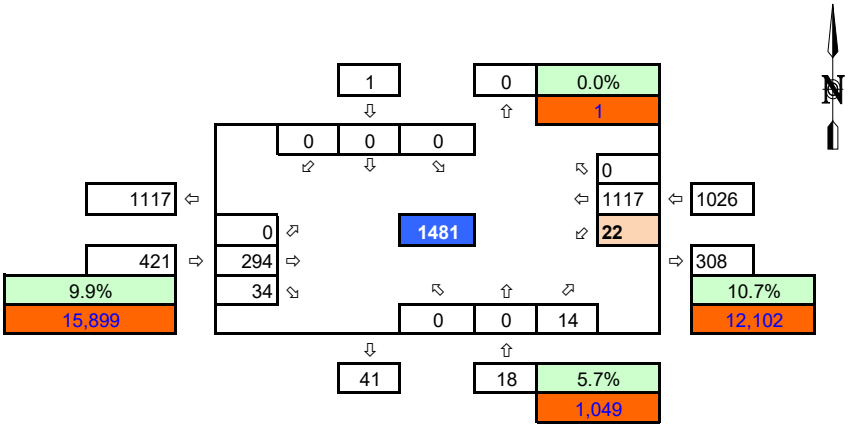
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 2 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**
Intersection #:	2
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Rail Yard Dwy / Country Club Dr**
E/W Street:	**Main St**



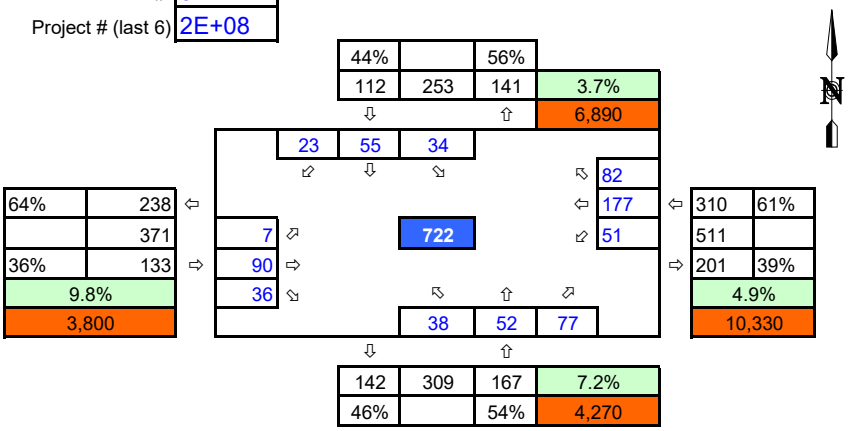
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

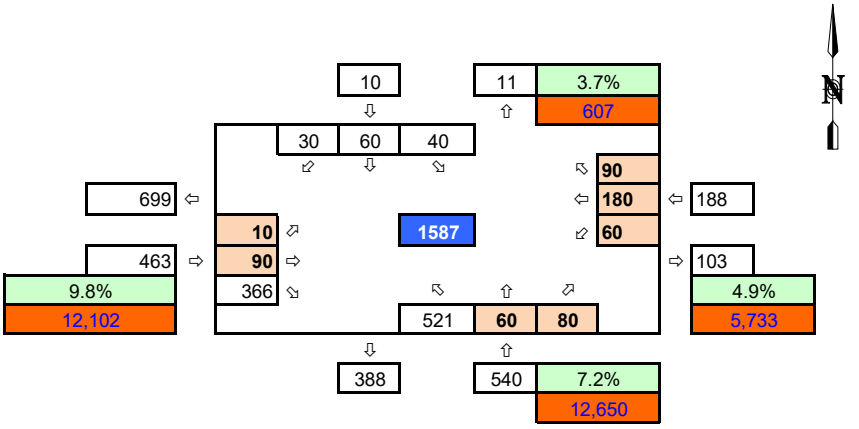
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 3 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**
Intersection #:	3
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Main St**



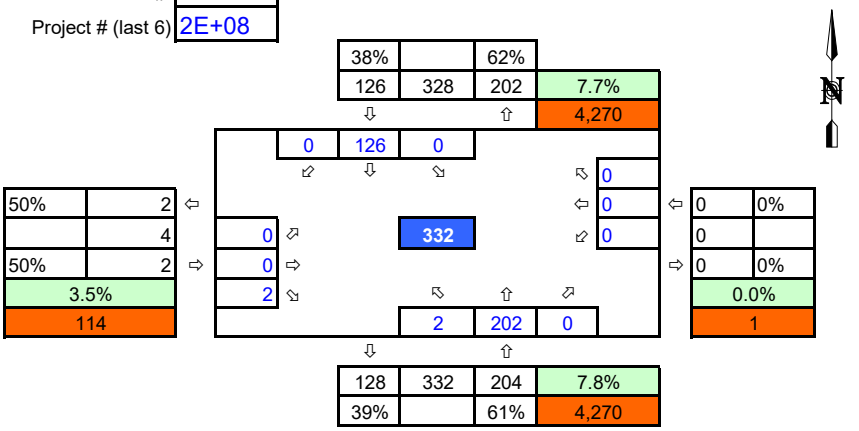
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

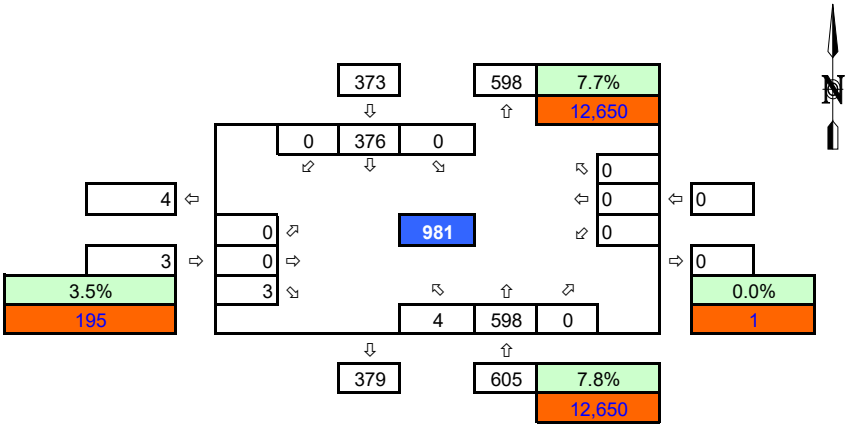
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 4 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**
Intersection #:	4
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Sun Valley Dr**



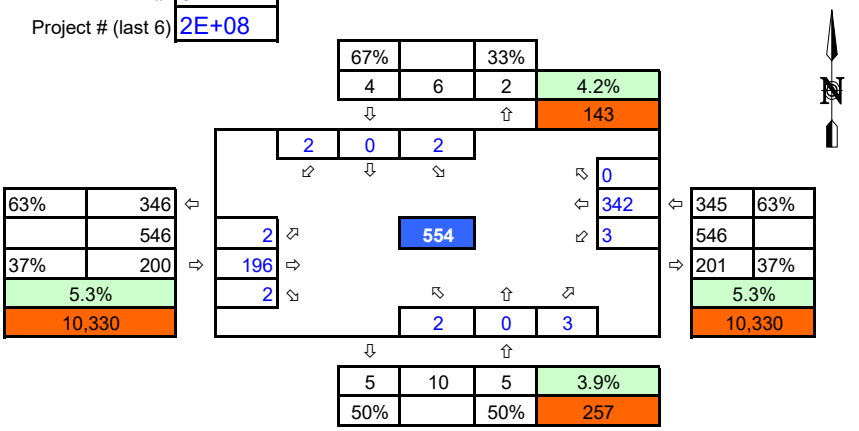
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

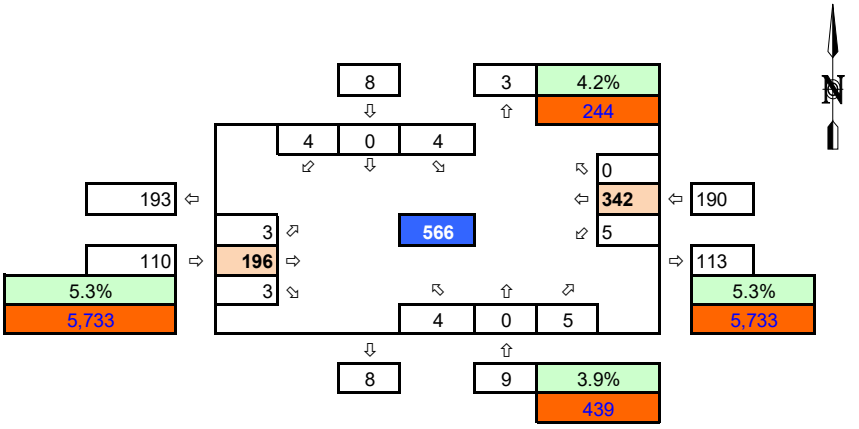
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 5 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**
Intersection #:	5
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Holland St**
E/W Street:	**Main St**



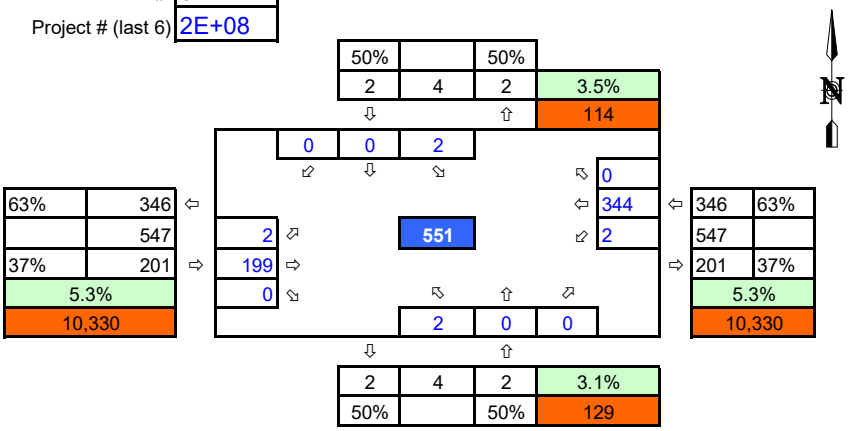
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

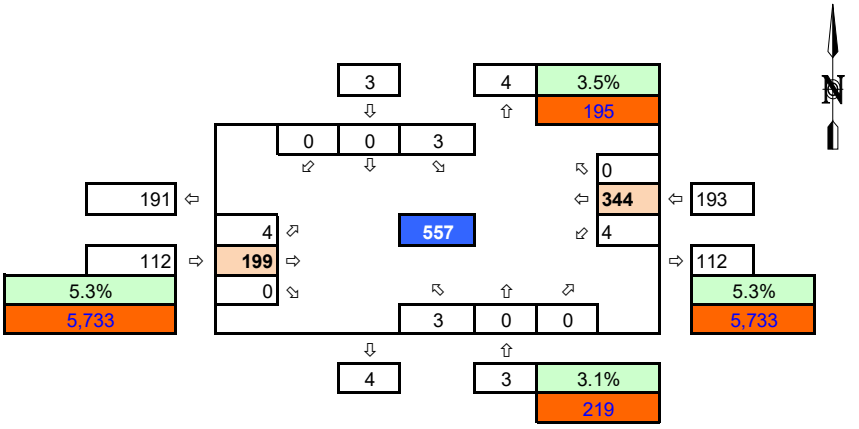
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 6 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**
Intersection #:	6
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Hannan St**
E/W Street:	**Main St**



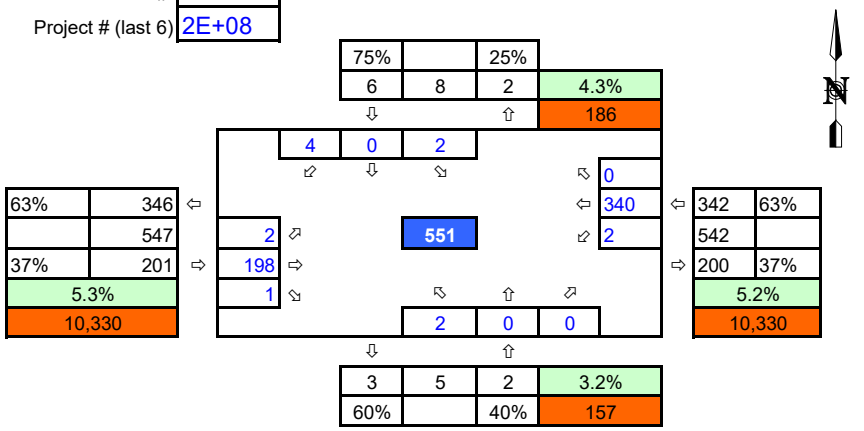
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

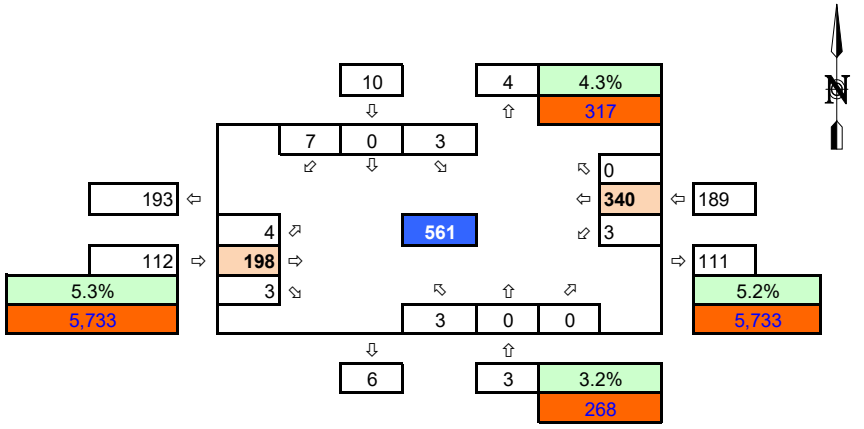
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 7 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**
Intersection #:	7
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Townsend St**
E/W Street:	**Main St**



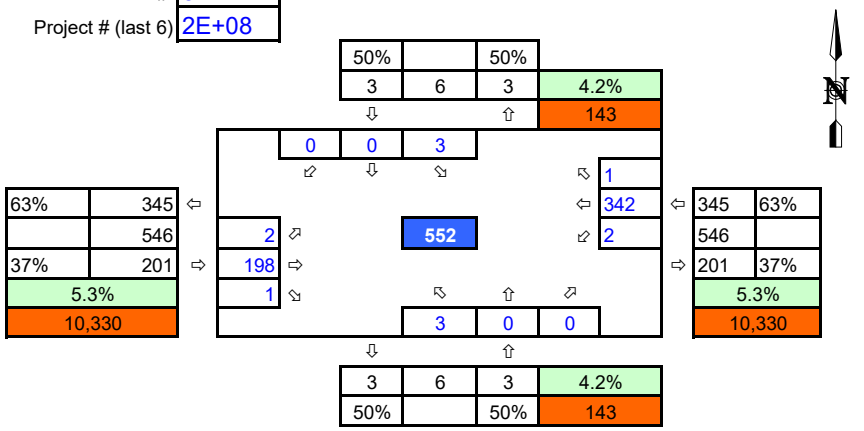
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

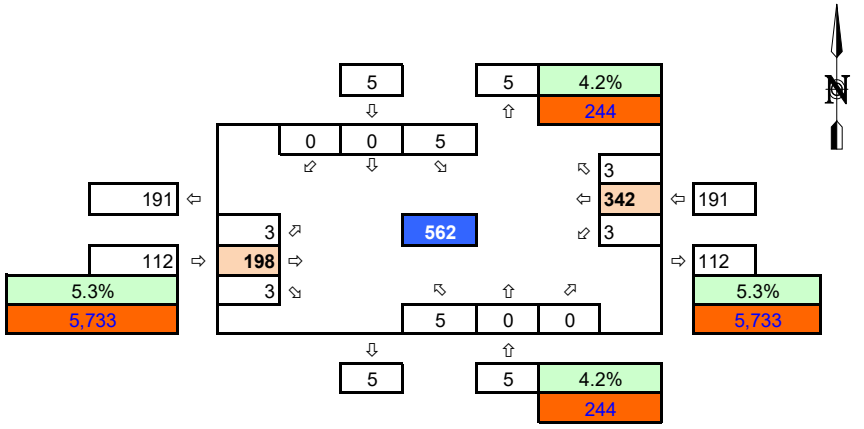
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 8 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**
Intersection #:	8
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Woods Ave**
E/W Street:	**Main St**



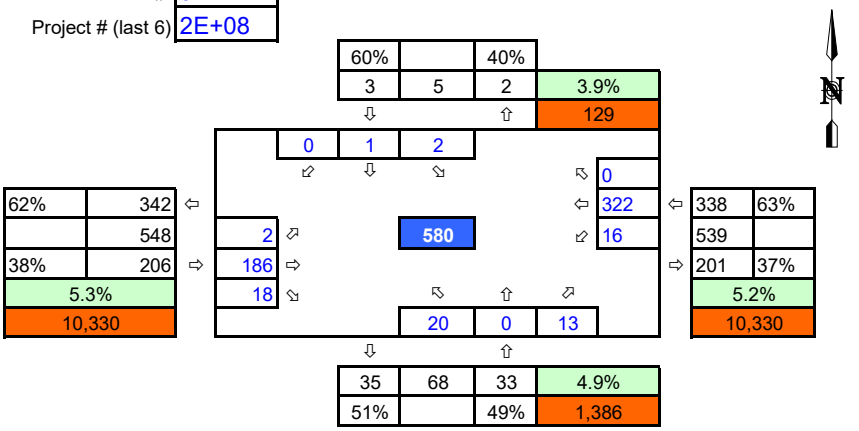
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

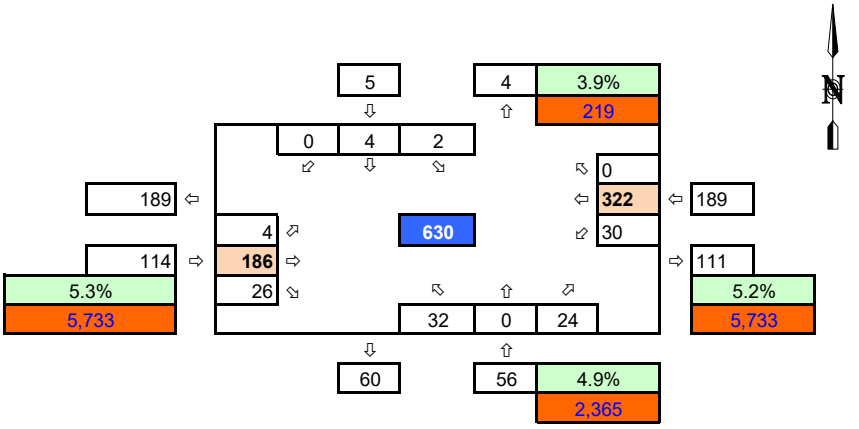
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 9 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**
Intersection #:	9
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Frank St**
E/W Street:	**Main St**



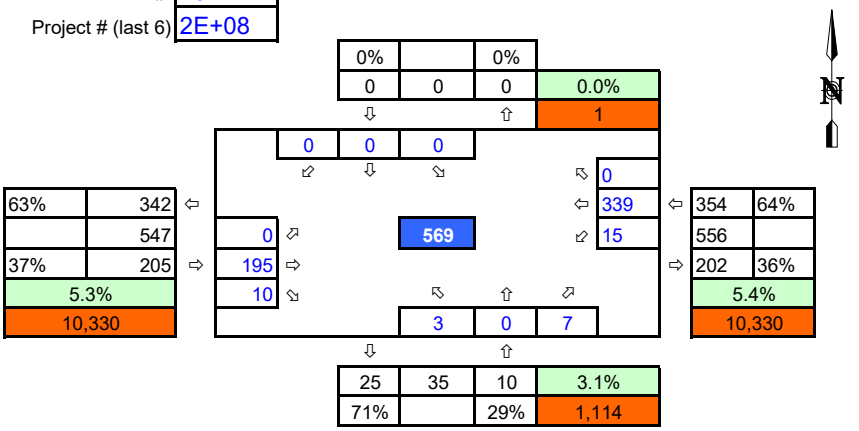
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

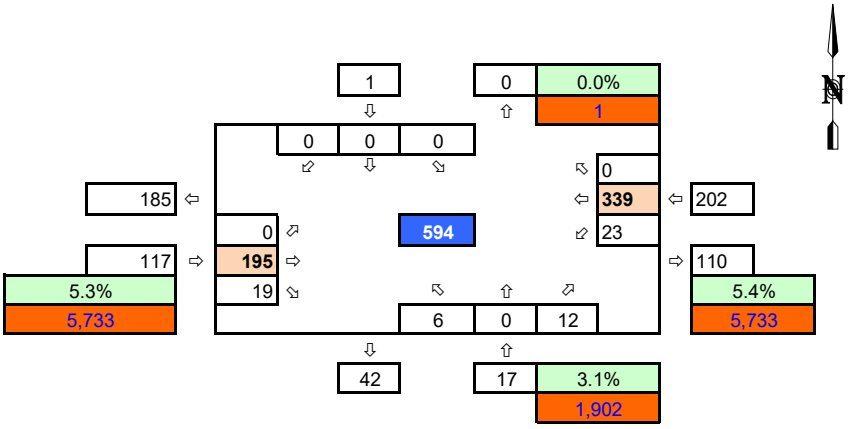
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 10 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**
Intersection #:	10
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Paris Ave**
E/W Street:	**Main St**



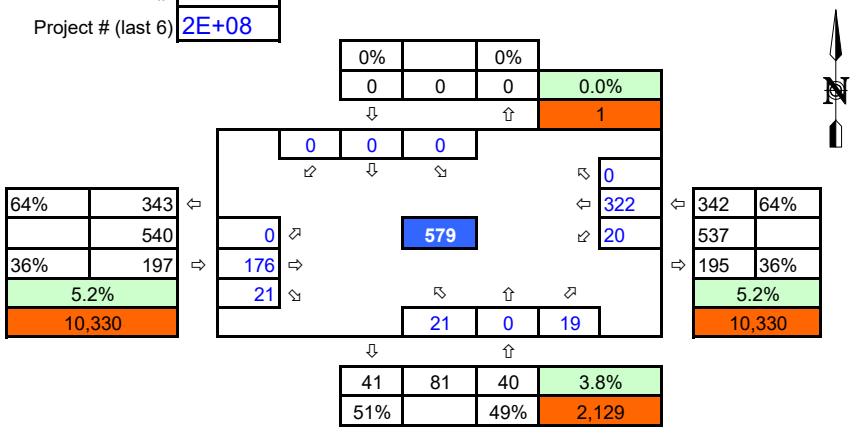
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

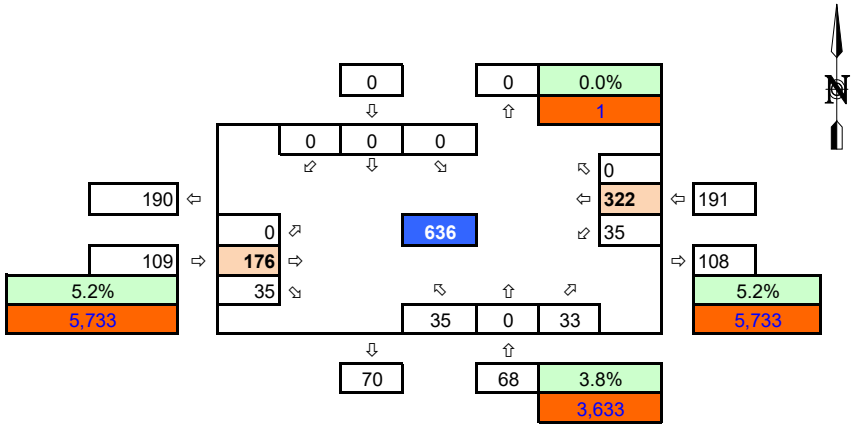
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 11 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**
Intersection #:	11
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Ash Rd**
E/W Street:	**Main St**



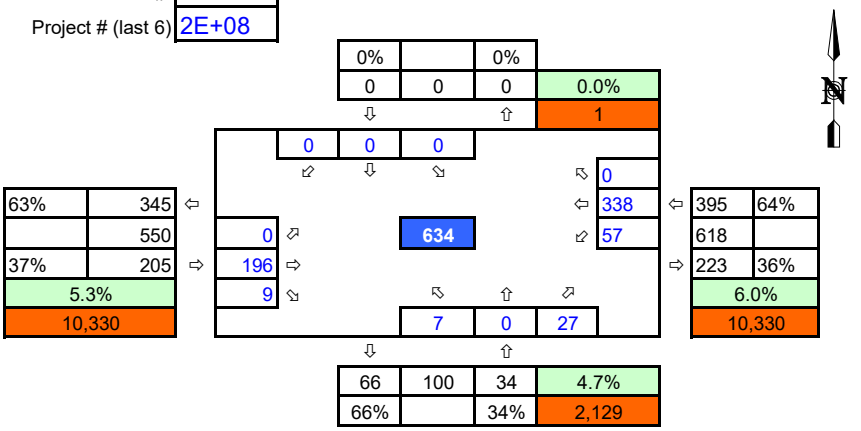
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

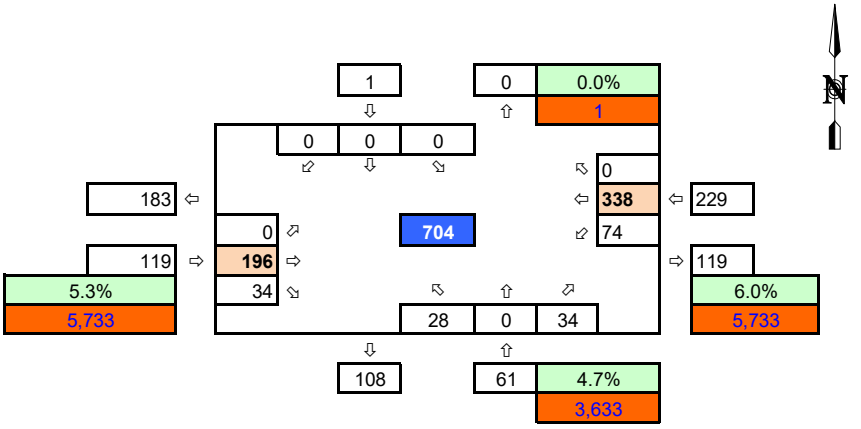
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 12 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**
Intersection #:	12
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Birch Rd**
E/W Street:	**Main St**



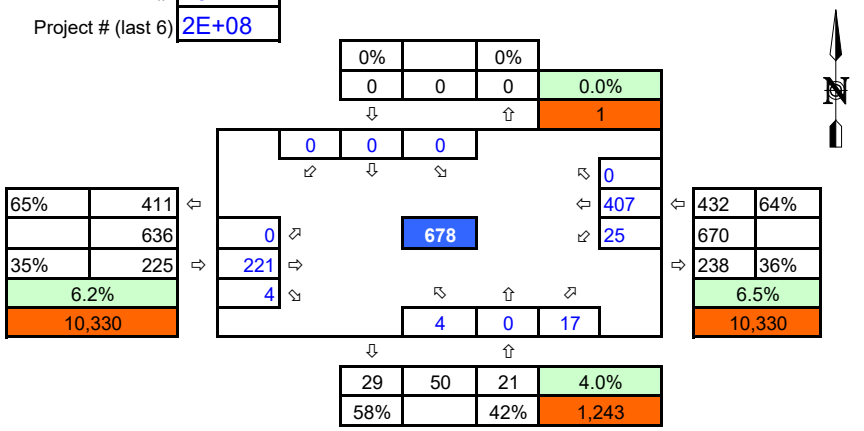
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

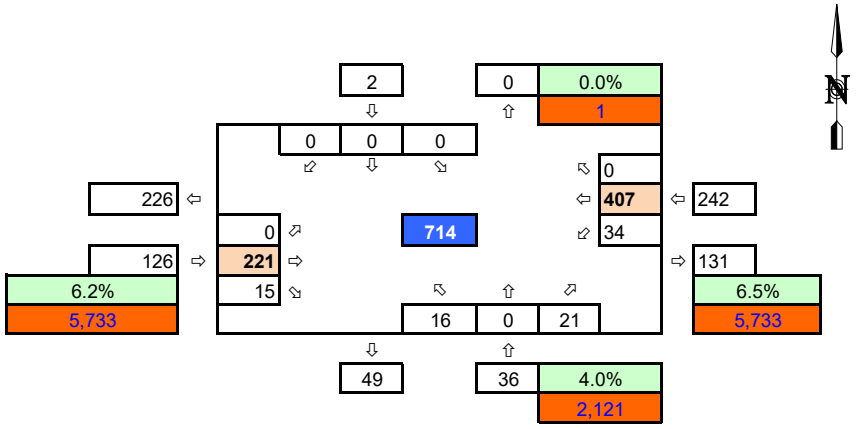
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 13 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**
Intersection #:	13
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Western Dr**
E/W Street:	**Main St**



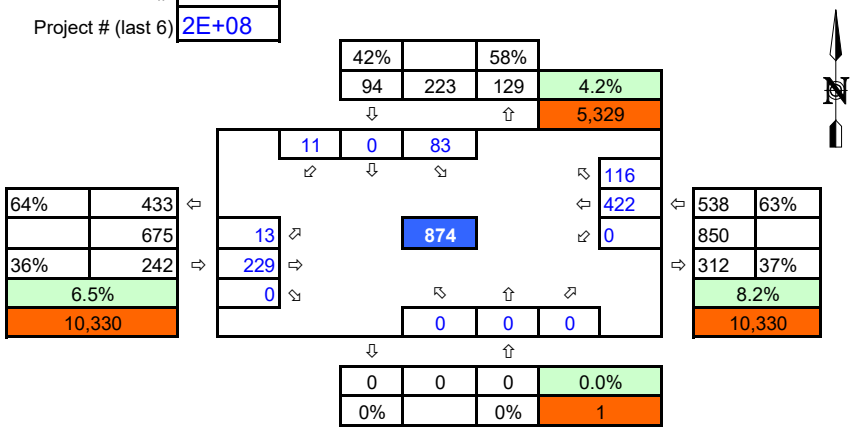
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

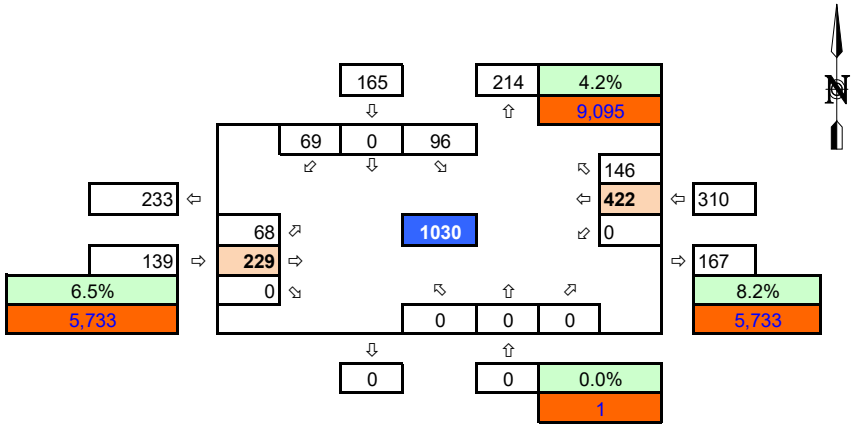
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 14 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**
Intersection #:	14
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Pettit Rd**
E/W Street:	**Main St**



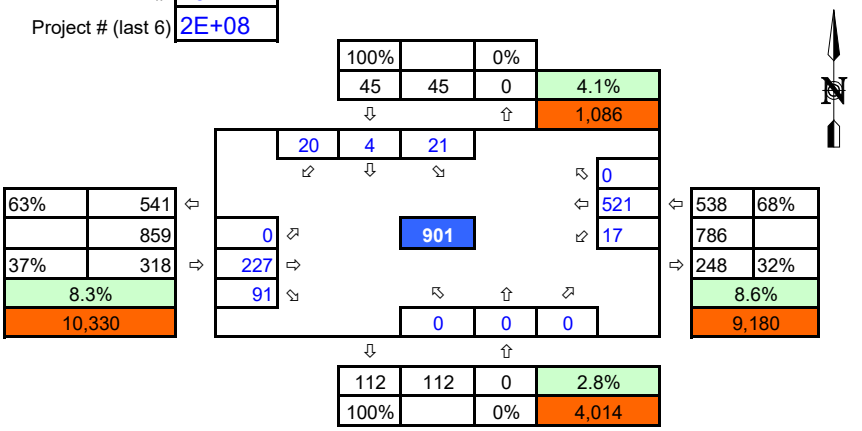
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

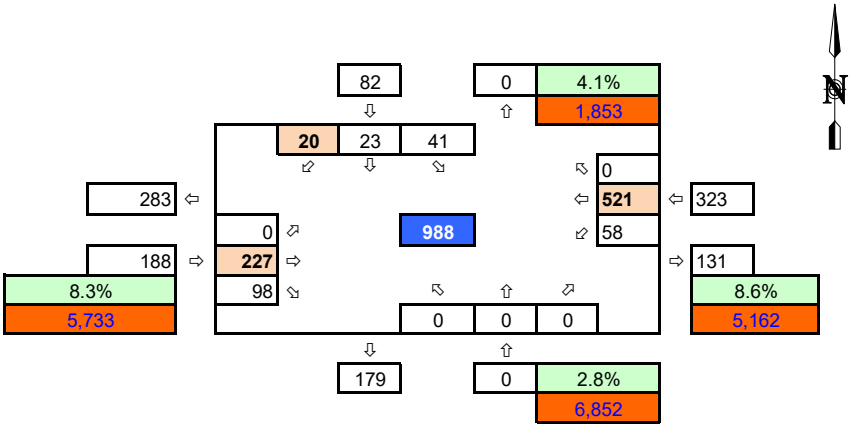
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 15 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**
Intersection #:	15
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**SR 58 EB Ramp**
E/W Street:	**Main St**



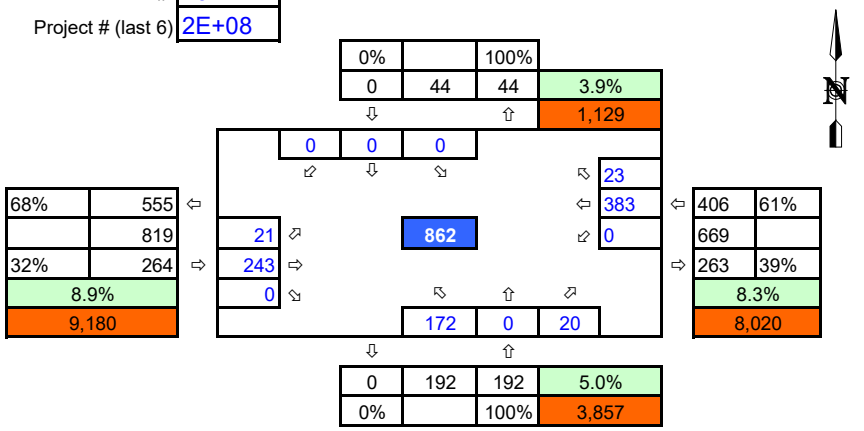
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

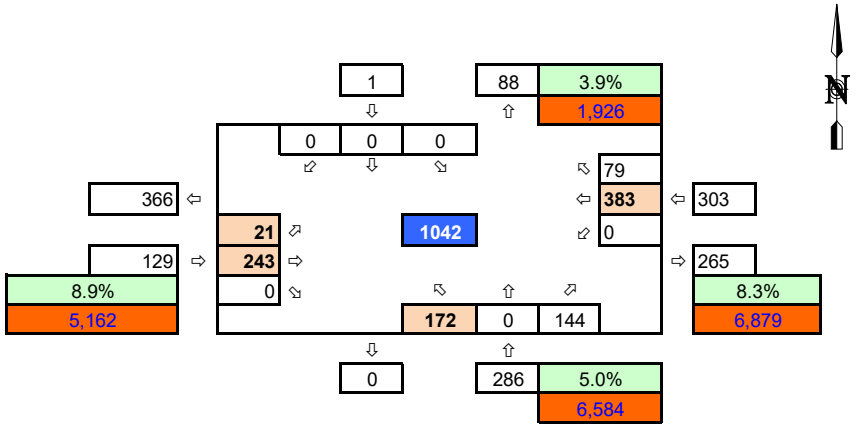
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 16 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**
Intersection #:	16
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**SR 58 WB Ramp**
E/W Street:	**Main St**



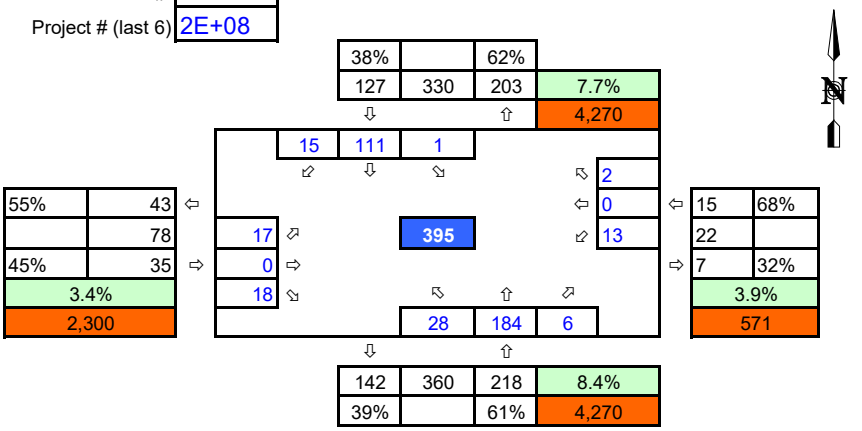
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

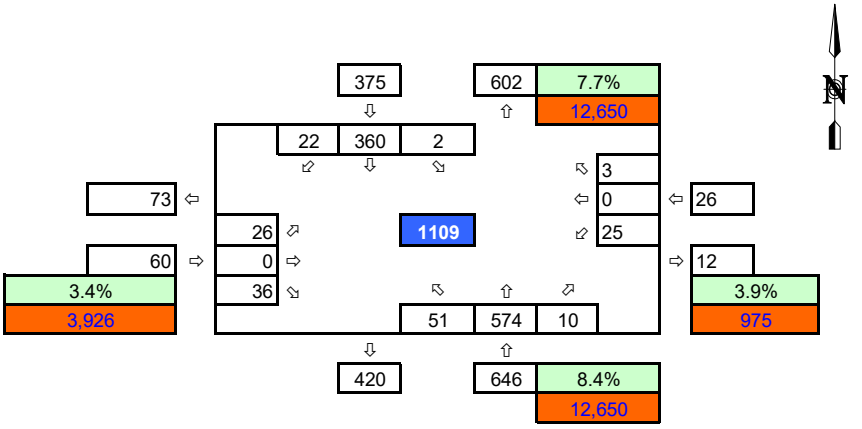
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 17 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**
Intersection #:	17
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Love's Travel Stop Dwy**



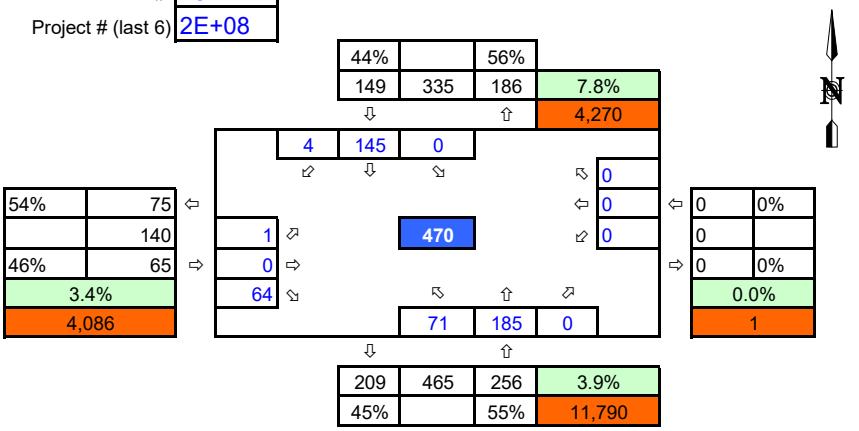
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

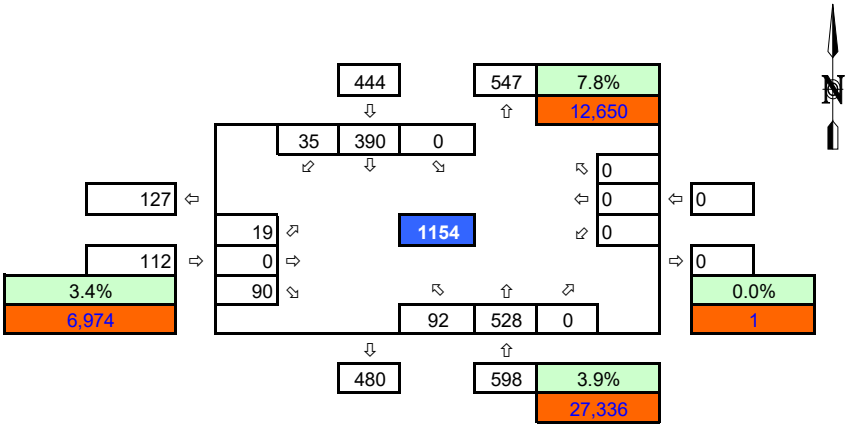
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 18 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**
Intersection #:	18
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**High Desert Rd**



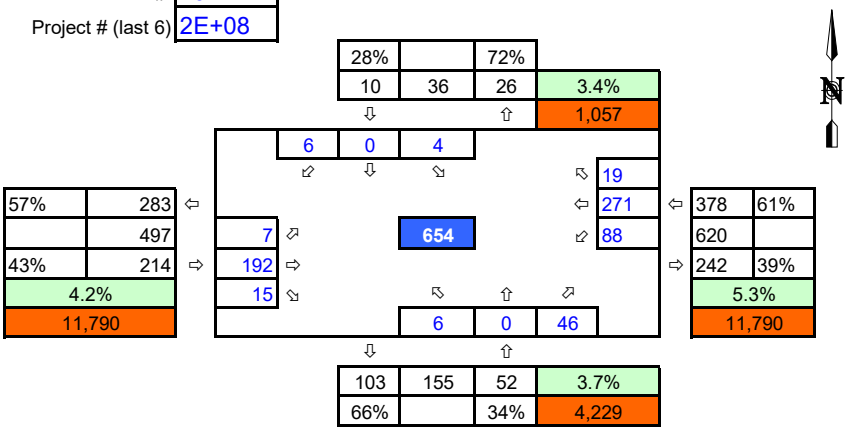
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

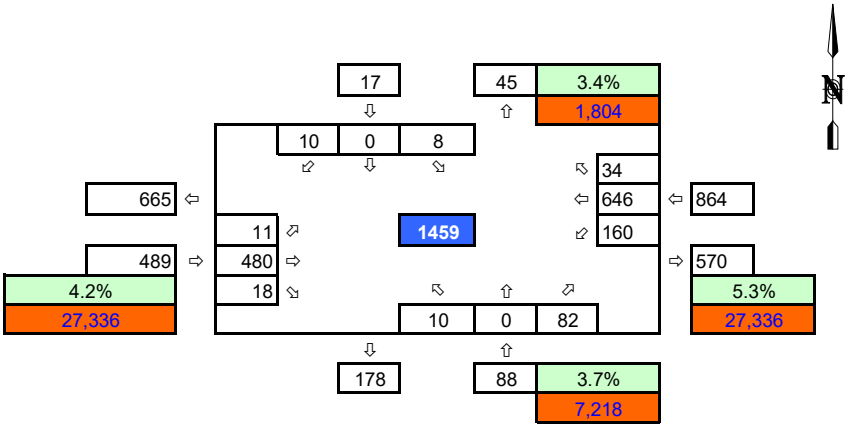
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 19 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**
Intersection #:	19
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Truck Freightliner Service Point Dwy**
E/W Street:	**Lenwood Rd**



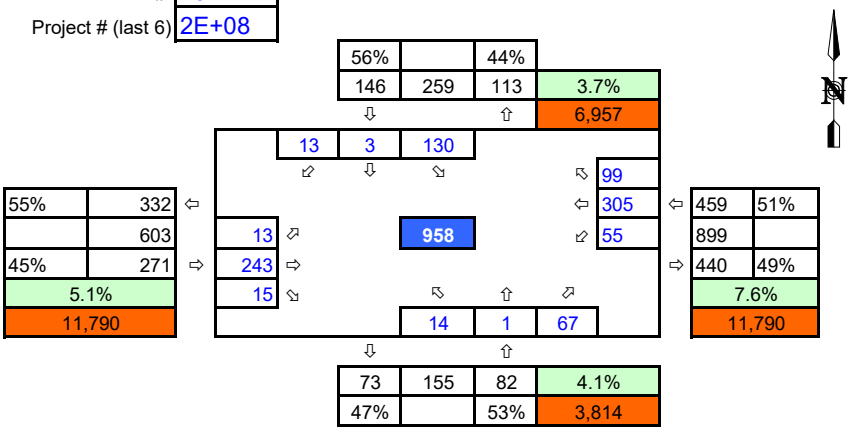
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

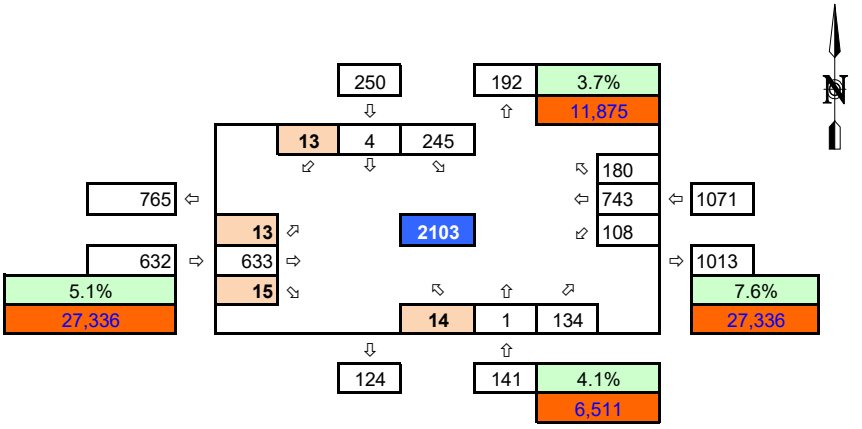
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 20 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**
Intersection #:	20
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Commerce Pkwy**
E/W Street:	**Lenwood Rd**



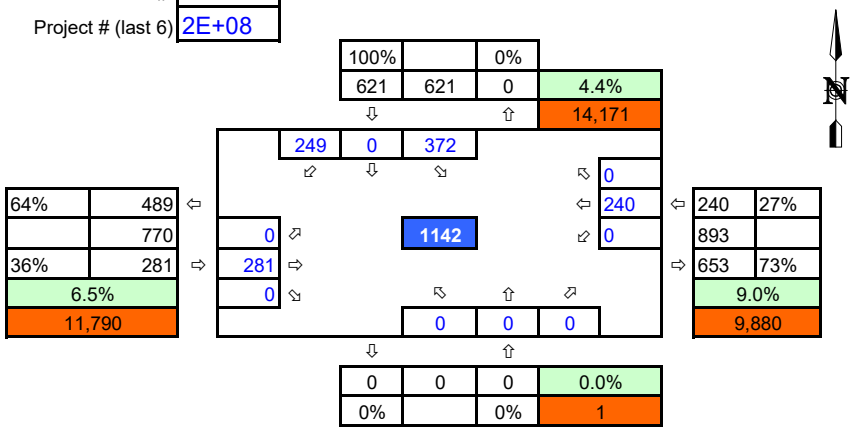
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

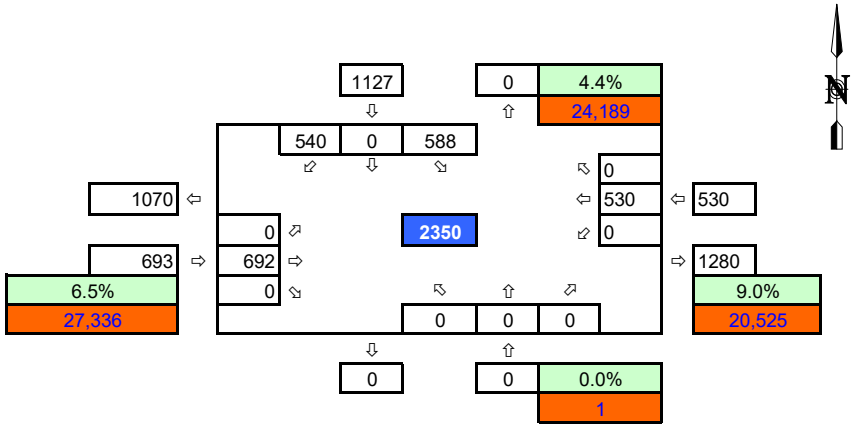
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 21 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	21
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**I-15 SB Off Ramps**
E/W Street:	**Lenwood Rd**



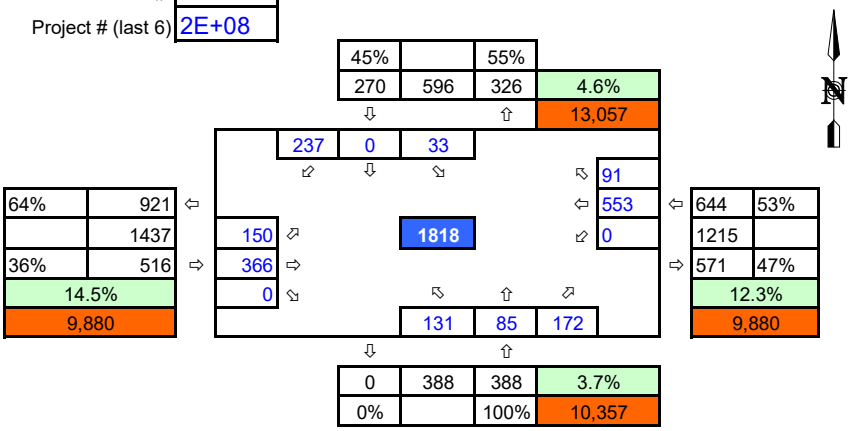
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

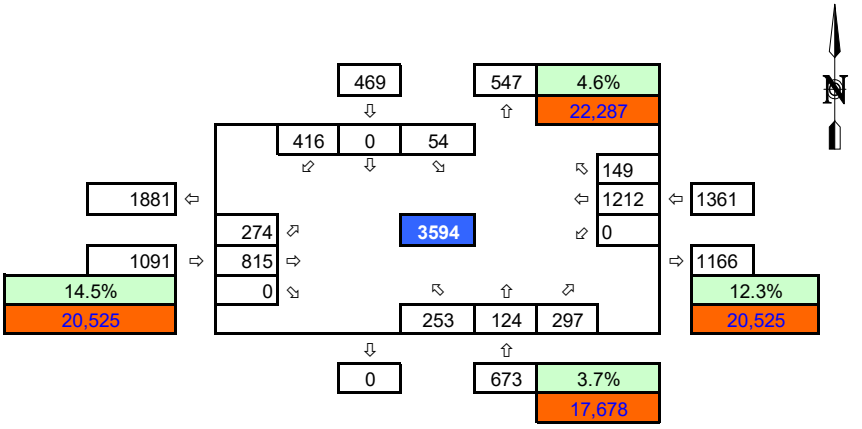
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 22 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**
Intersection #:	22
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**I-15 NB Off Ramps**
E/W Street:	**Lenwood Rd**



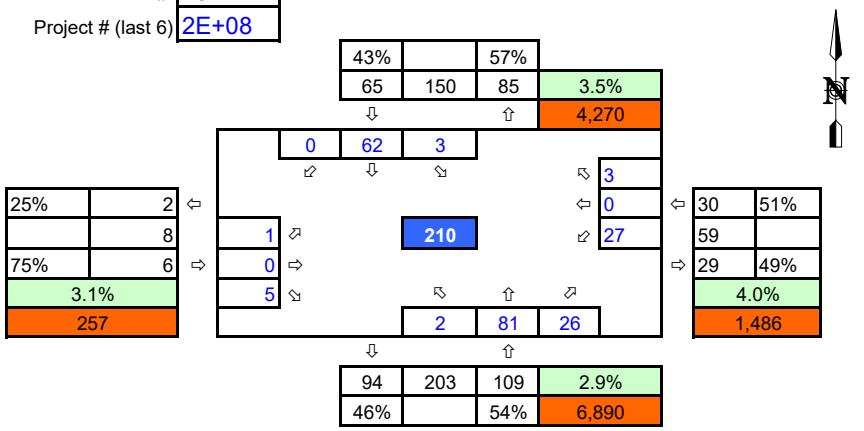
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

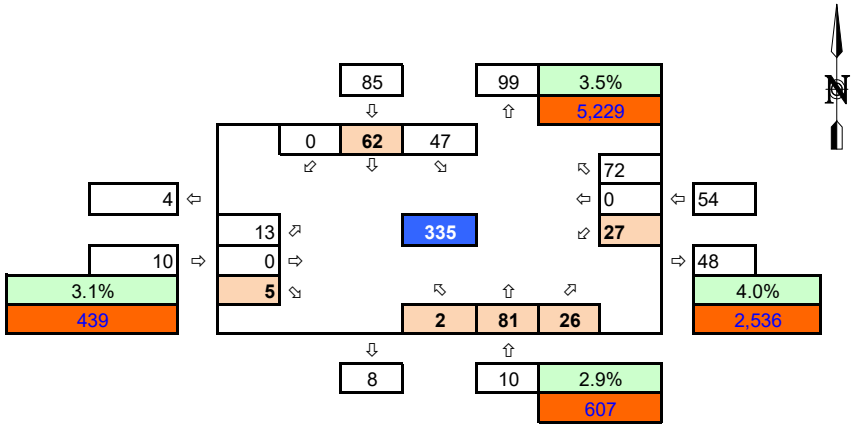
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 23 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**
Intersection #:	23
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Transload Warehouse Center Dwy / Jasper Rd**



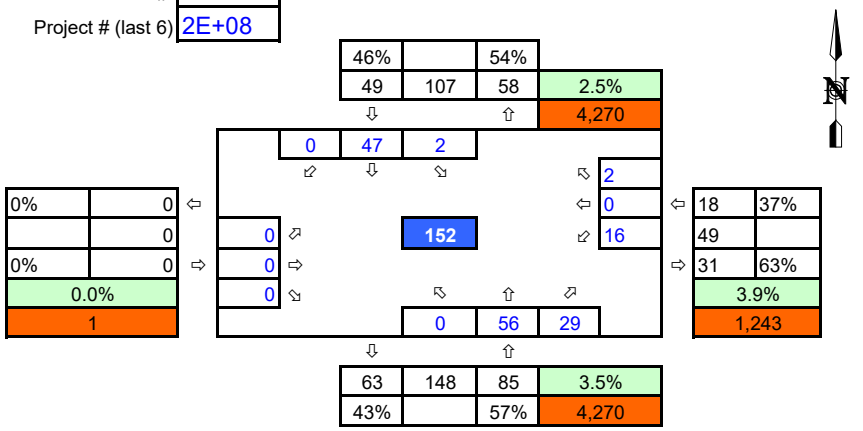
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

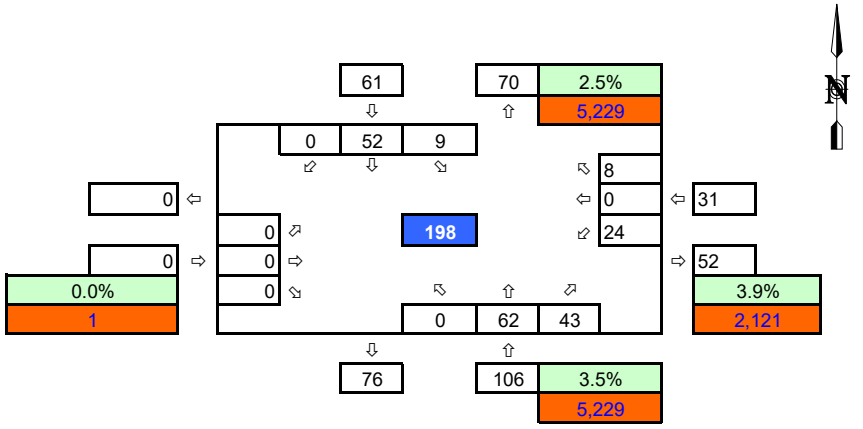
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 24 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**
Intersection #:	24
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Cam del Sol**



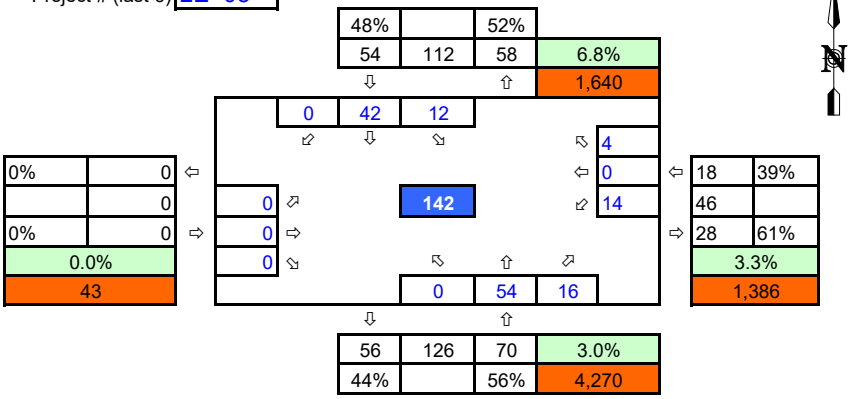
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

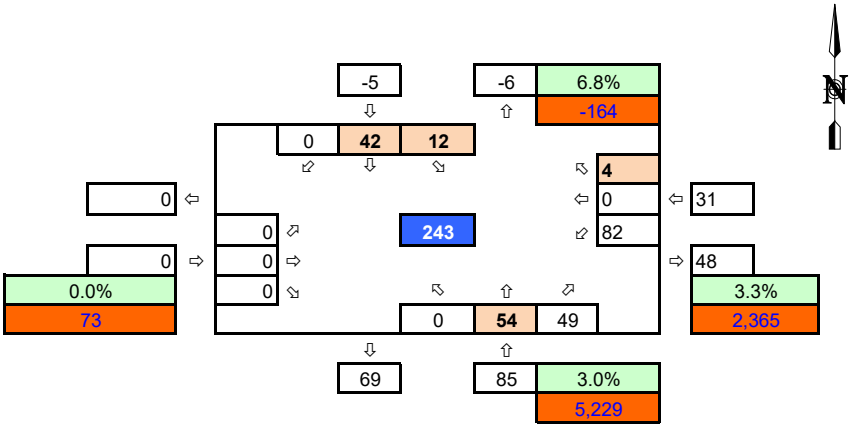
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 25 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**
Intersection #:	25
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Agate Rd**



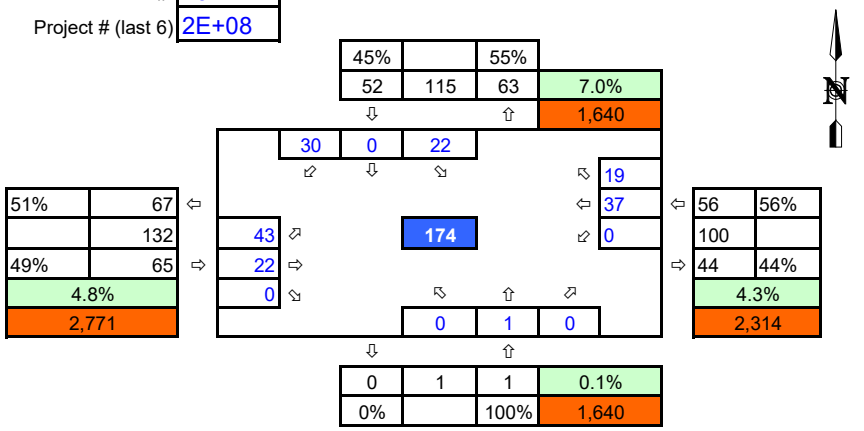
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

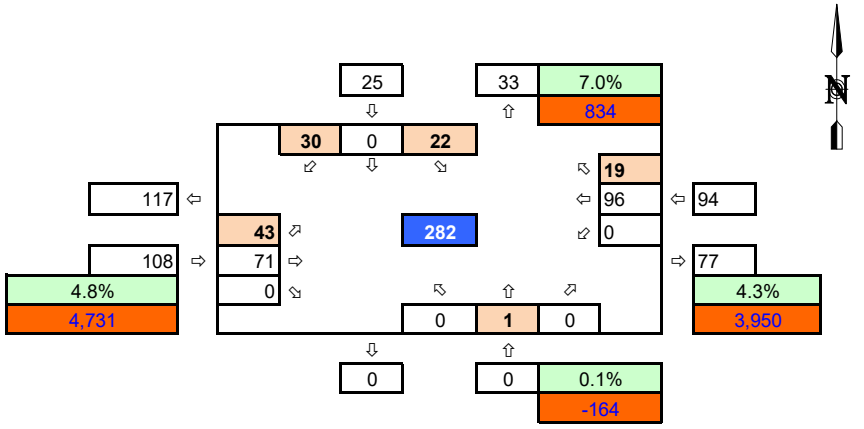
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 26 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**
Intersection #:	26
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**Community Blvd**



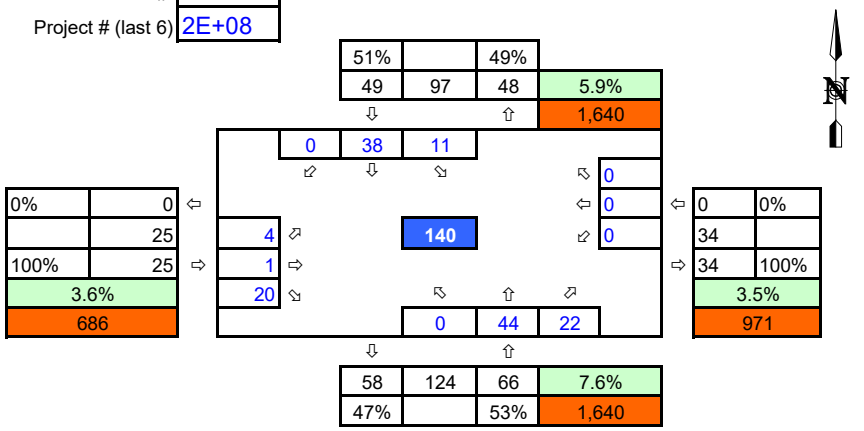
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

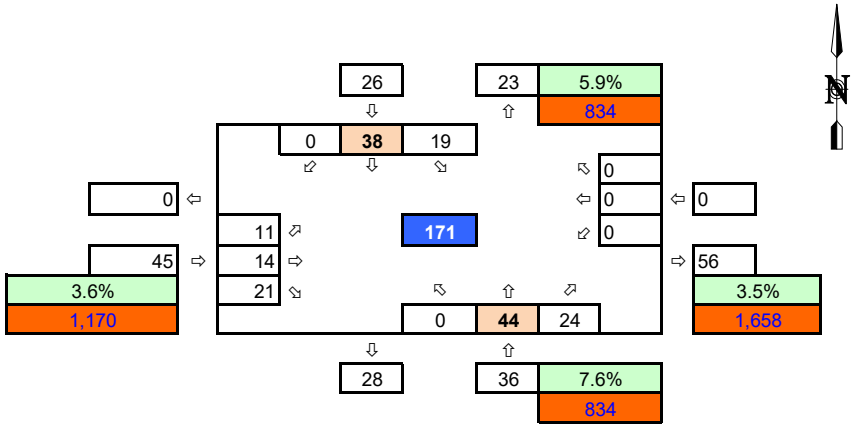
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 27 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**
Intersection #:	27
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 EB Ramps**



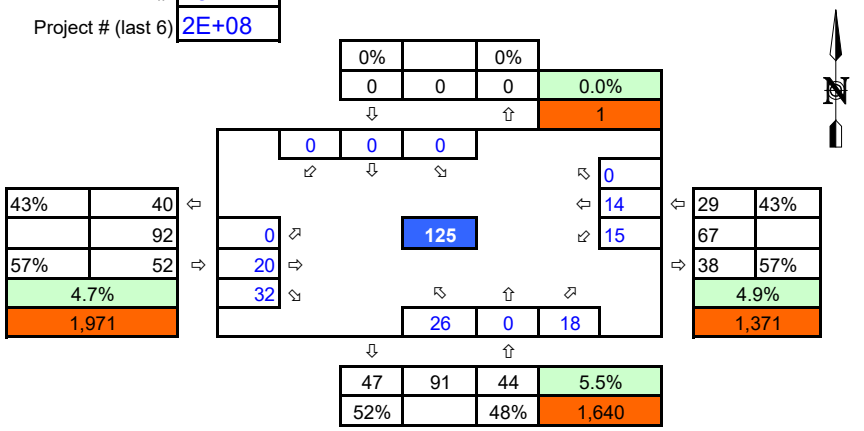
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

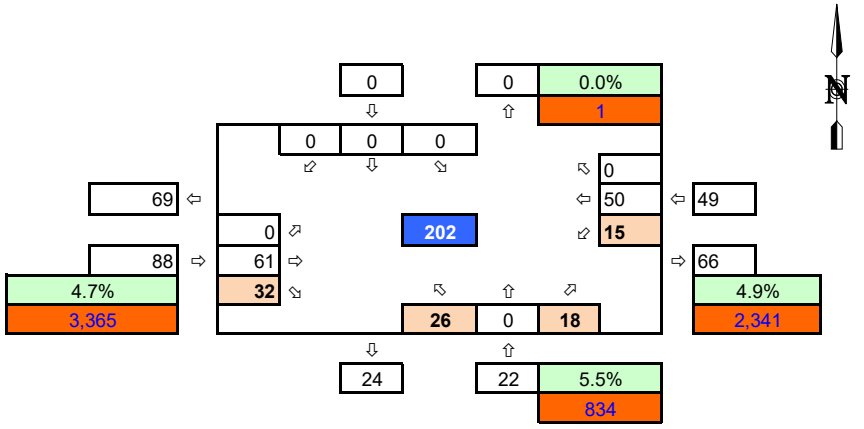
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 28 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**
Intersection #:	28
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lenwood Rd**
E/W Street:	**SR 58 WB Ramps**



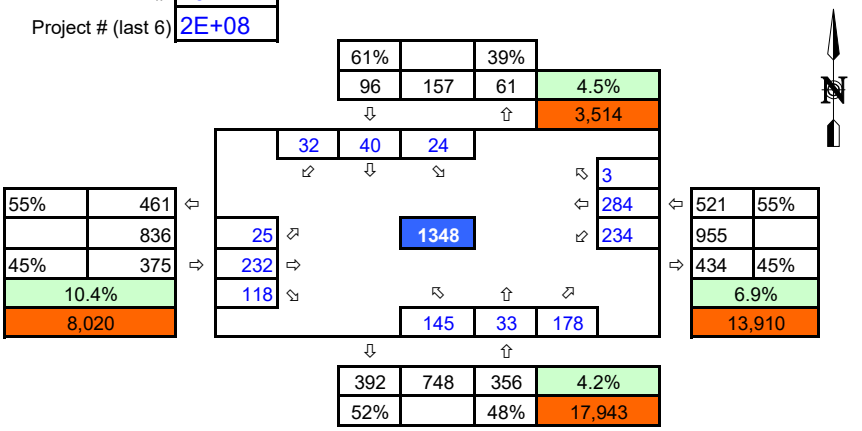
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

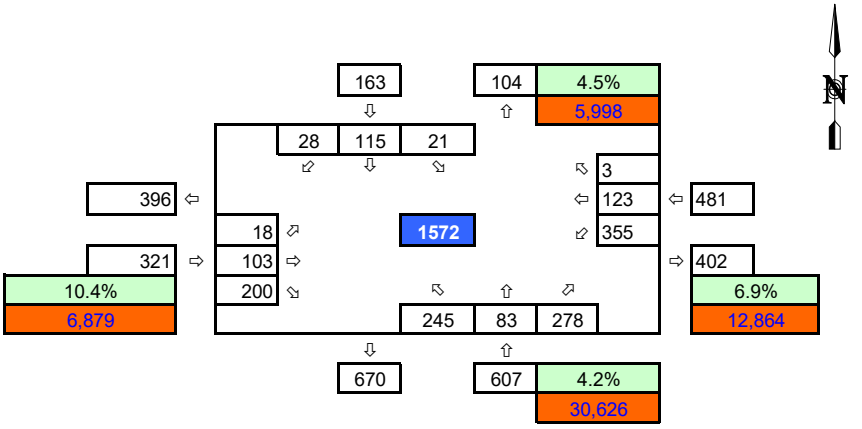
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 29 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**
Intersection #:	29
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Arco Dwy / L St**
E/W Street:	**Main St**



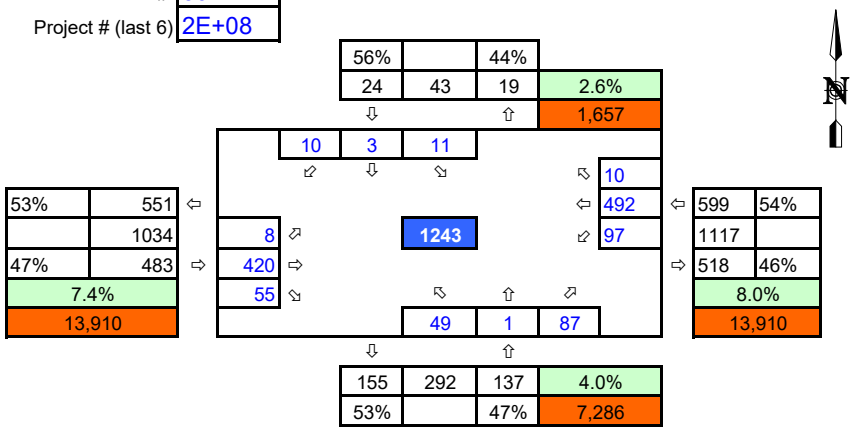
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

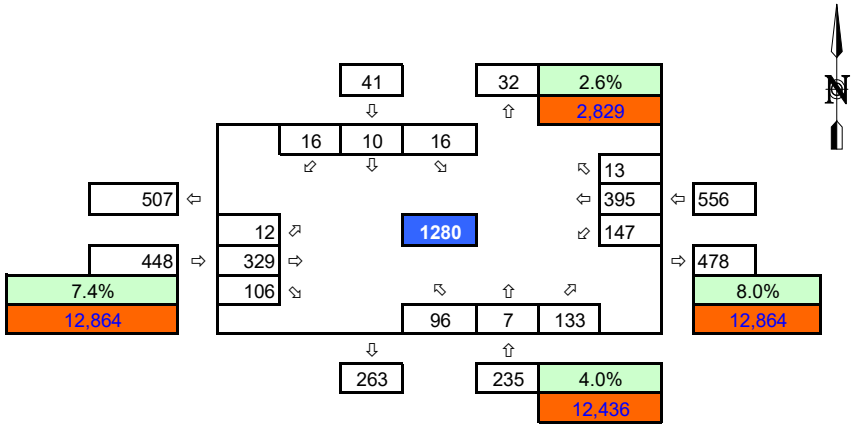
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 30 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**
Intersection #:	30
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Ave H**
E/W Street:	**Main St**



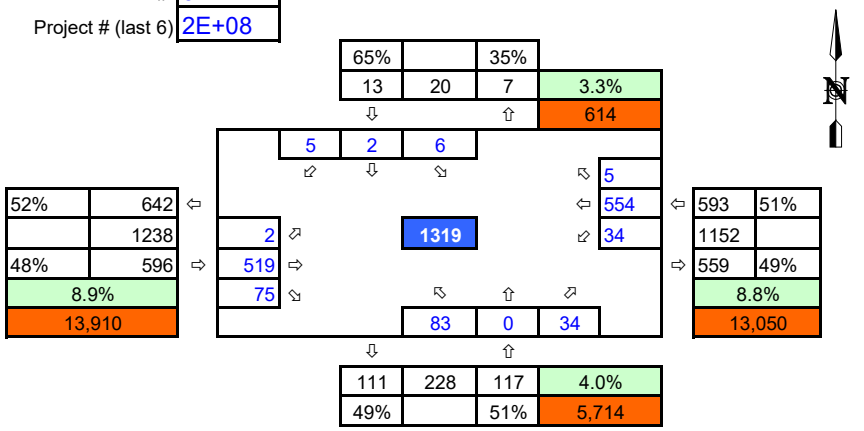
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

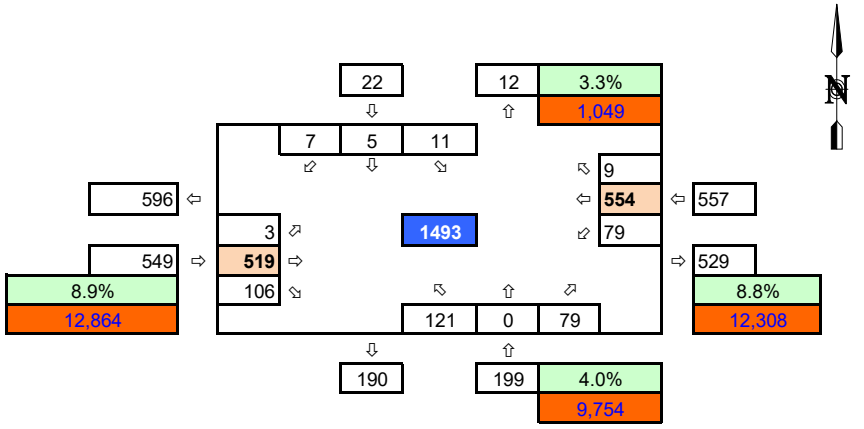
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 31 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**
Intersection #:	31
Project # (last 6)	2E+08



Scenario:	**Horizon Year Conditions**
N/S Street:	**Ave A**
E/W Street:	**Main St**



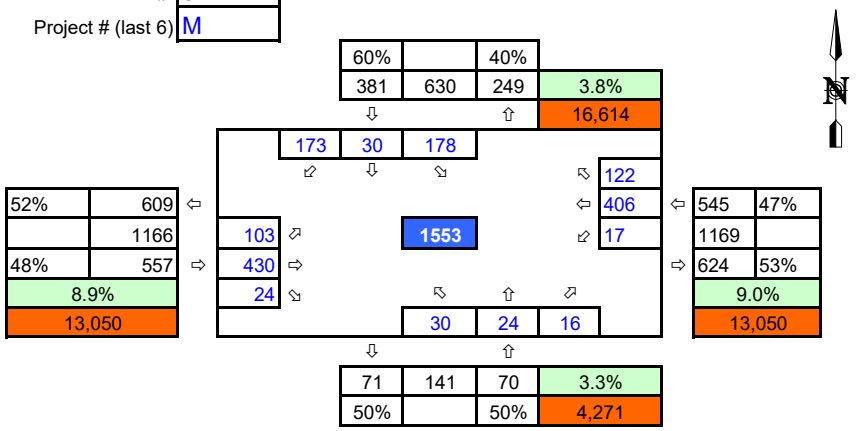
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

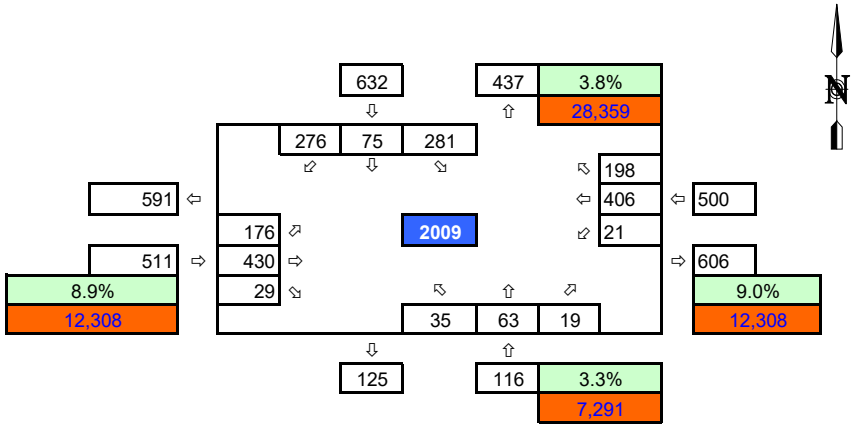
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 32 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**
Intersection #:	32
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**1st Ave**
E/W Street:	**Main St**



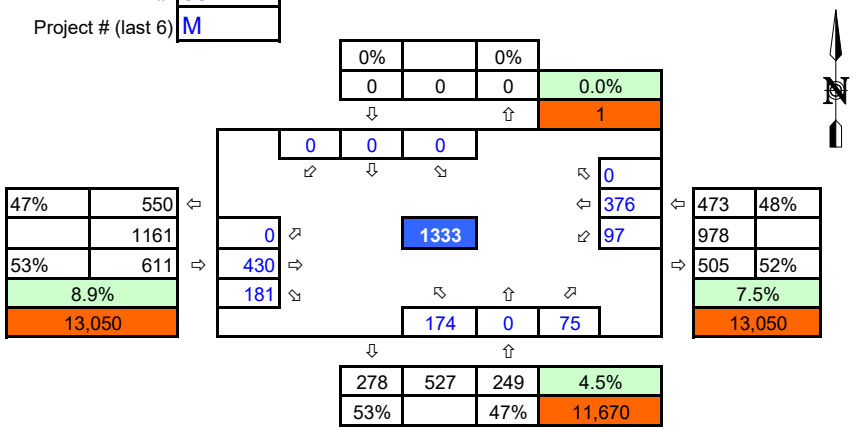
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

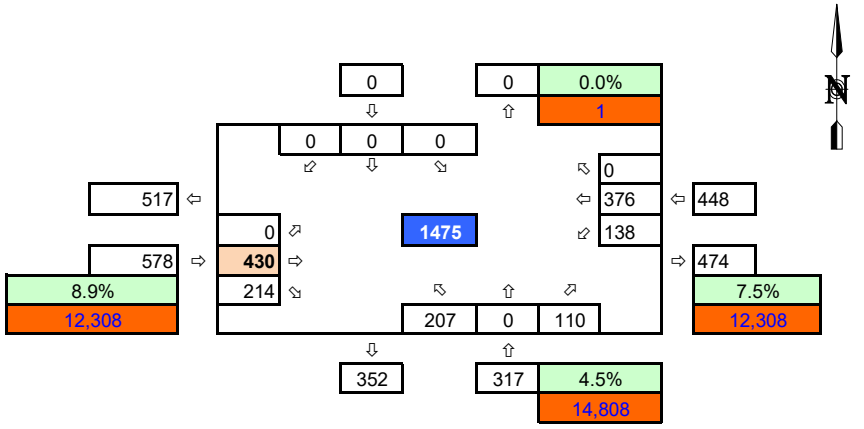
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 33 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**
Intersection #:	33
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Main St**



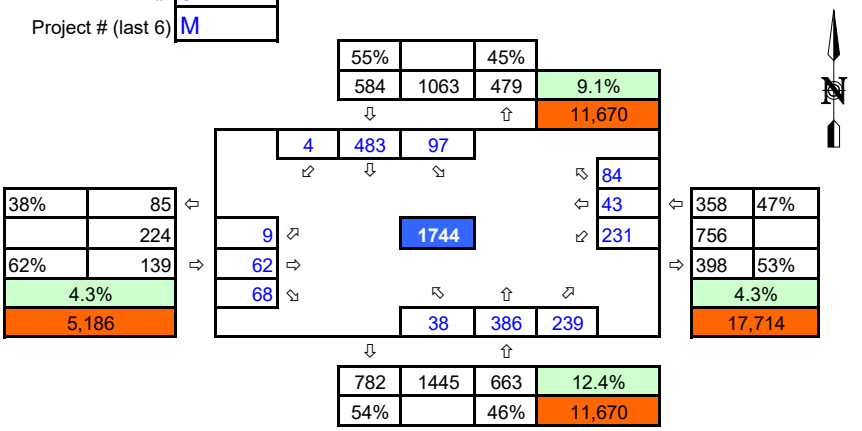
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

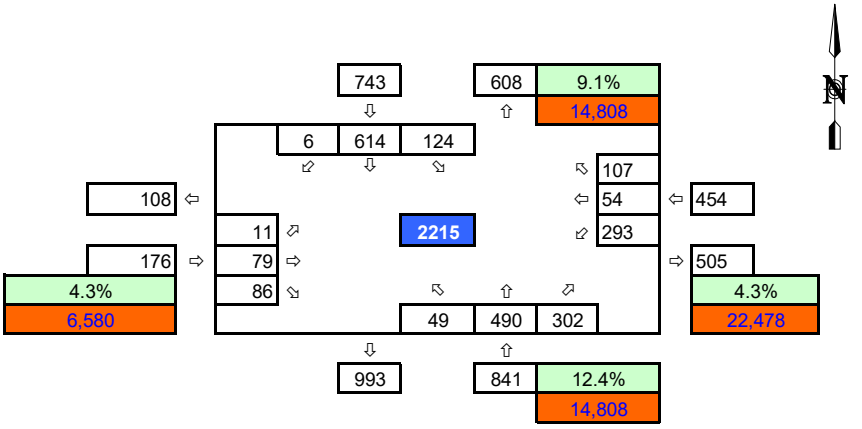
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 34 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**
Intersection #:	34
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Virginia Way**



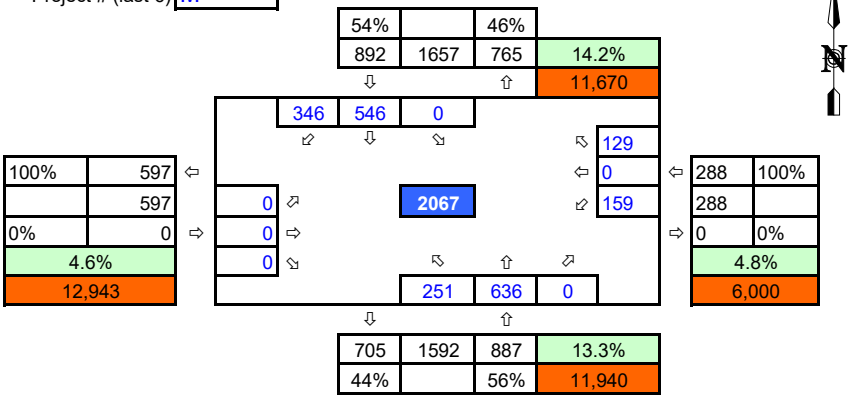
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

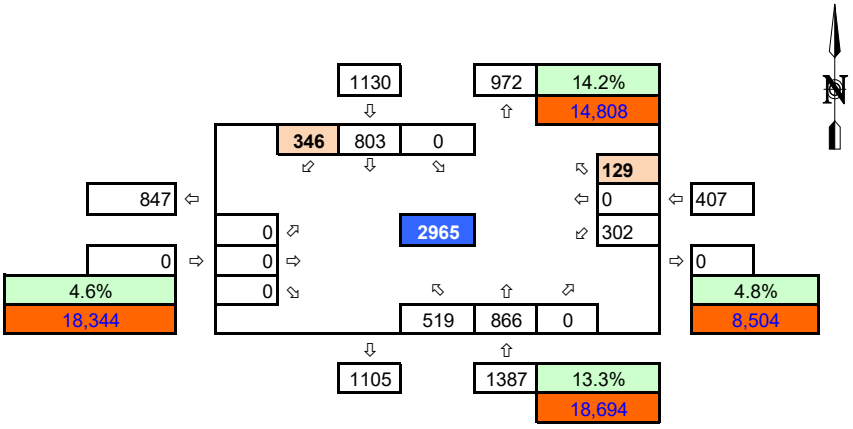
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 35 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**
Intersection #:	35
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 SB On-Ramp / I-15 SB Off-Ramp**



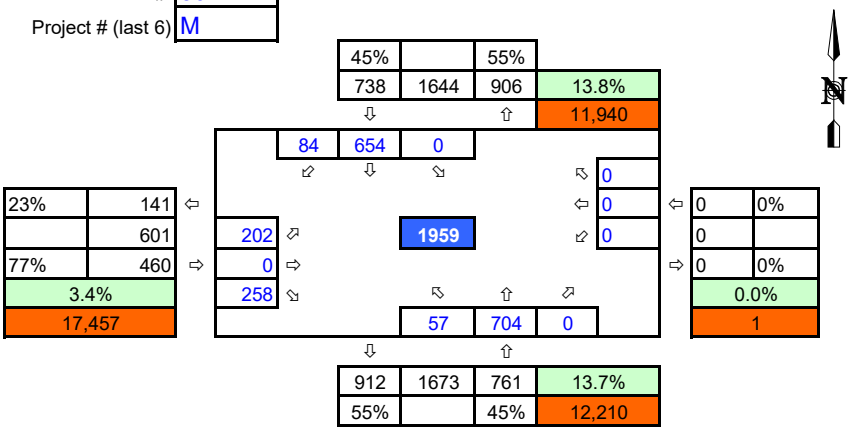
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

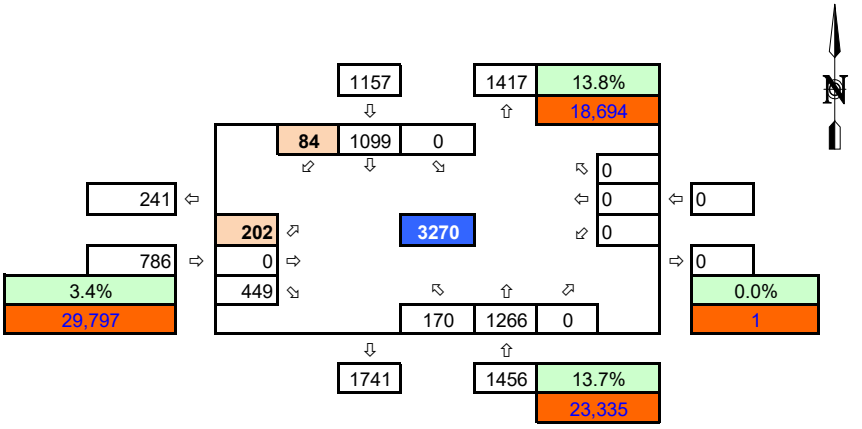
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 36 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**
Intersection #:	36
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**I-15 NB Ramps**



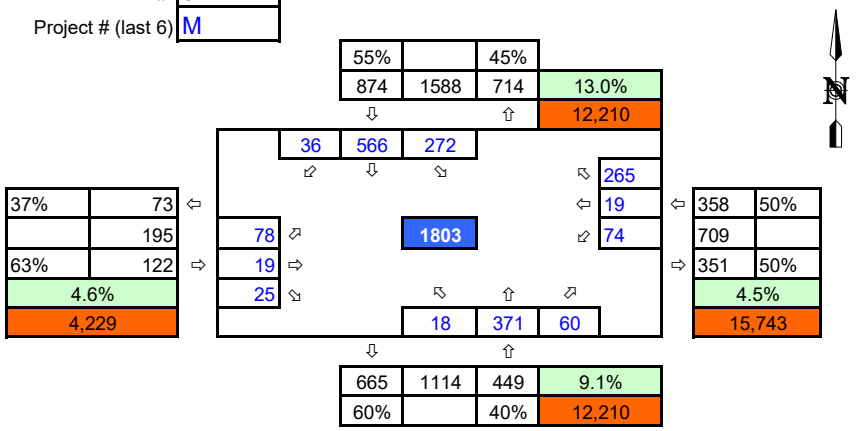
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

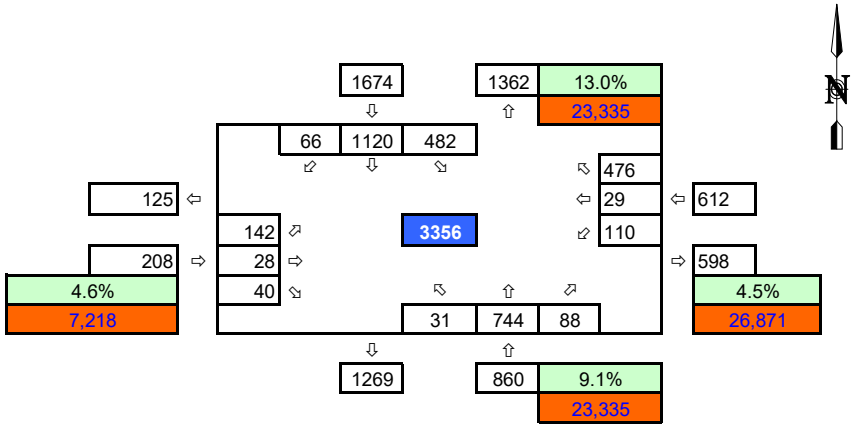
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 37 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**
Intersection #:	37
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Armory Rd**



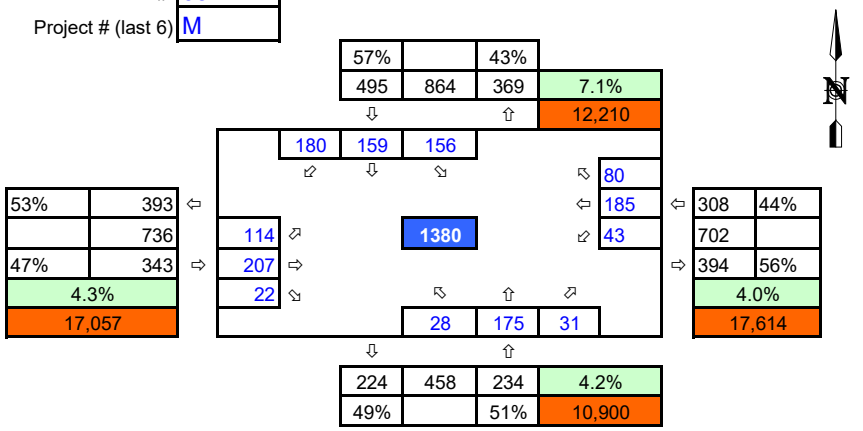
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

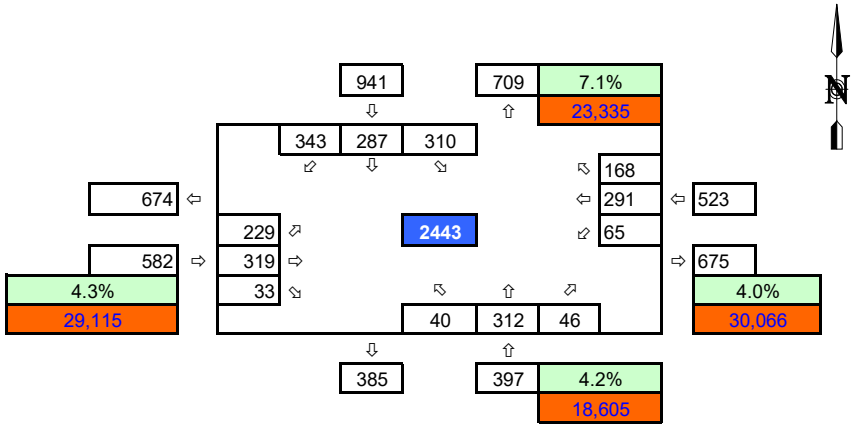
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 38 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**
Intersection #:	38
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**Barstow Rd**
E/W Street:	**Rimrock Rd**



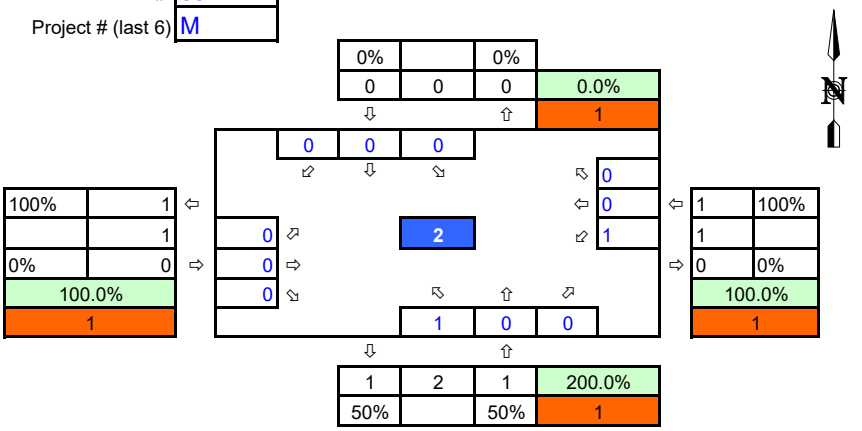
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

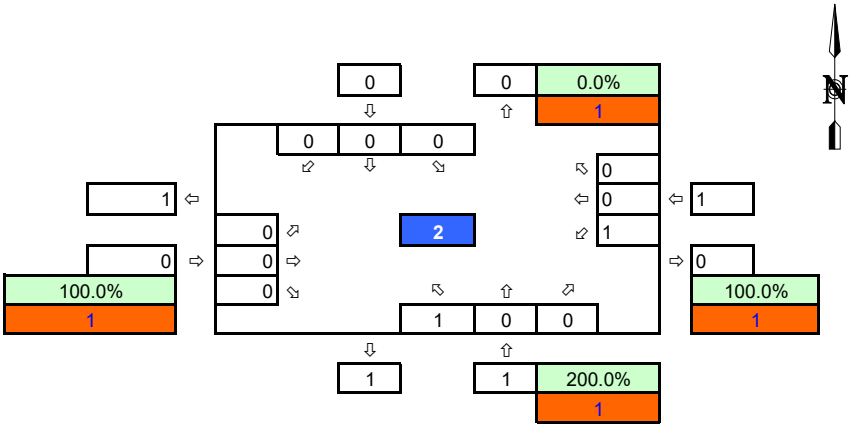
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 39 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	39
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**0 / Roadrunner Rd**
E/W Street:	**Hinkley Rd**



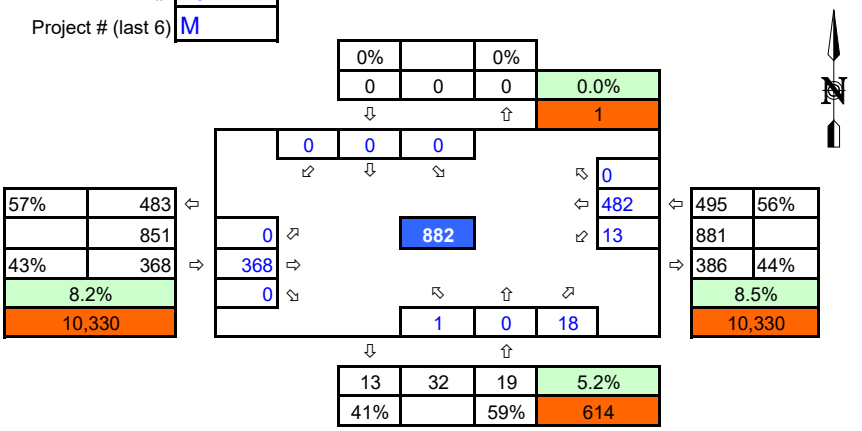
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

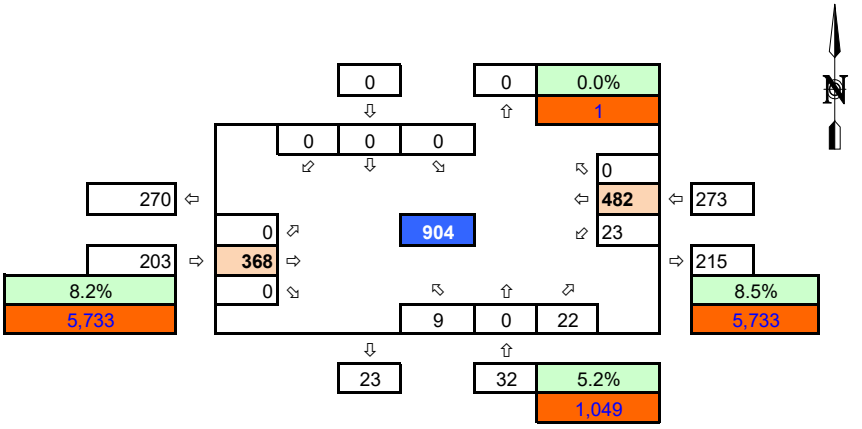
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 40 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**
Intersection #:	40
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**0 / Elk Dr**
E/W Street:	**Main St**



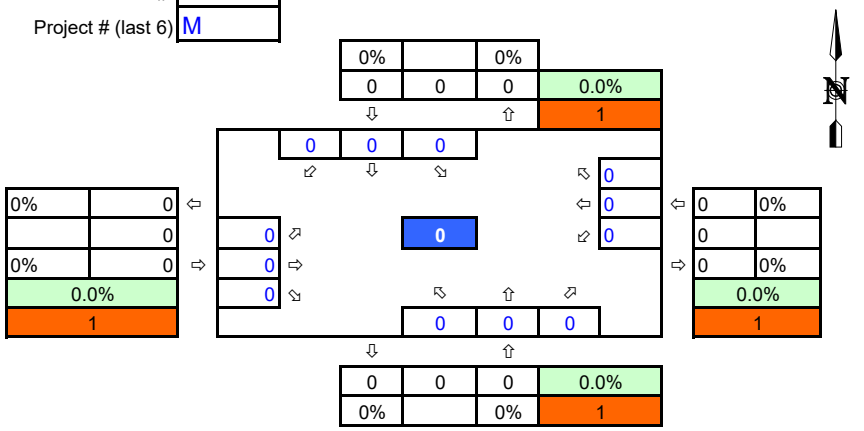
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

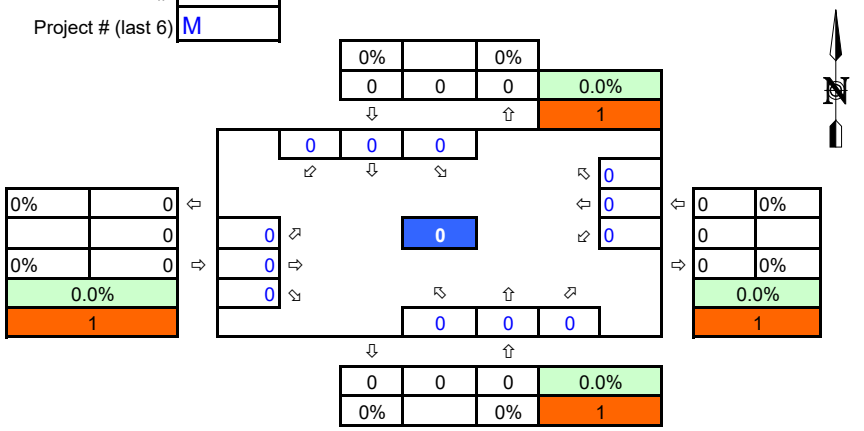
Int 41 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**A St / Jiggs Rd**
E/W Street:	**Hinkley Rd**
Intersection #:	41
Project # (last 6)	M

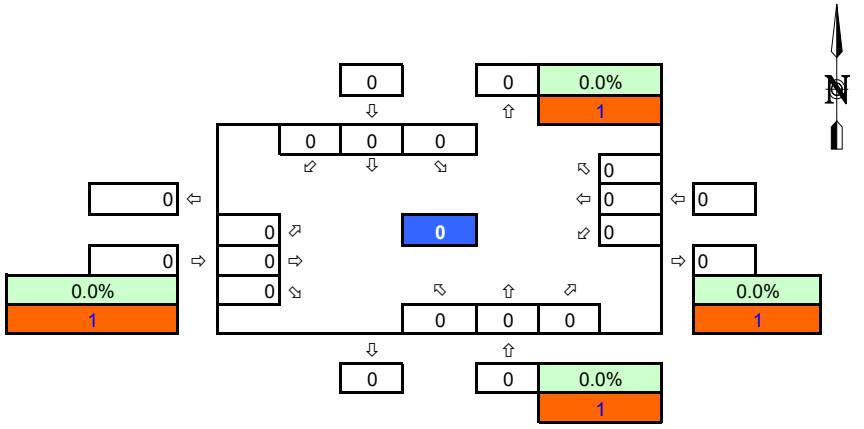

0% 0% 0 0 0 0.0% 1
0 0 0

Int 42 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**B St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	42
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**B St / 0**
E/W Street:	**Hinkley Rd**



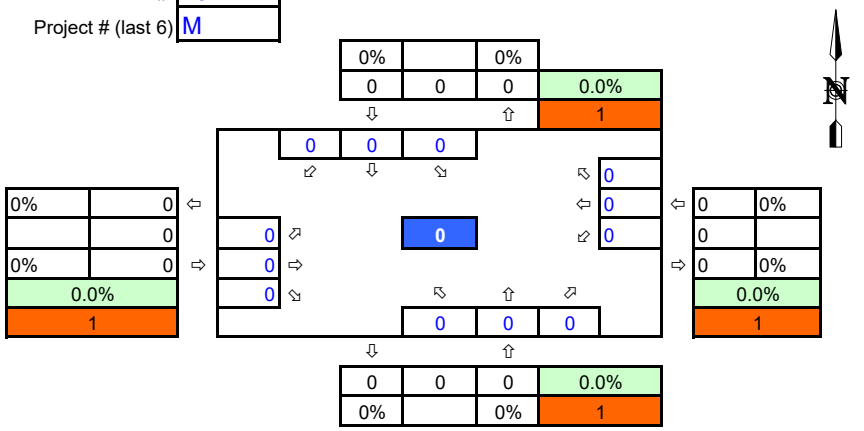
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

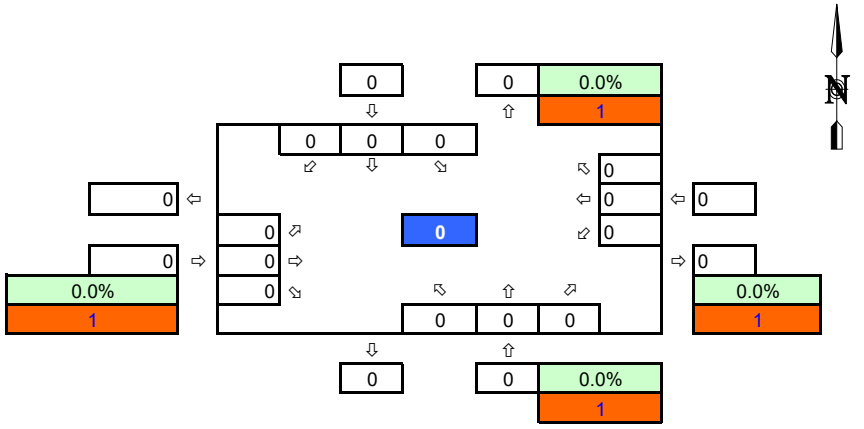
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 43 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**C St / 0**
E/W Street:	**Hinkley Rd**
Intersection #:	43
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**C St / 0**
E/W Street:	**Hinkley Rd**



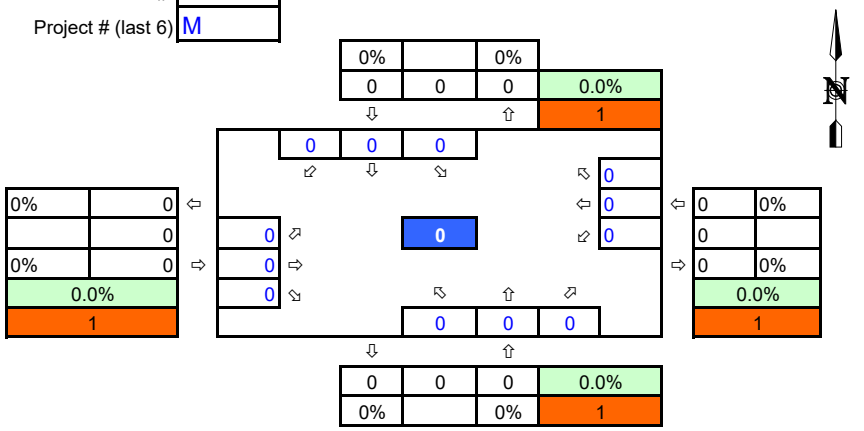
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

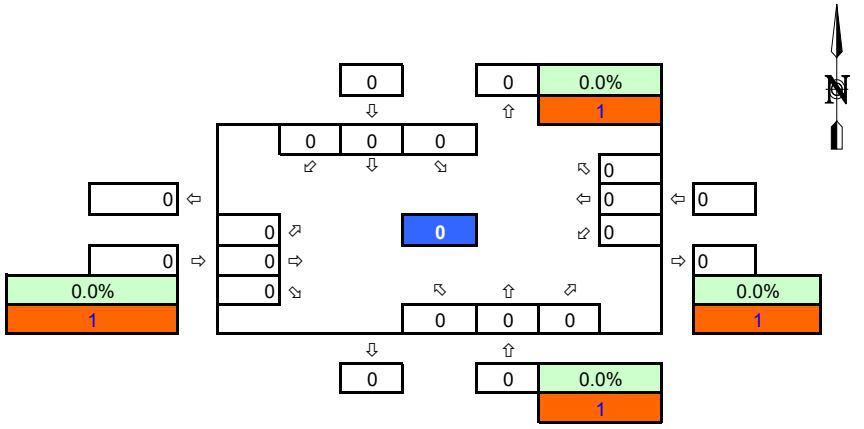
xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

Int 44 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**C St**
E/W Street:	**0 / F St**
Intersection #:	44
Project # (last 6)	M



Scenario:	**Horizon Year Conditions**
N/S Street:	**C St**
E/W Street:	**0 / F St**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

xx	= turning movement no longer exists.
xx	= predicted volume < baseline; volume manually increased.
xx	= volume manually incresed to ensure HY > OY

ENTER ACTUAL EXISTING PEAK HOUR VOLUMES

AM PEAK HOUR

Passenger Vehicles

		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	VLOOKUP OFFSET: ---->	3	4	5	6	7	8	9	10	11	12	13	14	#
1	Hinkley Rd & Main St	0	0	0	3	0	11	8	126	0	0	51	7	
2	Rail Yard Dwy & Main St	0	0	6	0	0	0	0	114	0	2	74	0	
3	Lenwood Rd & Main St	19	32	38	52	50	7	12	131	25	38	59	32	
4	Lenwood Rd & Sun Valley Dr	0	84	0	0	91	1	3	0	0	0	0	0	
5	Holland St & Main St	2	0	4	2	0	0	2	188	0	2	110	0	
6	Hannan St & Main St	2	0	0	2	0	0	2	192	1	2	110	0	
7	Townsend St & Main St	2	0	0	2	0	0	2	189	2	2	107	1	
8	Woods Ave & Main St	2	0	0	2	0	0	2	203	0	2	100	0	
9	Frank St & Main St	10	0	10	2	0	0	2	187	6	3	96	0	
10	Paris Ave & Main St	8	0	15	0	0	0	0	197	4	15	89	0	
11	Ash Rd & Main St	13	0	11	0	0	0	0	184	28	13	89	0	
12	Birch Rd & Main St	4	0	30	0	0	0	0	190	3	10	117	0	
13	Western Dr & Main St	2	0	22	0	0	0	0	200	4	8	144	0	
14	Pettit Rd & Main St	0	0	0	94	0	6	5	228	0	0	132	40	
15	SR 58 EB Ramp & Main St	0	0	0	16	1	14	0	198	128	29	158	0	
16	SR 58 WB Ramp & Main St	59	0	18	0	0	0	18	195	0	0	143	13	
17	Lenwood Rd & Love's Travel Stop Dwy	22	80	9	4	71	20	10	1	23	1	0	0	
18	Lenwood Rd & High Desert Rd	53	120	0	0	96	5	3	0	76	0	0	0	
19	Truck Freightliner Service Point Dwy & Lenwood Rd	6	0	75	11	0	8	1	148	10	43	139	16	
20	Commerce Pkwy & Lenwood Rd	6	2	41	106	5	16	13	207	10	41	186	74	
21	I-15 SB Off Ramps & Lenwood Rd	0	0	0	178	0	185	0	194	0	0	157	0	
22	High Point Pkwy & Lenwood Rd	101	60	170	4	0	159	57	157	0	0	284	25	
23	Lenwood Rd & Jasper Rd	5	50	10	2	52	0	0	1	3	27	0	3	
24	Lenwood Rd & Cam del Sol	0	39	14	2	36	0	0	0	0	18	0	3	
25	Lenwood Rd & Agate Rd	1	1	26	0	7	0	0	0	2	17	0	0	
26	Lenwood Rd & Community Blvd	0	2	0	16	0	13	18	13	1	0	13	16	
27	Lenwood Rd & SR 58 EB Ramps	0	17	12	14	13	0	3	0	20	0	0	0	
28	Lenwood Rd & SR 58 WB Ramps	14	0	11	0	0	0	0	1	21	8	6	0	
29	Arco Dwy & Main St	76	18	149	17	26	12	12	271	97	118	147	2	
30	Ave H & Main St	46	2	87	25	2	11	15	409	25	47	255	16	
31	Ave A & Main St	54	2	16	4	0	1	8	407	80	11	355	6	
32	1st Ave & Main St	31	22	22	137	38	127	99	301	20	21	236	90	
33	& Main St	112	0	51	0	0	0	0	312	116	42	239	0	
34	Barstow Rd & Virginia Way	20	402	155	58	250	6	1	37	35	128	35	54	
35	Barstow Rd & I-15 SB Off-Ramp	128	565	0	0	310	165	0	0	0	48	0	81	
36	Barstow Rd & I-15 NB Ramps	77	480	0	0	247	59	264	0	199	0	0	0	
37	Barstow Rd & Armory Rd	9	304	25	129	308	6	45	9	16	29	13	170	
38	Barstow Rd & Rimrock Rd	12	81	13	116	115	65	92	96	26	35	152	99	
39	0 & Hinkley Rd	1	0	0	0	0	0	0	0	0	1	0	0	
40	0 & Main St	2	0	3	0	0	0	0	271	2	4	207	0	
41	A St & Hinkley Rd	0	0	0	0	0	0	0	0	0	0	0	0	
42	B St & Hinkley Rd	0	0	0	0	0	0	0	0	0	0	0	0	
43	C St & Hinkley Rd	0	0	0	0	0	0	0	0	0	0	0	0	
44	C St & F St	0	0	0	0	0	0	0	0	0	0	0	0	

ENTER ACTUAL EXISTING PEAK HOUR VOLUMES

		2-Axle												
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	VLOOKUP OFFSET: ---->	16	17	18	19	20	21	22	23	24	25	26	27	#
1	Hinkley Rd & Main St													
2	Rail Yard Dwy & Main St													
3	Lenwood Rd & Main St													
4	Lenwood Rd & Sun Valley Dr													
5	Holland St & Main St													
6	Hannan St & Main St													
7	Townsend St & Main St													
8	Woods Ave & Main St													
9	Frank St & Main St													
10	Paris Ave & Main St													
11	Ash Rd & Main St													
12	Birch Rd & Main St													
13	Western Dr & Main St													
14	Pettit Rd & Main St													
15	SR 58 EB Ramp & Main St													
16	SR 58 WB Ramp & Main St													
17	Lenwood Rd & Love's Travel Stop Dwy													
18	Lenwood Rd & High Desert Rd													
19	Truck Freightliner Service Point Dwy & Lenwood Rd													
20	Commerce Pkwy & Lenwood Rd													
21	I-15 SB Off Ramps & Lenwood Rd													
22	High Point Pkwy & Lenwood Rd													
23	Lenwood Rd & Jasper Rd													
24	Lenwood Rd & Cam del Sol													
25	Lenwood Rd & Agate Rd													
26	Lenwood Rd & Community Blvd													
27	Lenwood Rd & SR 58 EB Ramps													
28	Lenwood Rd & SR 58 WB Ramps													
29	Arco Dwy & Main St													
30	Ave H & Main St													
31	Ave A & Main St													
32	1st Ave & Main St													
33	& Main St													
34	Barstow Rd & Virginia Way													
35	Barstow Rd & I-15 SB Off-Ramp													
36	Barstow Rd & I-15 NB Ramps													
37	Barstow Rd & Armory Rd													
38	Barstow Rd & Rimrock Rd													
39	0 & Hinkley Rd													
40	0 & Main St													
41	A St & Hinkley Rd													
42	B St & Hinkley Rd													
43	C St & Hinkley Rd													
44	C St & F St													

ENTER ACTUAL EXISTING PEAK HOUR VOLUMES

		3-Axle												
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	VLOOKUP OFFSET: ---->	29	30	31	32	33	34	35	36	37	38	39	40	#
1	Hinkley Rd & Main St													
2	Rail Yard Dwy & Main St													
3	Lenwood Rd & Main St													
4	Lenwood Rd & Sun Valley Dr													
5	Holland St & Main St													
6	Hannan St & Main St													
7	Townsend St & Main St													
8	Woods Ave & Main St													
9	Frank St & Main St													
10	Paris Ave & Main St													
11	Ash Rd & Main St													
12	Birch Rd & Main St													
13	Western Dr & Main St													
14	Pettit Rd & Main St													
15	SR 58 EB Ramp & Main St													
16	SR 58 WB Ramp & Main St													
17	Lenwood Rd & Love's Travel Stop Dwy													
18	Lenwood Rd & High Desert Rd													
19	Truck Freightliner Service Point Dwy & Lenwood Rd													
20	Commerce Pkwy & Lenwood Rd													
21	I-15 SB Off Ramps & Lenwood Rd													
22	High Point Pkwy & Lenwood Rd													
23	Lenwood Rd & Jasper Rd													
24	Lenwood Rd & Cam del Sol													
25	Lenwood Rd & Agate Rd													
26	Lenwood Rd & Community Blvd													
27	Lenwood Rd & SR 58 EB Ramps													
28	Lenwood Rd & SR 58 WB Ramps													
29	Arco Dwy & Main St													
30	Ave H & Main St													
31	Ave A & Main St													
32	1st Ave & Main St													
33	& Main St													
34	Barstow Rd & Virginia Way													
35	Barstow Rd & I-15 SB Off-Ramp													
36	Barstow Rd & I-15 NB Ramps													
37	Barstow Rd & Armory Rd													
38	Barstow Rd & Rimrock Rd													
39	0 & Hinkley Rd													
40	0 & Main St													
41	A St & Hinkley Rd													
42	B St & Hinkley Rd													
43	C St & Hinkley Rd													
44	C St & F St													

ENTER ACTUAL EXISTING PEAK HOUR VOLUMES

		4-Axle												
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	VLOOKUP OFFSET: ---->	42	43	44	45	46	47	48	49	50	51	52	53	54
1	Hinkley Rd & Main St													
2	Rail Yard Dwy & Main St													
3	Lenwood Rd & Main St													
4	Lenwood Rd & Sun Valley Dr													
5	Holland St & Main St													
6	Hannan St & Main St													
7	Townsend St & Main St													
8	Woods Ave & Main St													
9	Frank St & Main St													
10	Paris Ave & Main St													
11	Ash Rd & Main St													
12	Birch Rd & Main St													
13	Western Dr & Main St													
14	Pettit Rd & Main St													
15	SR 58 EB Ramp & Main St													
16	SR 58 WB Ramp & Main St													
17	Lenwood Rd & Love's Travel Stop Dwy													
18	Lenwood Rd & High Desert Rd													
19	Truck Freightliner Service Point Dwy & Lenwood Rd													
20	Commerce Pkwy & Lenwood Rd													
21	I-15 SB Off Ramps & Lenwood Rd													
22	High Point Pkwy & Lenwood Rd													
23	Lenwood Rd & Jasper Rd													
24	Lenwood Rd & Cam del Sol													
25	Lenwood Rd & Agate Rd													
26	Lenwood Rd & Community Blvd													
27	Lenwood Rd & SR 58 EB Ramps													
28	Lenwood Rd & SR 58 WB Ramps													
29	Arco Dwy & Main St													
30	Ave H & Main St													
31	Ave A & Main St													
32	1st Ave & Main St													
33	& Main St													
34	Barstow Rd & Virginia Way													
35	Barstow Rd & I-15 SB Off-Ramp													
36	Barstow Rd & I-15 NB Ramps													
37	Barstow Rd & Armory Rd													
38	Barstow Rd & Rimrock Rd													
39	0 & Hinkley Rd													
40	0 & Main St													
41	A St & Hinkley Rd													
42	B St & Hinkley Rd													
43	C St & Hinkley Rd													
44	C St & F St													

PM PEAK HOUR

ENTER ACTUAL EXISTING PEAK HOUR VOLUMES

Passenger Vehicles

		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	VLOOKUP OFFSET: ---->	55	56	57	58	59	60	61	62	63	64	65	66	67
1	Hinkley Rd & Main St	0	0	0	7	0	27	7	74	0	0	255	8	
2	Rail Yard Dwy & Main St	0	0	10	0	0	0	0	87	3	21	268	0	
3	Lenwood Rd & Main St	31	43	63	43	68	29	7	85	34	40	139	64	
4	Lenwood Rd & Sun Valley Dr	2	171	0	0	107	0	0	0	2	0	0	0	
5	Holland St & Main St	2	0	3	2	0	2	2	183	2	3	320	0	
6	Hannan St & Main St	2	0	0	2	0	0	2	186	0	2	322	0	
7	Townsend St & Main St	2	0	0	2	0	4	2	185	1	2	318	0	
8	Woods Ave & Main St	3	0	0	3	0	0	2	185	1	2	320	1	
9	Frank St & Main St	20	0	13	2	1	0	2	174	17	15	301	0	
10	Paris Ave & Main St	3	0	7	0	0	0	0	182	9	14	317	0	
11	Ash Rd & Main St	21	0	19	0	0	0	0	165	20	19	301	0	
12	Birch Rd & Main St	7	0	26	0	0	0	0	183	8	53	316	0	
13	Western Dr & Main St	4	0	17	0	0	0	0	207	4	23	381	0	
14	Pettit Rd & Main St	0	0	0	81	0	11	12	214	0	0	395	109	
15	SR 58 EB Ramp & Main St	0	0	0	21	4	20	0	212	85	16	487	0	
16	SR 58 WB Ramp & Main St	169	0	20	0	0	0	18	212	0	0	334	20	
17	Lenwood Rd & Love's Travel Stop Dwy	24	155	5	1	94	13	17	0	18	13	0	2	
18	Lenwood Rd & High Desert Rd	64	166	0	0	130	4	1	0	63	0	0	0	
19	Truck Freightliner Service Point Dwy & Lenwood Rd	6	0	45	4	0	6	6	173	13	79	244	17	
20	Commerce Pkwy & Lenwood Rd	14	1	66	127	3	13	12	218	13	50	274	89	
21	I-15 SB Off Ramps & Lenwood Rd	0	0	0	365	0	244	0	253	0	0	215	0	
22	High Point Pkwy & Lenwood Rd	128	83	169	32	0	232	134	328	0	0	496	82	
23	Lenwood Rd & Jasper Rd	2	75	24	3	57	0	1	0	5	26	0	3	
24	Lenwood Rd & Cam del Sol	0	52	27	2	44	0	0	0	0	16	0	2	
25	Lenwood Rd & Agate Rd	0	43	12	9	33	0	0	0	0	14	0	4	
26	Lenwood Rd & Community Blvd	0	1	0	17	0	24	42	22	0	0	36	19	
27	Lenwood Rd & SR 58 EB Ramps	0	35	17	8	30	0	4	1	20	0	0	0	
28	Lenwood Rd & SR 58 WB Ramps	21	0	14	0	0	0	0	20	31	15	14	0	
29	Arco Dwy & Main St	142	32	175	24	39	31	23	214	109	216	262	3	
30	Ave H & Main St	48	1	85	11	3	10	7	387	51	89	453	9	
31	Ave A & Main St	81	0	33	6	2	5	2	478	69	31	510	4	
32	1st Ave & Main St	29	24	16	175	29	170	96	402	22	16	379	114	
33	& Main St	165	0	71	0	0	0	0	402	169	91	351	0	
34	Barstow Rd & Virginia Way	36	366	227	92	458	4	9	61	67	226	42	82	
35	Barstow Rd & I-15 SB Off-Ramp	238	603	0	0	518	328	0	0	0	156	0	126	
36	Barstow Rd & I-15 NB Ramps	52	643	0	0	597	77	198	0	253	0	0	0	
37	Barstow Rd & Armory Rd	16	339	55	248	517	33	76	19	25	73	19	260	
38	Barstow Rd & Rimrock Rd	26	160	28	142	145	164	112	203	22	42	181	78	
39	0 & Hinkley Rd	1	0	0	0	0	0	0	0	0	1	0	0	
40	0 & Main St	1	0	18	0	0	0	0	344	0	12	450	0	
41	A St & Hinkley Rd	0	0	0	0	0	0	0	0	0	0	0	0	
42	B St & Hinkley Rd	0	0	0	0	0	0	0	0	0	0	0	0	
43	C St & Hinkley Rd	0	0	0	0	0	0	0	0	0	0	0	0	
44	C St & F St	0	0	0	0	0	0	0	0	0	0	0	0	

ENTER ACTUAL EXISTING PEAK HOUR VOLUMES

		2-Axle											
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
	VLOOKUP OFFSET: ---->	68	69	70	71	72	73	74	75	76	77	78	79	80
1	Hinkley Rd & Main St													
2	Rail Yard Dwy & Main St													
3	Lenwood Rd & Main St													
4	Lenwood Rd & Sun Valley Dr													
5	Holland St & Main St													
6	Hannan St & Main St													
7	Townsend St & Main St													
8	Woods Ave & Main St													
9	Frank St & Main St													
10	Paris Ave & Main St													
11	Ash Rd & Main St													
12	Birch Rd & Main St													
13	Western Dr & Main St													
14	Pettit Rd & Main St													
15	SR 58 EB Ramp & Main St													
16	SR 58 WB Ramp & Main St													
17	Lenwood Rd & Love's Travel Stop Dwy													
18	Lenwood Rd & High Desert Rd													
19	Truck Freightliner Service Point Dwy & Lenwood Rd													
20	Commerce Pkwy & Lenwood Rd													
21	I-15 SB Off Ramps & Lenwood Rd													
22	High Point Pkwy & Lenwood Rd													
23	Lenwood Rd & Jasper Rd													
24	Lenwood Rd & Cam del Sol													
25	Lenwood Rd & Agate Rd													
26	Lenwood Rd & Community Blvd													
27	Lenwood Rd & SR 58 EB Ramps													
28	Lenwood Rd & SR 58 WB Ramps													
29	Arco Dwy & Main St													
30	Ave H & Main St													
31	Ave A & Main St													
32	1st Ave & Main St													
33	& Main St													
34	Barstow Rd & Virginia Way													
35	Barstow Rd & I-15 SB Off-Ramp													
36	Barstow Rd & I-15 NB Ramps													
37	Barstow Rd & Armory Rd													
38	Barstow Rd & Rimrock Rd													
39	0 & Hinkley Rd													
40	0 & Main St													
41	A St & Hinkley Rd													
42	B St & Hinkley Rd													
43	C St & Hinkley Rd													
44	C St & F St													

ENTER ACTUAL EXISTING PEAK HOUR VOLUMES

		3-Axle												
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	VLOOKUP OFFSET: ---->	81	82	83	84	85	86	87	88	89	90	91	92	93
1	Hinkley Rd & Main St													
2	Rail Yard Dwy & Main St													
3	Lenwood Rd & Main St													
4	Lenwood Rd & Sun Valley Dr													
5	Holland St & Main St													
6	Hannan St & Main St													
7	Townsend St & Main St													
8	Woods Ave & Main St													
9	Frank St & Main St													
10	Paris Ave & Main St													
11	Ash Rd & Main St													
12	Birch Rd & Main St													
13	Western Dr & Main St													
14	Pettit Rd & Main St													
15	SR 58 EB Ramp & Main St													
16	SR 58 WB Ramp & Main St													
17	Lenwood Rd & Love's Travel Stop Dwy													
18	Lenwood Rd & High Desert Rd													
19	Truck Freightliner Service Point Dwy & Lenwood Rd													
20	Commerce Pkwy & Lenwood Rd													
21	I-15 SB Off Ramps & Lenwood Rd													
22	High Point Pkwy & Lenwood Rd													
23	Lenwood Rd & Jasper Rd													
24	Lenwood Rd & Cam del Sol													
25	Lenwood Rd & Agate Rd													
26	Lenwood Rd & Community Blvd													
27	Lenwood Rd & SR 58 EB Ramps													
28	Lenwood Rd & SR 58 WB Ramps													
29	Arco Dwy & Main St													
30	Ave H & Main St													
31	Ave A & Main St													
32	1st Ave & Main St													
33	& Main St													
34	Barstow Rd & Virginia Way													
35	Barstow Rd & I-15 SB Off-Ramp													
36	Barstow Rd & I-15 NB Ramps													
37	Barstow Rd & Armory Rd													
38	Barstow Rd & Rimrock Rd													
39	0 & Hinkley Rd													
40	0 & Main St													
41	A St & Hinkley Rd													
42	B St & Hinkley Rd													
43	C St & Hinkley Rd													
44	C St & F St													

ENTER ACTUAL EXISTING PEAK HOUR VOLUMES

		4-Axle											
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
	VLOOKUP OFFSET: ---->	94	95	96	97	98	99	100	101	102	103	104	105
1	Hinkley Rd & Main St												
2	Rail Yard Dwy & Main St												
3	Lenwood Rd & Main St												
4	Lenwood Rd & Sun Valley Dr												
5	Holland St & Main St												
6	Hannan St & Main St												
7	Townsend St & Main St												
8	Woods Ave & Main St												
9	Frank St & Main St												
10	Paris Ave & Main St												
11	Ash Rd & Main St												
12	Birch Rd & Main St												
13	Western Dr & Main St												
14	Pettit Rd & Main St												
15	SR 58 EB Ramp & Main St												
16	SR 58 WB Ramp & Main St												
17	Lenwood Rd & Love's Travel Stop Dwy												
18	Lenwood Rd & High Desert Rd												
19	Truck Freightliner Service Point Dwy & Lenwood Rd												
20	Commerce Pkwy & Lenwood Rd												
21	I-15 SB Off Ramps & Lenwood Rd												
22	High Point Pkwy & Lenwood Rd												
23	Lenwood Rd & Jasper Rd												
24	Lenwood Rd & Cam del Sol												
25	Lenwood Rd & Agate Rd												
26	Lenwood Rd & Community Blvd												
27	Lenwood Rd & SR 58 EB Ramps												
28	Lenwood Rd & SR 58 WB Ramps												
29	Arco Dwy & Main St												
30	Ave H & Main St												
31	Ave A & Main St												
32	1st Ave & Main St												
33	& Main St												
34	Barstow Rd & Virginia Way												
35	Barstow Rd & I-15 SB Off-Ramp												
36	Barstow Rd & I-15 NB Ramps												
37	Barstow Rd & Armory Rd												
38	Barstow Rd & Rimrock Rd												
39	0 & Hinkley Rd												
40	0 & Main St												
41	A St & Hinkley Rd												
42	B St & Hinkley Rd												
43	C St & Hinkley Rd												
44	C St & F St												

Existing Peak Hour Volumes - Non-Classification Counts

1 **Hinkley Rd & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
		Truck Volumes					
NL	0	15.3%	0	0	1.8	0	0
NT	0	15.3%	0	0	1.8	0	0
NR	0	15.3%	0	0	1.8	0	0
SL	3	15.3%	3	0	1.8	0	3
ST	0	15.3%	0	0	1.8	0	0
SR	11	15.3%	9	2	1.8	4	13
EL	8	6.5%	7	1	1.8	2	9
ET	126	6.5%	118	8	1.8	14	132
ER	0	6.5%	0	0	1.8	0	0
WL	0	6.5%	0	0	1.8	0	0
WT	51	6.5%	48	3	1.8	5	53
WR	7	6.5%	7	0	1.8	0	7
							217
North Leg Volumes							
Approach	14	0	12	2	5.4		16
Depart	15	0	14	1	5.4		16
Total	29	1	26	3	10.9		32
South Leg Volumes							
Approach	0	0	0	0	5.4		0
Depart	0	0	0	0	5.4		0
Total	0	1	0	0	10.9		0
East Leg Volumes							
Approach	58	0	55	3	5.4		60
Depart	129	0	121	8	5.4		135
Total	187	1	176	11	10.8		195
West Leg Volumes							
Approach	134	0	125	9	5.4		141
Depart	62	0	57	5	5.4		66
Total	196	1	182	14	10.8		207
All Legs							
Approach	206	1	192	14	21.7		217
Depart	206	1	192	14	21.7		217
Total	412	3	384	28	43.4		434

PM Peak Hour Volumes

	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
		Truck Volumes					
NL	0	15.3%	0	0	1.8	0	0
NT	0	15.3%	0	0	1.8	0	0
NR	0	15.3%	0	0	1.8	0	0
SL	7	15.3%	6	1	1.8	2	8
ST	0	15.3%	0	0	1.8	0	0
SR	27	15.3%	23	4	1.8	7	30
EL	7	6.5%	7	0	1.8	0	7
ET	74	6.5%	69	5	1.8	9	78
ER	0	6.5%	0	0	1.8	0	0
WL	0	6.5%	0	0	1.8	0	0
WT	255	6.5%	238	17	1.8	31	269
WR	8	6.5%	7	1	1.8	2	9
							401
North Leg Volumes							
Approach	34	0	29	5	5.4		38
Depart	15	0	14	1	5.4		16
Total	49	1	43	6	10.9		54
South Leg Volumes							
Approach	0	0	0	0	5.4		0
Depart	0	0	0	0	5.4		0
Total	0	1	0	0	10.9		0
East Leg Volumes							
Approach	263	0	245	18	5.4		278
Depart	81	0	75	6	5.4		86
Total	344	1	320	24	10.8		364
West Leg Volumes							
Approach	81	0	76	5	5.4		85
Depart	282	0	261	21	5.4		299
Total	363	1	337	26	10.8		384
All Legs							
Approach	378	1	350	28	21.7		401
Depart	378	1	350	28	21.7		401
Total	756	3	700	56	43.4		802

Existing Peak Hour Volumes - Non-Classification Counts

2 **Rail Yard Dwy & Main St**

	AM Peak Hour Volumes							PM Peak Hour Volumes						
		Truck Volumes					Total		Truck Volumes					Total
	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume
NL	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
NR	6	2.0%	6	0	2.0	0	6	10	2.0%	10	0	2.0	0	10
SL	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
EL	0	6.5%	0	0	1.8	0	0	0	6.5%	0	0	1.8	0	0
ET	114	6.5%	107	7	1.8	13	120	87	6.5%	81	6	1.8	11	92
ER	0	6.5%	0	0	1.8	0	0	3	6.5%	3	0	1.8	0	3
WL	2	6.5%	2	0	1.8	0	2	21	6.5%	20	1	1.8	2	22
WT	74	6.5%	69	5	1.8	9	78	268	6.5%	251	17	1.8	31	282
WR	0	6.5%	0	0	1.8	0	0	0	6.5%	0	0	1.8	0	0
							206							409
North Leg Volumes														
Approach	0	0	0	0	6.0		0	0	0	0	0	6.0		0
Depart	0	0	0	0	5.6		0	0	0	0	0	5.6		0
Total	0	0	0	0	11.6		0	0	0	0	0	11.6		0
South Leg Volumes														
Approach	6	0	6	0	6.0		6	10	0	10	0	6.0		10
Depart	2	0	2	0	5.6		2	24	0	23	1	5.6		25
Total	8	0	8	0	11.6		8	34	0	33	1	11.6		35
East Leg Volumes														
Approach	76	0	71	5	5.4		80	289	0	271	18	5.4		304
Depart	120	0	113	7	5.8		126	97	0	91	6	5.8		102
Total	196	0	184	12	11.2		206	386	0	362	24	11.2		406
West Leg Volumes														
Approach	114	0	107	7	5.4		120	90	0	84	6	5.4		95
Depart	74	0	69	5	5.8		78	268	0	251	17	5.8		282
Total	188	0	176	12	11.2		198	358	0	335	23	11.2		377
All Legs														
Approach	196	1	184	12	22.8		206	389	1	365	24	22.8		409
Depart	196	1	184	12	22.8		206	389	1	365	24	22.8		409
Total	392	1	368	24	45.6		412	778	1	730	48	45.6		818

Existing Peak Hour Volumes - Non-Classification Counts

3 **Lenwood Rd & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	19	14.1%	16	3	1.6	5	21
NT	32	14.1%	27	5	1.6	8	35
NR	38	14.1%	33	5	1.6	8	41
SL	52	14.1%	45	7	1.6	11	56
ST	50	14.1%	43	7	1.6	11	54
SR	7	14.1%	6	1	1.6	2	8
EL	12	6.5%	11	1	1.8	2	13
ET	131	6.5%	123	8	1.8	14	137
ER	25	6.5%	23	2	1.8	4	27
WL	38	6.5%	36	2	1.8	4	40
WT	59	6.5%	55	4	1.8	7	62
WR	32	6.5%	30	2	1.8	4	34
							528
North Leg Volumes							
Approach	109	0	94	15	4.7		118
Depart	76	0	68	8	5.2		82
Total	185	1	162	23	9.9		200
South Leg Volumes							
Approach	89	0	76	13	4.7		97
Depart	113	0	102	11	5.2		121
Total	202	1	178	24	9.9		218
East Leg Volumes							
Approach	129	0	121	8	5.4		136
Depart	221	0	201	20	4.9		234
Total	350	1	322	28	10.3		370
West Leg Volumes							
Approach	168	0	157	11	5.4		177
Depart	85	0	77	8	4.9		91
Total	253	1	234	19	10.3		268
All Legs							
Approach	495	1	448	47	20.2		528
Depart	495	1	448	47	20.2		528
Total	990	2	896	94	40.4		1,056

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	31	14.1%	27	4	1.6	6	33
NT	43	14.1%	37	6	1.6	9	46
NR	63	14.1%	54	9	1.6	14	68
SL	43	14.1%	37	6	1.6	9	46
ST	68	14.1%	58	10	1.6	16	74
SR	29	14.1%	25	4	1.6	6	31
EL	7	6.5%	7	0	1.8	0	7
ET	85	6.5%	79	6	1.8	11	90
ER	34	6.5%	32	2	1.8	4	36
WL	40	6.5%	37	3	1.8	5	42
WT	139	6.5%	130	9	1.8	16	146
WR	64	6.5%	60	4	1.8	7	67
							686
North Leg Volumes							
Approach	140	0	120	20	4.7		151
Depart	114	0	104	10	5.2		120
Total	254	1	224	30	9.9		271
South Leg Volumes							
Approach	137	0	118	19	4.7		147
Depart	142	0	127	15	5.2		152
Total	279	1	245	34	9.9		299
East Leg Volumes							
Approach	243	0	227	16	5.4		255
Depart	191	0	170	21	4.9		204
Total	434	1	397	37	10.3		459
West Leg Volumes							
Approach	126	0	118	8	5.4		133
Depart	199	0	182	17	4.9		210
Total	325	1	300	25	10.3		343
All Legs							
Approach	646	1	583	63	20.2		686
Depart	646	1	583	63	20.2		686
Total	1,292	2	1,166	126	40.4		1,372

Existing Peak Hour Volumes - Non-Classification Counts

4 **Lenwood Rd & Sun Valley Dr**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	17.2%	0	0	2.1	0	0
NT	84	17.2%	70	14	2.1	29	99
NR	0	17.2%	0	0	2.1	0	0
SL	0	17.2%	0	0	2.1	0	0
ST	91	17.2%	75	16	2.1	33	108
SR	1	17.2%	1	0	2.1	0	1
EL	3	2.0%	3	0	2.0	0	3
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							211
North Leg Volumes							
Approach	92	1	76	16	6.2		109
Depart	87	0	73	14	6.1		102
Total	179	1	149	30	12.2		211
South Leg Volumes							
Approach	84	1	70	14	6.2		99
Depart	91	0	75	16	6.1		108
Total	175	1	145	30	12.2		207
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.1		0
Total	0	0	0	0	12.1		0
West Leg Volumes							
Approach	3	0	3	0	6.0		3
Depart	1	0	1	0	6.1		1
Total	4	0	4	0	12.1		4
All Legs							
Approach	179	1	149	30	24.3		211
Depart	179	1	149	30	24.3		211
Total	358	2	298	60	48.7		422

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	2	17.2%	2	0	2.1	0	2
NT	171	17.2%	142	29	2.1	60	202
NR	0	17.2%	0	0	2.1	0	0
SL	0	17.2%	0	0	2.1	0	0
ST	107	17.2%	89	18	2.1	37	126
SR	0	17.2%	0	0	2.1	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	2	2.0%	2	0	2.0	0	2
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							332
North Leg Volumes							
Approach	107	1	89	18	6.2		126
Depart	171	0	142	29	6.1		202
Total	278	1	231	47	12.2		328
South Leg Volumes							
Approach	173	1	144	29	6.2		204
Depart	109	0	91	18	6.1		128
Total	282	1	235	47	12.2		332
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.1		0
Total	0	0	0	0	12.1		0
West Leg Volumes							
Approach	2	0	2	0	6.0		2
Depart	2	0	2	0	6.1		2
Total	4	0	4	0	12.1		4
All Legs							
Approach	282	1	235	47	24.3		332
Depart	282	1	235	47	24.3		332
Total	564	2	470	94	48.7		664

Existing Peak Hour Volumes - Non-Classification Counts

5 **Holland St & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	2	2.0%	2	0	2.0	0	2
NT	0	2.0%	0	0	2.0	0	0
NR	4	2.0%	4	0	2.0	0	4
SL	2	2.0%	2	0	2.0	0	2
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	2	7.4%	2	0	1.9	0	2
ET	188	7.4%	174	14	1.9	27	201
ER	0	7.4%	0	0	1.9	0	0
WL	2	7.4%	2	0	1.9	0	2
WT	110	7.4%	102	8	1.9	15	117
WR	0	7.4%	0	0	1.9	0	0
							330
North Leg Volumes							
Approach	2	0	2	0	6.0		2
Depart	2	0	2	0	5.9		2
Total	4	0	4	0	11.9		4
South Leg Volumes							
Approach	6	0	6	0	6.0		6
Depart	2	0	2	0	5.9		2
Total	8	0	8	0	11.9		8
East Leg Volumes							
Approach	112	0	104	8	5.8		119
Depart	194	0	180	14	5.9		207
Total	306	0	284	22	11.7		326
West Leg Volumes							
Approach	190	0	176	14	5.8		203
Depart	112	0	104	8	5.9		119
Total	302	0	280	22	11.7		322
All Legs							
Approach	310	1	288	22	23.6		330
Depart	310	1	288	22	23.6		330
Total	620	1	576	44	47.2		660

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	2	2.0%	2	0	2.0	0	2
NT	0	2.0%	0	0	2.0	0	0
NR	3	2.0%	3	0	2.0	0	3
SL	2	2.0%	2	0	2.0	0	2
ST	0	2.0%	0	0	2.0	0	0
SR	2	2.0%	2	0	2.0	0	2
EL	2	7.4%	2	0	1.9	0	2
ET	183	7.4%	169	14	1.9	27	196
ER	2	7.4%	2	0	1.9	0	2
WL	3	7.4%	3	0	1.9	0	3
WT	320	7.4%	296	24	1.9	46	342
WR	0	7.4%	0	0	1.9	0	0
							554
North Leg Volumes							
Approach	4	0	4	0	6.0		4
Depart	2	0	2	0	5.9		2
Total	6	0	6	0	11.9		6
South Leg Volumes							
Approach	5	0	5	0	6.0		5
Depart	5	0	5	0	5.9		5
Total	10	0	10	0	11.9		10
East Leg Volumes							
Approach	323	0	299	24	5.8		345
Depart	188	0	174	14	5.9		201
Total	511	0	473	38	11.7		546
West Leg Volumes							
Approach	187	0	173	14	5.8		200
Depart	324	0	300	24	5.9		346
Total	511	0	473	38	11.7		546
All Legs							
Approach	519	1	481	38	23.6		554
Depart	519	1	481	38	23.6		554
Total	1,038	1	962	76	47.2		1,108

Existing Peak Hour Volumes - Non-Classification Counts

6 **Hannan St & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	2	2.0%	2	0	2.0	0	2
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	2	2.0%	2	0	2.0	0	2
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	2	7.4%	2	0	1.9	0	2
ET	192	7.4%	178	14	1.9	27	205
ER	1	7.4%	1	0	1.9	0	1
WL	2	7.4%	2	0	1.9	0	2
WT	110	7.4%	102	8	1.9	15	117
WR	0	7.4%	0	0	1.9	0	0
							331
North Leg Volumes							
Approach	2	0	2	0	6.0		2
Depart	2	0	2	0	5.9		2
Total	4	0	4	0	11.9		4
South Leg Volumes							
Approach	2	0	2	0	6.0		2
Depart	3	0	3	0	5.9		3
Total	5	0	5	0	11.9		5
East Leg Volumes							
Approach	112	0	104	8	5.8		119
Depart	194	0	180	14	5.9		207
Total	306	0	284	22	11.7		326
West Leg Volumes							
Approach	195	0	181	14	5.8		208
Depart	112	0	104	8	5.9		119
Total	307	0	285	22	11.7		327
All Legs							
Approach	311	1	289	22	23.6		331
Depart	311	1	289	22	23.6		331
Total	622	1	578	44	47.2		662

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	2	2.0%	2	0	2.0	0	2
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	2	2.0%	2	0	2.0	0	2
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	2	7.4%	2	0	1.9	0	2
ET	186	7.4%	172	14	1.9	27	199
ER	0	7.4%	0	0	1.9	0	0
WL	2	7.4%	2	0	1.9	0	2
WT	322	7.4%	298	24	1.9	46	344
WR	0	7.4%	0	0	1.9	0	0
							551
North Leg Volumes							
Approach	2	0	2	0	6.0		2
Depart	2	0	2	0	5.9		2
Total	4	0	4	0	11.9		4
South Leg Volumes							
Approach	2	0	2	0	6.0		2
Depart	2	0	2	0	5.9		2
Total	4	0	4	0	11.9		4
East Leg Volumes							
Approach	324	0	300	24	5.8		346
Depart	188	0	174	14	5.9		201
Total	512	0	474	38	11.7		547
West Leg Volumes							
Approach	188	0	174	14	5.8		201
Depart	324	0	300	24	5.9		346
Total	512	0	474	38	11.7		547
All Legs							
Approach	516	1	478	38	23.6		551
Depart	516	1	478	38	23.6		551
Total	1,032	1	956	76	47.2		1,102

Existing Peak Hour Volumes - Non-Classification Counts

7 **Townsend St & Main St**

	AM Peak Hour Volumes							PM Peak Hour Volumes						
		Truck Volumes					Total		Truck Volumes					Total
	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume
NL	2	2.0%	2	0	2.0	0	2	2	2.0%	2	0	2.0	0	2
NT	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
SL	2	2.0%	2	0	2.0	0	2	2	2.0%	2	0	2.0	0	2
ST	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0	4	2.0%	4	0	2.0	0	4
EL	2	7.4%	2	0	1.9	0	2	2	7.4%	2	0	1.9	0	2
ET	189	7.4%	175	14	1.9	27	202	185	7.4%	171	14	1.9	27	198
ER	2	7.4%	2	0	1.9	0	2	1	7.4%	1	0	1.9	0	1
WL	2	7.4%	2	0	1.9	0	2	2	7.4%	2	0	1.9	0	2
WT	107	7.4%	99	8	1.9	15	114	318	7.4%	294	24	1.9	46	340
WR	1	7.4%	1	0	1.9	0	1	0	7.4%	0	0	1.9	0	0
							327							551
North Leg Volumes								**North Leg Volumes**						
Approach	2	0	2	0	6.0		2	Approach	6	0	6	0	6.0	6
Depart	3	0	3	0	5.9		3	Depart	2	0	2	0	5.9	2
Total	5	0	5	0	11.9		5	Total	8	0	8	0	11.9	8
South Leg Volumes								**South Leg Volumes**						
Approach	2	0	2	0	6.0		2	Approach	2	0	2	0	6.0	2
Depart	4	0	4	0	5.9		4	Depart	3	0	3	0	5.9	3
Total	6	0	6	0	11.9		6	Total	5	0	5	0	11.9	5
East Leg Volumes								**East Leg Volumes**						
Approach	110	0	102	8	5.8		117	Approach	320	0	296	24	5.8	342
Depart	191	0	177	14	5.9		204	Depart	187	0	173	14	5.9	200
Total	301	0	279	22	11.7		321	Total	507	0	469	38	11.7	542
West Leg Volumes								**West Leg Volumes**						
Approach	193	0	179	14	5.8		206	Approach	188	0	174	14	5.8	201
Depart	109	0	101	8	5.9		116	Depart	324	0	300	24	5.9	346
Total	302	0	280	22	11.7		322	Total	512	0	474	38	11.7	547
All Legs								**All Legs**						
Approach	307	1	285	22	23.6		327	Approach	516	1	478	38	23.6	551
Depart	307	1	285	22	23.6		327	Depart	516	1	478	38	23.6	551
Total	614	1	570	44	47.2		654	Total	1,032	1	956	76	47.2	1,102

Existing Peak Hour Volumes - Non-Classification Counts

8 **Woods Ave & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
		Truck Volumes					
NL	2	2.0%	2	0	2.0	0	2
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	2	2.0%	2	0	2.0	0	2
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	2	7.4%	2	0	1.9	0	2
ET	203	7.4%	188	15	1.9	29	217
ER	0	7.4%	0	0	1.9	0	0
WL	2	7.4%	2	0	1.9	0	2
WT	100	7.4%	93	7	1.9	14	107
WR	0	7.4%	0	0	1.9	0	0
							332
North Leg Volumes							
Approach	2	0	2	0	6.0		2
Depart	2	0	2	0	5.9		2
Total	4	0	4	0	11.9		4
South Leg Volumes							
Approach	2	0	2	0	6.0		2
Depart	2	0	2	0	5.9		2
Total	4	0	4	0	11.9		4
East Leg Volumes							
Approach	102	0	95	7	5.8		109
Depart	205	0	190	15	5.9		219
Total	307	0	285	22	11.7		328
West Leg Volumes							
Approach	205	0	190	15	5.8		219
Depart	102	0	95	7	5.9		109
Total	307	0	285	22	11.7		328
All Legs							
Approach	311	1	289	22	23.6		332
Depart	311	1	289	22	23.6		332
Total	622	1	578	44	47.2		664

PM Peak Hour Volumes

	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
		Truck Volumes					
NL	3	2.0%	3	0	2.0	0	3
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	3	2.0%	3	0	2.0	0	3
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	2	7.4%	2	0	1.9	0	2
ET	185	7.4%	171	14	1.9	27	198
ER	1	7.4%	1	0	1.9	0	1
WL	2	7.4%	2	0	1.9	0	2
WT	320	7.4%	296	24	1.9	46	342
WR	1	7.4%	1	0	1.9	0	1
							552
North Leg Volumes							
Approach	3	0	3	0	6.0		3
Depart	3	0	3	0	5.9		3
Total	6	0	6	0	11.9		6
South Leg Volumes							
Approach	3	0	3	0	6.0		3
Depart	3	0	3	0	5.9		3
Total	6	0	6	0	11.9		6
East Leg Volumes							
Approach	323	0	299	24	5.8		345
Depart	188	0	174	14	5.9		201
Total	511	0	473	38	11.7		546
West Leg Volumes							
Approach	188	0	174	14	5.8		201
Depart	323	0	299	24	5.9		345
Total	511	0	473	38	11.7		546
All Legs							
Approach	517	1	479	38	23.6		552
Depart	517	1	479	38	23.6		552
Total	1,034	1	958	76	47.2		1,104

Existing Peak Hour Volumes - Non-Classification Counts

9 **Frank St & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	10	2.0%	10	0	2.0	0	10
NT	0	2.0%	0	0	2.0	0	0
NR	10	2.0%	10	0	2.0	0	10
SL	2	2.0%	2	0	2.0	0	2
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	2	7.4%	2	0	1.9	0	2
ET	187	7.4%	173	14	1.9	27	200
ER	6	7.4%	6	0	1.9	0	6
WL	3	7.4%	3	0	1.9	0	3
WT	96	7.4%	89	7	1.9	14	103
WR	0	7.4%	0	0	1.9	0	0
							336
North Leg Volumes							
Approach	2	0	2	0	6.0		2
Depart	2	0	2	0	5.9		2
Total	4	0	4	0	11.9		4
South Leg Volumes							
Approach	20	0	20	0	6.0		20
Depart	9	0	9	0	5.9		9
Total	29	0	29	0	11.9		29
East Leg Volumes							
Approach	99	0	92	7	5.8		106
Depart	199	0	185	14	5.9		212
Total	298	0	277	21	11.7		318
West Leg Volumes							
Approach	195	0	181	14	5.8		208
Depart	106	0	99	7	5.9		113
Total	301	0	280	21	11.7		321
All Legs							
Approach	316	1	295	21	23.6		336
Depart	316	1	295	21	23.6		336
Total	632	1	590	42	47.2		672

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	20	2.0%	20	0	2.0	0	20
NT	0	2.0%	0	0	2.0	0	0
NR	13	2.0%	13	0	2.0	0	13
SL	2	2.0%	2	0	2.0	0	2
ST	1	2.0%	1	0	2.0	0	1
SR	0	2.0%	0	0	2.0	0	0
EL	2	7.4%	2	0	1.9	0	2
ET	174	7.4%	161	13	1.9	25	186
ER	17	7.4%	16	1	1.9	2	18
WL	15	7.4%	14	1	1.9	2	16
WT	301	7.4%	279	22	1.9	43	322
WR	0	7.4%	0	0	1.9	0	0
							580
North Leg Volumes							
Approach	3	0	3	0	6.0		3
Depart	2	0	2	0	5.9		2
Total	5	0	5	0	11.9		5
South Leg Volumes							
Approach	33	0	33	0	6.0		33
Depart	33	0	31	2	5.9		35
Total	66	0	64	2	11.9		68
East Leg Volumes							
Approach	316	0	293	23	5.8		338
Depart	189	0	176	13	5.9		201
Total	505	0	469	36	11.7		539
West Leg Volumes							
Approach	193	0	179	14	5.8		206
Depart	321	0	299	22	5.9		342
Total	514	0	478	36	11.7		548
All Legs							
Approach	545	1	508	37	23.6		580
Depart	545	1	508	37	23.6		580
Total	1,090	1	1,016	74	47.2		1,160

Existing Peak Hour Volumes - Non-Classification Counts

10 **Paris Ave & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	8	2.0%	8	0	2.0	0	8
NT	0	2.0%	0	0	2.0	0	0
NR	15	2.0%	15	0	2.0	0	15
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	7.4%	0	0	1.9	0	0
ET	197	7.4%	182	15	1.9	29	211
ER	4	7.4%	4	0	1.9	0	4
WL	15	7.4%	14	1	1.9	2	16
WT	89	7.4%	82	7	1.9	14	96
WR	0	7.4%	0	0	1.9	0	0
							350
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
South Leg Volumes							
Approach	23	0	23	0	6.0		23
Depart	19	0	18	1	5.9		20
Total	42	0	41	1	11.9		43
East Leg Volumes							
Approach	104	0	96	8	5.8		112
Depart	212	0	197	15	5.9		226
Total	316	0	293	23	11.7		338
West Leg Volumes							
Approach	201	0	186	15	5.8		215
Depart	97	0	90	7	5.9		104
Total	298	0	276	22	11.7		319
All Legs							
Approach	328	1	305	23	23.6		350
Depart	328	1	305	23	23.6		350
Total	656	1	610	46	47.2		700

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	3	2.0%	3	0	2.0	0	3
NT	0	2.0%	0	0	2.0	0	0
NR	7	2.0%	7	0	2.0	0	7
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	7.4%	0	0	1.9	0	0
ET	182	7.4%	168	14	1.9	27	195
ER	9	7.4%	8	1	1.9	2	10
WL	14	7.4%	13	1	1.9	2	15
WT	317	7.4%	293	24	1.9	46	339
WR	0	7.4%	0	0	1.9	0	0
							569
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
South Leg Volumes							
Approach	10	0	10	0	6.0		10
Depart	23	0	21	2	5.9		25
Total	33	0	31	2	11.9		35
East Leg Volumes							
Approach	331	0	306	25	5.8		354
Depart	189	0	175	14	5.9		202
Total	520	0	481	39	11.7		556
West Leg Volumes							
Approach	191	0	176	15	5.8		205
Depart	320	0	296	24	5.9		342
Total	511	0	472	39	11.7		547
All Legs							
Approach	532	1	492	40	23.6		569
Depart	532	1	492	40	23.6		569
Total	1,064	1	984	80	47.2		1,138

Existing Peak Hour Volumes - Non-Classification Counts

11 **Ash Rd & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	13	2.0%	13	0	2.0	0	13
NT	0	2.0%	0	0	2.0	0	0
NR	11	2.0%	11	0	2.0	0	11
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	7.4%	0	0	1.9	0	0
ET	184	7.4%	170	14	1.9	27	197
ER	28	7.4%	26	2	1.9	4	30
WL	13	7.4%	12	1	1.9	2	14
WT	89	7.4%	82	7	1.9	14	96
WR	0	7.4%	0	0	1.9	0	0
							361
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
South Leg Volumes							
Approach	24	0	24	0	6.0		24
Depart	41	0	38	3	5.9		44
Total	65	0	62	3	11.9		68
East Leg Volumes							
Approach	102	0	94	8	5.8		110
Depart	195	0	181	14	5.9		208
Total	297	0	275	22	11.7		318
West Leg Volumes							
Approach	212	0	196	16	5.8		227
Depart	102	0	95	7	5.9		109
Total	314	0	291	23	11.7		336
All Legs							
Approach	338	1	314	24	23.6		361
Depart	338	1	314	24	23.6		361
Total	676	1	628	48	47.2		722

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	21	2.0%	21	0	2.0	0	21
NT	0	2.0%	0	0	2.0	0	0
NR	19	2.0%	19	0	2.0	0	19
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	7.4%	0	0	1.9	0	0
ET	165	7.4%	153	12	1.9	23	176
ER	20	7.4%	19	1	1.9	2	21
WL	19	7.4%	18	1	1.9	2	20
WT	301	7.4%	279	22	1.9	43	322
WR	0	7.4%	0	0	1.9	0	0
							579
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
South Leg Volumes							
Approach	40	0	40	0	6.0		40
Depart	39	0	37	2	5.9		41
Total	79	0	77	2	11.9		81
East Leg Volumes							
Approach	320	0	297	23	5.8		342
Depart	184	0	172	12	5.9		195
Total	504	0	469	35	11.7		537
West Leg Volumes							
Approach	185	0	172	13	5.8		197
Depart	322	0	300	22	5.9		343
Total	507	0	472	35	11.7		540
All Legs							
Approach	545	1	509	36	23.6		579
Depart	545	1	509	36	23.6		579
Total	1,090	1	1,018	72	47.2		1,158

Existing Peak Hour Volumes - Non-Classification Counts

12 **Birch Rd & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	4	2.0%	4	0	2.0	0	4
NT	0	2.0%	0	0	2.0	0	0
NR	30	2.0%	29	1	2.0	2	31
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	7.4%	0	0	1.9	0	0
ET	190	7.4%	176	14	1.9	27	203
ER	3	7.4%	3	0	1.9	0	3
WL	10	7.4%	9	1	1.9	2	11
WT	117	7.4%	108	9	1.9	17	125
WR	0	7.4%	0	0	1.9	0	0
							377
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
South Leg Volumes							
Approach	34	0	33	1	6.0		35
Depart	13	0	12	1	5.9		14
Total	47	0	45	2	11.9		49
East Leg Volumes							
Approach	127	0	117	10	5.8		136
Depart	220	0	205	15	5.9		234
Total	347	0	322	25	11.7		370
West Leg Volumes							
Approach	193	0	179	14	5.8		206
Depart	121	0	112	9	5.9		129
Total	314	0	291	23	11.7		335
All Legs							
Approach	354	1	329	25	23.6		377
Depart	354	1	329	25	23.6		377
Total	708	1	658	50	47.2		754

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	7	2.0%	7	0	2.0	0	7
NT	0	2.0%	0	0	2.0	0	0
NR	26	2.0%	25	1	2.0	2	27
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	7.4%	0	0	1.9	0	0
ET	183	7.4%	169	14	1.9	27	196
ER	8	7.4%	7	1	1.9	2	9
WL	53	7.4%	49	4	1.9	8	57
WT	316	7.4%	292	24	1.9	46	338
WR	0	7.4%	0	0	1.9	0	0
							634
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
South Leg Volumes							
Approach	33	0	32	1	6.0		34
Depart	61	0	56	5	5.9		66
Total	94	0	88	6	11.9		100
East Leg Volumes							
Approach	369	0	341	28	5.8		395
Depart	209	0	194	15	5.9		223
Total	578	0	535	43	11.7		618
West Leg Volumes							
Approach	191	0	176	15	5.8		205
Depart	323	0	299	24	5.9		345
Total	514	0	475	39	11.7		550
All Legs							
Approach	593	1	549	44	23.6		634
Depart	593	1	549	44	23.6		634
Total	1,186	1	1,098	88	47.2		1,268

Existing Peak Hour Volumes - Non-Classification Counts

13 **Western Dr & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	2	2.0%	2	0	2.0	0	2
NT	0	2.0%	0	0	2.0	0	0
NR	22	2.0%	22	0	2.0	0	22
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	7.4%	0	0	1.9	0	0
ET	200	7.4%	185	15	1.9	29	214
ER	4	7.4%	4	0	1.9	0	4
WL	8	7.4%	7	1	1.9	2	9
WT	144	7.4%	133	11	1.9	21	154
WR	0	7.4%	0	0	1.9	0	0
							405
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
South Leg Volumes							
Approach	24	0	24	0	6.0		24
Depart	12	0	11	1	5.9		13
Total	36	0	35	1	11.9		37
East Leg Volumes							
Approach	152	0	140	12	5.8		163
Depart	222	0	207	15	5.9		236
Total	374	0	347	27	11.7		399
West Leg Volumes							
Approach	204	0	189	15	5.8		218
Depart	146	0	135	11	5.9		156
Total	350	0	324	26	11.7		374
All Legs							
Approach	380	1	353	27	23.6		405
Depart	380	1	353	27	23.6		405
Total	760	1	706	54	47.2		810

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	4	2.0%	4	0	2.0	0	4
NT	0	2.0%	0	0	2.0	0	0
NR	17	2.0%	17	0	2.0	0	17
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	7.4%	0	0	1.9	0	0
ET	207	7.4%	192	15	1.9	29	221
ER	4	7.4%	4	0	1.9	0	4
WL	23	7.4%	21	2	1.9	4	25
WT	381	7.4%	353	28	1.9	54	407
WR	0	7.4%	0	0	1.9	0	0
							678
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
South Leg Volumes							
Approach	21	0	21	0	6.0		21
Depart	27	0	25	2	5.9		29
Total	48	0	46	2	11.9		50
East Leg Volumes							
Approach	404	0	374	30	5.8		432
Depart	224	0	209	15	5.9		238
Total	628	0	583	45	11.7		670
West Leg Volumes							
Approach	211	0	196	15	5.8		225
Depart	385	0	357	28	5.9		411
Total	596	0	553	43	11.7		636
All Legs							
Approach	636	1	591	45	23.6		678
Depart	636	1	591	45	23.6		678
Total	1,272	1	1,182	90	47.2		1,356

Existing Peak Hour Volumes - Non-Classification Counts

14 **Pettit Rd & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	94	2.0%	92	2	2.0	4	96
ST	0	2.0%	0	0	2.0	0	0
SR	6	2.0%	6	0	2.0	0	6
EL	5	7.4%	5	0	1.9	0	5
ET	228	7.4%	211	17	1.9	33	244
ER	0	7.4%	0	0	1.9	0	0
WL	0	7.4%	0	0	1.9	0	0
WT	132	7.4%	122	10	1.9	19	141
WR	40	7.4%	37	3	1.9	6	43
							535
North Leg Volumes							
Approach	100	0	98	2	6.0		102
Depart	45	0	42	3	5.9		48
Total	145	0	140	5	11.9		150
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
East Leg Volumes							
Approach	172	0	159	13	5.8		184
Depart	322	0	303	19	5.9		340
Total	494	0	462	32	11.7		524
West Leg Volumes							
Approach	233	0	216	17	5.8		249
Depart	138	0	128	10	5.9		147
Total	371	0	344	27	11.7		396
All Legs							
Approach	505	1	473	32	23.6		535
Depart	505	1	473	32	23.6		535
Total	1,010	1	946	64	47.2		1,070

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	81	2.0%	79	2	2.0	4	83
ST	0	2.0%	0	0	2.0	0	0
SR	11	2.0%	11	0	2.0	0	11
EL	12	7.4%	11	1	1.9	2	13
ET	214	7.4%	198	16	1.9	31	229
ER	0	7.4%	0	0	1.9	0	0
WL	0	7.4%	0	0	1.9	0	0
WT	395	7.4%	366	29	1.9	56	422
WR	109	7.4%	101	8	1.9	15	116
							874
North Leg Volumes							
Approach	92	0	90	2	6.0		94
Depart	121	0	112	9	5.9		129
Total	213	0	202	11	11.9		223
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
East Leg Volumes							
Approach	504	0	467	37	5.8		538
Depart	295	0	277	18	5.9		312
Total	799	0	744	55	11.7		850
West Leg Volumes							
Approach	226	0	209	17	5.8		242
Depart	406	0	377	29	5.9		433
Total	632	0	586	46	11.7		675
All Legs							
Approach	822	1	766	56	23.6		874
Depart	822	1	766	56	23.6		874
Total	1,644	1	1,532	112	47.2		1,748

Existing Peak Hour Volumes - Non-Classification Counts

15 **SR 58 EB Ramp & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
		Truck Volumes					
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	16	2.0%	16	0	2.0	0	16
ST	1	2.0%	1	0	2.0	0	1
SR	14	2.0%	14	0	2.0	0	14
EL	0	7.4%	0	0	1.9	0	0
ET	198	7.4%	183	15	1.9	29	212
ER	128	7.4%	118	10	1.9	19	137
WL	29	7.4%	27	2	1.9	4	31
WT	158	7.4%	146	12	1.9	23	169
WR	0	7.4%	0	0	1.9	0	0
							580
North Leg Volumes							
Approach	31	0	31	0	6.0		31
Depart	0	0	0	0	5.9		0
Total	31	0	31	0	11.9		31
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	158	0	146	12	5.9		169
Total	158	0	146	12	11.9		169
East Leg Volumes							
Approach	187	0	173	14	5.8		200
Depart	214	0	199	15	5.9		228
Total	401	0	372	29	11.7		428
West Leg Volumes							
Approach	326	0	301	25	5.8		349
Depart	172	0	160	12	5.9		183
Total	498	0	461	37	11.7		532
All Legs							
Approach	544	1	505	39	23.6		580
Depart	544	1	505	39	23.6		580
Total	1,088	1	1,010	78	47.2		1,160

PM Peak Hour Volumes

	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
		Truck Volumes					
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	21	2.0%	21	0	2.0	0	21
ST	4	2.0%	4	0	2.0	0	4
SR	20	2.0%	20	0	2.0	0	20
EL	0	7.4%	0	0	1.9	0	0
ET	212	7.4%	196	16	1.9	31	227
ER	85	7.4%	79	6	1.9	12	91
WL	16	7.4%	15	1	1.9	2	17
WT	487	7.4%	451	36	1.9	70	521
WR	0	7.4%	0	0	1.9	0	0
							901
North Leg Volumes							
Approach	45	0	45	0	6.0		45
Depart	0	0	0	0	5.9		0
Total	45	0	45	0	11.9		45
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	105	0	98	7	5.9		112
Total	105	0	98	7	11.9		112
East Leg Volumes							
Approach	503	0	466	37	5.8		538
Depart	233	0	217	16	5.9		248
Total	736	0	683	53	11.7		786
West Leg Volumes							
Approach	297	0	275	22	5.8		318
Depart	507	0	471	36	5.9		541
Total	804	0	746	58	11.7		859
All Legs							
Approach	845	1	786	59	23.6		901
Depart	845	1	786	59	23.6		901
Total	1,690	1	1,572	118	47.2		1,802

Existing Peak Hour Volumes - Non-Classification Counts

16 **SR 58 WB Ramp & Main St**

	AM Peak Hour Volumes							PM Peak Hour Volumes						
		Truck Volumes					Total		Truck Volumes					Total
	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume
NL	59	2.0%	58	1	2.0	2	60	169	2.0%	166	3	2.0	6	172
NT	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
NR	18	2.0%	18	0	2.0	0	18	20	2.0%	20	0	2.0	0	20
SL	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
EL	18	11.5%	16	2	2.3	5	21	18	11.5%	16	2	2.3	5	21
ET	195	11.5%	173	22	2.3	50	223	212	11.5%	188	24	2.3	55	243
ER	0	11.5%	0	0	2.3	0	0	0	11.5%	0	0	2.3	0	0
WL	0	11.5%	0	0	2.3	0	0	0	11.5%	0	0	2.3	0	0
WT	143	11.5%	127	16	2.3	36	163	334	11.5%	296	38	2.3	87	383
WR	13	11.5%	12	1	2.3	2	14	20	11.5%	18	2	2.3	5	23
							499							862
North Leg Volumes								**North Leg Volumes**						
Approach	0	0	0	0	6.0		0	Approach	0	0	0	0	6.0	0
Depart	31	0	28	3	6.6		35	Depart	38	0	34	4	6.6	44
Total	31	0	28	3	12.6		35	Total	38	0	34	4	12.6	44
South Leg Volumes								**South Leg Volumes**						
Approach	77	0	76	1	6.0		78	Approach	189	0	186	3	6.0	192
Depart	0	0	0	0	6.6		0	Depart	0	0	0	0	6.6	0
Total	77	0	76	1	12.6		78	Total	189	0	186	3	12.6	192
East Leg Volumes								**East Leg Volumes**						
Approach	156	0	139	17	6.8		177	Approach	354	0	314	40	6.8	406
Depart	213	0	191	22	6.3		241	Depart	232	0	208	24	6.3	263
Total	369	1	330	39	13.1		418	Total	586	1	522	64	13.1	669
West Leg Volumes								**West Leg Volumes**						
Approach	213	0	189	24	6.8		244	Approach	230	0	204	26	6.8	264
Depart	202	0	185	17	6.3		223	Depart	503	0	462	41	6.3	555
Total	415	1	374	41	13.1		467	Total	733	1	666	67	13.1	819
All Legs								**All Legs**						
Approach	446	1	404	42	25.7		499	Approach	773	1	704	69	25.7	862
Depart	446	1	404	42	25.7		499	Depart	773	1	704	69	25.7	862
Total	892	2	808	84	51.3		998	Total	1,546	2	1,408	138	51.3	1,724

Existing Peak Hour Volumes - Non-Classification Counts

17 **Lenwood Rd & Love's Travel Stop Dwy**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	22	17.2%	18	4	2.1	8	26
NT	80	17.2%	66	14	2.1	29	95
NR	9	17.2%	7	2	2.1	4	11
SL	4	17.2%	3	1	2.1	2	5
ST	71	17.2%	59	12	2.1	25	84
SR	20	17.2%	17	3	2.1	6	23
EL	10	2.0%	10	0	2.0	0	10
ET	1	2.0%	1	0	2.0	0	1
ER	23	2.0%	23	0	2.0	0	23
WL	1	2.0%	1	0	2.0	0	1
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							279
North Leg Volumes							
Approach	95	1	79	16	6.2		112
Depart	90	0	76	14	6.1		105
Total	185	1	155	30	12.2		217
South Leg Volumes							
Approach	111	1	91	20	6.2		132
Depart	95	0	83	12	6.1		108
Total	206	1	174	32	12.2		240
East Leg Volumes							
Approach	1	0	1	0	6.0		1
Depart	14	0	11	3	6.1		17
Total	15	0	12	3	12.1		18
West Leg Volumes							
Approach	34	0	34	0	6.0		34
Depart	42	0	35	7	6.1		49
Total	76	0	69	7	12.1		83
All Legs							
Approach	241	1	205	36	24.3		279
Depart	241	1	205	36	24.3		279
Total	482	2	410	72	48.7		558

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	24	17.2%	20	4	2.1	8	28
NT	155	17.2%	128	27	2.1	56	184
NR	5	17.2%	4	1	2.1	2	6
SL	1	17.2%	1	0	2.1	0	1
ST	94	17.2%	78	16	2.1	33	111
SR	13	17.2%	11	2	2.1	4	15
EL	17	2.0%	17	0	2.0	0	17
ET	0	2.0%	0	0	2.0	0	0
ER	18	2.0%	18	0	2.0	0	18
WL	13	2.0%	13	0	2.0	0	13
WT	0	2.0%	0	0	2.0	0	0
WR	2	2.0%	2	0	2.0	0	2
							395
North Leg Volumes							
Approach	108	1	90	18	6.2		127
Depart	174	0	147	27	6.1		203
Total	282	1	237	45	12.2		330
South Leg Volumes							
Approach	184	1	152	32	6.2		218
Depart	125	0	109	16	6.1		142
Total	309	1	261	48	12.2		360
East Leg Volumes							
Approach	15	0	15	0	6.0		15
Depart	6	0	5	1	6.1		7
Total	21	0	20	1	12.1		22
West Leg Volumes							
Approach	35	0	35	0	6.0		35
Depart	37	0	31	6	6.1		43
Total	72	0	66	6	12.1		78
All Legs							
Approach	342	1	292	50	24.3		395
Depart	342	1	292	50	24.3		395
Total	684	2	584	100	48.7		790

Existing Peak Hour Volumes - Non-Classification Counts

18 **Lenwood Rd & High Desert Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	53	12.4%	46	7	1.9	13	59
NT	120	12.4%	105	15	1.9	29	134
NR	0	12.4%	0	0	1.9	0	0
SL	0	12.4%	0	0	1.9	0	0
ST	96	12.4%	84	12	1.9	23	107
SR	5	12.4%	4	1	1.9	2	6
EL	3	2.0%	3	0	2.0	0	3
ET	0	2.0%	0	0	2.0	0	0
ER	76	2.0%	74	2	2.0	4	78
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							387
North Leg Volumes							
Approach	101	0	88	13	5.7		113
Depart	123	0	108	15	5.9		137
Total	224	1	196	28	11.7		250
South Leg Volumes							
Approach	173	0	151	22	5.7		193
Depart	172	0	158	14	5.9		185
Total	345	1	309	36	11.7		378
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.8		0
Total	0	0	0	0	11.8		0
West Leg Volumes							
Approach	79	0	77	2	6.0		81
Depart	58	0	50	8	5.8		65
Total	137	0	127	10	11.8		146
All Legs							
Approach	353	1	316	37	23.5		387
Depart	353	1	316	37	23.5		387
Total	706	2	632	74	47.0		774

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	64	12.4%	56	8	1.9	15	71
NT	166	12.4%	145	21	1.9	40	185
NR	0	12.4%	0	0	1.9	0	0
SL	0	12.4%	0	0	1.9	0	0
ST	130	12.4%	114	16	1.9	31	145
SR	4	12.4%	4	0	1.9	0	4
EL	1	2.0%	1	0	2.0	0	1
ET	0	2.0%	0	0	2.0	0	0
ER	63	2.0%	62	1	2.0	2	64
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							470
North Leg Volumes							
Approach	134	0	118	16	5.7		149
Depart	167	0	146	21	5.9		186
Total	301	1	264	37	11.7		335
South Leg Volumes							
Approach	230	0	201	29	5.7		256
Depart	193	0	176	17	5.9		209
Total	423	1	377	46	11.7		465
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.8		0
Total	0	0	0	0	11.8		0
West Leg Volumes							
Approach	64	0	63	1	6.0		65
Depart	68	0	60	8	5.8		75
Total	132	0	123	9	11.8		140
All Legs							
Approach	428	1	382	46	23.5		470
Depart	428	1	382	46	23.5		470
Total	856	2	764	92	47.0		940

Existing Peak Hour Volumes - Non-Classification Counts

19 **Truck Freightliner Service Point Dwy & Lenwood Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	6	2.0%	6	0	2.0	0	6
NT	0	2.0%	0	0	2.0	0	0
NR	75	2.0%	74	1	2.0	2	76
SL	11	2.0%	11	0	2.0	0	11
ST	0	2.0%	0	0	2.0	0	0
SR	8	2.0%	8	0	2.0	0	8
EL	1	12.4%	1	0	1.9	0	1
ET	148	12.4%	130	18	1.9	34	164
ER	10	12.4%	9	1	1.9	2	11
WL	43	12.4%	38	5	1.9	10	48
WT	139	12.4%	122	17	1.9	33	155
WR	16	12.4%	14	2	1.9	4	18
							498
North Leg Volumes							
Approach	19	0	19	0	6.0		19
Depart	17	0	15	2	5.8		19
Total	36	0	34	2	11.8		38
South Leg Volumes							
Approach	81	0	80	1	6.0		82
Depart	53	0	47	6	5.8		59
Total	134	0	127	7	11.8		141
East Leg Volumes							
Approach	198	0	174	24	5.7		221
Depart	234	0	215	19	5.9		251
Total	432	1	389	43	11.7		472
West Leg Volumes							
Approach	159	0	140	19	5.7		176
Depart	153	0	136	17	5.9		169
Total	312	1	276	36	11.7		345
All Legs							
Approach	457	1	413	44	23.5		498
Depart	457	1	413	44	23.5		498
Total	914	2	826	88	47.0		996

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	6	2.0%	6	0	2.0	0	6
NT	0	2.0%	0	0	2.0	0	0
NR	45	2.0%	44	1	2.0	2	46
SL	4	2.0%	4	0	2.0	0	4
ST	0	2.0%	0	0	2.0	0	0
SR	6	2.0%	6	0	2.0	0	6
EL	6	12.4%	5	1	1.9	2	7
ET	173	12.4%	152	21	1.9	40	192
ER	13	12.4%	11	2	1.9	4	15
WL	79	12.4%	69	10	1.9	19	88
WT	244	12.4%	214	30	1.9	57	271
WR	17	12.4%	15	2	1.9	4	19
							654
North Leg Volumes							
Approach	10	0	10	0	6.0		10
Depart	23	0	20	3	5.8		26
Total	33	0	30	3	11.8		36
South Leg Volumes							
Approach	51	0	50	1	6.0		52
Depart	92	0	80	12	5.8		103
Total	143	0	130	13	11.8		155
East Leg Volumes							
Approach	340	0	298	42	5.7		378
Depart	222	0	200	22	5.9		242
Total	562	1	498	64	11.7		620
West Leg Volumes							
Approach	192	0	168	24	5.7		214
Depart	256	0	226	30	5.9		283
Total	448	1	394	54	11.7		497
All Legs							
Approach	593	1	526	67	23.5		654
Depart	593	1	526	67	23.5		654
Total	1,186	2	1,052	134	47.0		1,308

Existing Peak Hour Volumes - Non-Classification Counts

20 **Commerce Pkwy & Lenwood Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	6	2.0%	6	0	2.0	0	6
NT	2	2.0%	2	0	2.0	0	2
NR	41	2.0%	40	1	2.0	2	42
SL	106	2.0%	104	2	2.0	4	108
ST	5	2.0%	5	0	2.0	0	5
SR	16	2.0%	16	0	2.0	0	16
EL	13	12.4%	11	2	1.9	4	15
ET	207	12.4%	181	26	1.9	50	231
ER	10	12.4%	9	1	1.9	2	11
WL	41	12.4%	36	5	1.9	10	46
WT	186	12.4%	163	23	1.9	44	207
WR	74	12.4%	65	9	1.9	17	82
							771
North Leg Volumes							
Approach	127	0	125	2	6.0		129
Depart	89	0	78	11	5.8		99
Total	216	0	203	13	11.8		228
South Leg Volumes							
Approach	49	0	48	1	6.0		50
Depart	56	0	50	6	5.8		62
Total	105	0	98	7	11.8		112
East Leg Volumes							
Approach	301	0	264	37	5.7		335
Depart	354	0	325	29	5.9		381
Total	655	1	589	66	11.7		716
West Leg Volumes							
Approach	230	0	201	29	5.7		257
Depart	208	0	185	23	5.9		229
Total	438	1	386	52	11.7		486
All Legs							
Approach	707	1	638	69	23.5		771
Depart	707	1	638	69	23.5		771
Total	1,414	2	1,276	138	47.0		1,542

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	14	2.0%	14	0	2.0	0	14
NT	1	2.0%	1	0	2.0	0	1
NR	66	2.0%	65	1	2.0	2	67
SL	127	2.0%	124	3	2.0	6	130
ST	3	2.0%	3	0	2.0	0	3
SR	13	2.0%	13	0	2.0	0	13
EL	12	12.4%	11	1	1.9	2	13
ET	218	12.4%	191	27	1.9	52	243
ER	13	12.4%	11	2	1.9	4	15
WL	50	12.4%	44	6	1.9	11	55
WT	274	12.4%	240	34	1.9	65	305
WR	89	12.4%	78	11	1.9	21	99
							958
North Leg Volumes							
Approach	143	0	140	3	6.0		146
Depart	102	0	90	12	5.8		113
Total	245	0	230	15	11.8		259
South Leg Volumes							
Approach	81	0	80	1	6.0		82
Depart	66	0	58	8	5.8		73
Total	147	0	138	9	11.8		155
East Leg Volumes							
Approach	413	0	362	51	5.7		459
Depart	411	0	380	31	5.9		440
Total	824	1	742	82	11.7		899
West Leg Volumes							
Approach	243	0	213	30	5.7		271
Depart	301	0	267	34	5.9		332
Total	544	1	480	64	11.7		603
All Legs							
Approach	880	1	795	85	23.5		958
Depart	880	1	795	85	23.5		958
Total	1,760	2	1,590	170	47.0		1,916

Existing Peak Hour Volumes - Non-Classification Counts

21 **I-15 SB Off Ramps & Lenwood Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	178	2.0%	174	4	2.0	8	182
ST	0	2.0%	0	0	2.0	0	0
SR	185	2.0%	181	4	2.0	8	189
EL	0	12.4%	0	0	1.9	0	0
ET	194	12.4%	170	24	1.9	46	216
ER	0	12.4%	0	0	1.9	0	0
WL	0	12.4%	0	0	1.9	0	0
WT	157	12.4%	138	19	1.9	36	174
WR	0	12.4%	0	0	1.9	0	0
							761
North Leg Volumes							
Approach	363	0	355	8	6.0		371
Depart	0	0	0	0	5.8		0
Total	363	0	355	8	11.8		371
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.8		0
Total	0	0	0	0	11.8		0
East Leg Volumes							
Approach	157	0	138	19	5.7		174
Depart	372	0	344	28	5.9		398
Total	529	1	482	47	11.7		572
West Leg Volumes							
Approach	194	0	170	24	5.7		216
Depart	342	0	319	23	5.9		363
Total	536	1	489	47	11.7		579
All Legs							
Approach	714	1	663	51	23.5		761
Depart	714	1	663	51	23.5		761
Total	1,428	2	1,326	102	47.0		1,522

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	365	2.0%	358	7	2.0	14	372
ST	0	2.0%	0	0	2.0	0	0
SR	244	2.0%	239	5	2.0	10	249
EL	0	12.4%	0	0	1.9	0	0
ET	253	12.4%	222	31	1.9	59	281
ER	0	12.4%	0	0	1.9	0	0
WL	0	12.4%	0	0	1.9	0	0
WT	215	12.4%	188	27	1.9	52	240
WR	0	12.4%	0	0	1.9	0	0
							1,142
North Leg Volumes							
Approach	609	0	597	12	6.0		621
Depart	0	0	0	0	5.8		0
Total	609	0	597	12	11.8		621
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.8		0
Total	0	0	0	0	11.8		0
East Leg Volumes							
Approach	215	0	188	27	5.7		240
Depart	618	0	580	38	5.9		653
Total	833	1	768	65	11.7		893
West Leg Volumes							
Approach	253	0	222	31	5.7		281
Depart	459	0	427	32	5.9		489
Total	712	1	649	63	11.7		770
All Legs							
Approach	1,077	1	1,007	70	23.5		1,142
Depart	1,077	1	1,007	70	23.5		1,142
Total	2,154	2	2,014	140	47.0		2,284

Existing Peak Hour Volumes - Non-Classification Counts

22 **High Point Pkwy & Lenwood Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	101	2.0%	99	2	2.0	4	103
NT	60	2.0%	59	1	2.0	2	61
NR	170	2.0%	167	3	2.0	6	173
SL	4	2.0%	4	0	2.0	0	4
ST	0	2.0%	0	0	2.0	0	0
SR	159	2.0%	156	3	2.0	6	162
EL	57	12.4%	50	7	1.9	13	63
ET	157	12.4%	138	19	1.9	36	174
ER	0	12.4%	0	0	1.9	0	0
WL	0	12.4%	0	0	1.9	0	0
WT	284	12.4%	249	35	1.9	67	316
WR	25	12.4%	22	3	1.9	6	28
							1,084
North Leg Volumes							
Approach	163	0	160	3	6.0		166
Depart	142	0	131	11	5.8		152
Total	305	0	291	14	11.8		318
South Leg Volumes							
Approach	331	0	325	6	6.0		337
Depart	0	0	0	0	5.8		0
Total	331	0	325	6	11.8		337
East Leg Volumes							
Approach	309	0	271	38	5.7		344
Depart	331	0	309	22	5.9		351
Total	640	1	580	60	11.7		695
West Leg Volumes							
Approach	214	0	188	26	5.7		237
Depart	544	0	504	40	5.9		581
Total	758	1	692	66	11.7		818
All Legs							
Approach	1,017	1	944	73	23.5		1,084
Depart	1,017	1	944	73	23.5		1,084
Total	2,034	2	1,888	146	47.0		2,168

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	128	2.0%	125	3	2.0	6	131
NT	83	2.0%	81	2	2.0	4	85
NR	169	2.0%	166	3	2.0	6	172
SL	32	2.0%	31	1	2.0	2	33
ST	0	2.0%	0	0	2.0	0	0
SR	232	2.0%	227	5	2.0	10	237
EL	134	12.4%	117	17	1.9	33	150
ET	328	12.4%	287	41	1.9	79	366
ER	0	12.4%	0	0	1.9	0	0
WL	0	12.4%	0	0	1.9	0	0
WT	496	12.4%	434	62	1.9	119	553
WR	82	12.4%	72	10	1.9	19	91
							1,818
North Leg Volumes							
Approach	264	0	258	6	6.0		270
Depart	299	0	270	29	5.8		326
Total	563	0	528	35	11.8		596
South Leg Volumes							
Approach	380	0	372	8	6.0		388
Depart	0	0	0	0	5.8		0
Total	380	0	372	8	11.8		388
East Leg Volumes							
Approach	578	0	506	72	5.7		644
Depart	529	0	484	45	5.9		571
Total	1,107	1	990	117	11.7		1,215
West Leg Volumes							
Approach	462	0	404	58	5.7		516
Depart	856	0	786	70	5.9		921
Total	1,318	1	1,190	128	11.7		1,437
All Legs							
Approach	1,684	1	1,540	144	23.5		1,818
Depart	1,684	1	1,540	144	23.5		1,818
Total	3,368	2	3,080	288	47.0		3,636

Existing Peak Hour Volumes - Non-Classification Counts

23 **Lenwood Rd & Jasper Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	5	14.1%	4	1	1.6	2	6
NT	50	14.1%	43	7	1.6	11	54
NR	10	14.1%	9	1	1.6	2	11
SL	2	14.1%	2	0	1.6	0	2
ST	52	14.1%	45	7	1.6	11	56
SR	0	14.1%	0	0	1.6	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	1	2.0%	1	0	2.0	0	1
ER	3	2.0%	3	0	2.0	0	3
WL	27	2.0%	26	1	2.0	2	28
WT	0	2.0%	0	0	2.0	0	0
WR	3	2.0%	3	0	2.0	0	3
							164
North Leg Volumes							
Approach	54	0	47	7	4.7		58
Depart	53	0	46	7	5.6		57
Total	107	1	93	14	10.3		115
South Leg Volumes							
Approach	65	0	56	9	4.7		71
Depart	82	0	74	8	5.6		87
Total	147	1	130	17	10.3		158
East Leg Volumes							
Approach	30	0	29	1	6.0		31
Depart	13	0	12	1	5.1		14
Total	43	0	41	2	11.1		45
West Leg Volumes							
Approach	4	0	4	0	6.0		4
Depart	5	0	4	1	5.1		6
Total	9	0	8	1	11.1		10
All Legs							
Approach	153	1	136	17	21.4		164
Depart	153	1	136	17	21.4		164
Total	306	2	272	34	42.8		328

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	2	14.1%	2	0	1.6	0	2
NT	75	14.1%	64	11	1.6	17	81
NR	24	14.1%	21	3	1.6	5	26
SL	3	14.1%	3	0	1.6	0	3
ST	57	14.1%	49	8	1.6	13	62
SR	0	14.1%	0	0	1.6	0	0
EL	1	2.0%	1	0	2.0	0	1
ET	0	2.0%	0	0	2.0	0	0
ER	5	2.0%	5	0	2.0	0	5
WL	26	2.0%	25	1	2.0	2	27
WT	0	2.0%	0	0	2.0	0	0
WR	3	2.0%	3	0	2.0	0	3
							210
North Leg Volumes							
Approach	60	0	52	8	4.7		65
Depart	79	0	68	11	5.6		85
Total	139	1	120	19	10.3		150
South Leg Volumes							
Approach	101	0	87	14	4.7		109
Depart	88	0	79	9	5.6		94
Total	189	1	166	23	10.3		203
East Leg Volumes							
Approach	29	0	28	1	6.0		30
Depart	27	0	24	3	5.1		29
Total	56	0	52	4	11.1		59
West Leg Volumes							
Approach	6	0	6	0	6.0		6
Depart	2	0	2	0	5.1		2
Total	8	0	8	0	11.1		8
All Legs							
Approach	196	1	173	23	21.4		210
Depart	196	1	173	23	21.4		210
Total	392	2	346	46	42.8		420

Existing Peak Hour Volumes - Non-Classification Counts

24 **Lenwood Rd & Cam del Sol**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	14.1%	0	0	1.6	0	0
NT	39	14.1%	34	5	1.6	8	42
NR	14	14.1%	12	2	1.6	3	15
SL	2	14.1%	2	0	1.6	0	2
ST	36	14.1%	31	5	1.6	8	39
SR	0	14.1%	0	0	1.6	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	18	2.0%	18	0	2.0	0	18
WT	0	2.0%	0	0	2.0	0	0
WR	3	2.0%	3	0	2.0	0	3
							119
North Leg Volumes							
Approach	38	0	33	5	4.7		41
Depart	42	0	37	5	5.6		45
Total	80	1	70	10	10.3		86
South Leg Volumes							
Approach	53	0	46	7	4.7		57
Depart	54	0	49	5	5.6		57
Total	107	1	95	12	10.3		114
East Leg Volumes							
Approach	21	0	21	0	6.0		21
Depart	16	0	14	2	5.1		17
Total	37	0	35	2	11.1		38
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.1		0
Total	0	0	0	0	11.1		0
All Legs							
Approach	112	1	100	12	21.4		119
Depart	112	1	100	12	21.4		119
Total	224	2	200	24	42.8		238

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	14.1%	0	0	1.6	0	0
NT	52	14.1%	45	7	1.6	11	56
NR	27	14.1%	23	4	1.6	6	29
SL	2	14.1%	2	0	1.6	0	2
ST	44	14.1%	38	6	1.6	9	47
SR	0	14.1%	0	0	1.6	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	16	2.0%	16	0	2.0	0	16
WT	0	2.0%	0	0	2.0	0	0
WR	2	2.0%	2	0	2.0	0	2
							152
North Leg Volumes							
Approach	46	0	40	6	4.7		49
Depart	54	0	47	7	5.6		58
Total	100	1	87	13	10.3		107
South Leg Volumes							
Approach	79	0	68	11	4.7		85
Depart	60	0	54	6	5.6		63
Total	139	1	122	17	10.3		148
East Leg Volumes							
Approach	18	0	18	0	6.0		18
Depart	29	0	25	4	5.1		31
Total	47	0	43	4	11.1		49
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.1		0
Total	0	0	0	0	11.1		0
All Legs							
Approach	143	1	126	17	21.4		152
Depart	143	1	126	17	21.4		152
Total	286	2	252	34	42.8		304

Existing Peak Hour Volumes - Non-Classification Counts

25 **Lenwood Rd & Agate Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	1	21.3%	1	0	2.3	0	1
NT	1	21.3%	1	0	2.3	0	1
NR	26	21.3%	20	6	2.3	14	34
SL	0	21.3%	0	0	2.3	0	0
ST	7	21.3%	6	1	2.3	2	8
SR	0	21.3%	0	0	2.3	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	2	2.0%	2	0	2.0	0	2
WL	17	2.0%	17	0	2.0	0	17
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							63
North Leg Volumes							
Approach	7	1	6	1	6.8		8
Depart	1	0	1	0	6.3		1
Total	8	1	7	1	13.0		9
South Leg Volumes							
Approach	28	1	22	6	6.8		36
Depart	26	0	25	1	6.3		27
Total	54	1	47	7	13.0		63
East Leg Volumes							
Approach	17	0	17	0	6.0		17
Depart	26	0	20	6	6.5		34
Total	43	1	37	6	12.5		51
West Leg Volumes							
Approach	2	0	2	0	6.0		2
Depart	1	0	1	0	6.5		1
Total	3	1	3	0	12.5		3
All Legs							
Approach	54	1	47	7	25.5		63
Depart	54	1	47	7	25.5		63
Total	108	3	94	14	51.1		126

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	21.3%	0	0	2.3	0	0
NT	43	21.3%	34	9	2.3	20	54
NR	12	21.3%	9	3	2.3	7	16
SL	9	21.3%	7	2	2.3	5	12
ST	33	21.3%	26	7	2.3	16	42
SR	0	21.3%	0	0	2.3	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	14	2.0%	14	0	2.0	0	14
WT	0	2.0%	0	0	2.0	0	0
WR	4	2.0%	4	0	2.0	0	4
							142
North Leg Volumes							
Approach	42	1	33	9	6.8		54
Depart	47	0	38	9	6.3		58
Total	89	1	71	18	13.0		112
South Leg Volumes							
Approach	55	1	43	12	6.8		70
Depart	47	0	40	7	6.3		56
Total	102	1	83	19	13.0		126
East Leg Volumes							
Approach	18	0	18	0	6.0		18
Depart	21	0	16	5	6.5		28
Total	39	1	34	5	12.5		46
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.5		0
Total	0	1	0	0	12.5		0
All Legs							
Approach	115	1	94	21	25.5		142
Depart	115	1	94	21	25.5		142
Total	230	3	188	42	51.1		284

Existing Peak Hour Volumes - Non-Classification Counts

26 **Lenwood Rd & Community Blvd**

	AM Peak Hour Volumes							PM Peak Hour Volumes						
		Truck Volumes					Total		Truck Volumes					Total
	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume
NL	0	21.3%	0	0	2.3	0	0	0	21.3%	0	0	2.3	0	0
NT	2	21.3%	2	0	2.3	0	2	1	21.3%	1	0	2.3	0	1
NR	0	21.3%	0	0	2.3	0	0	0	21.3%	0	0	2.3	0	0
SL	16	21.3%	13	3	2.3	7	20	17	21.3%	13	4	2.3	9	22
ST	0	21.3%	0	0	2.3	0	0	0	21.3%	0	0	2.3	0	0
SR	13	21.3%	10	3	2.3	7	17	24	21.3%	19	5	2.3	11	30
EL	18	2.0%	18	0	2.0	0	18	42	2.0%	41	1	2.0	2	43
ET	13	2.0%	13	0	2.0	0	13	22	2.0%	22	0	2.0	0	22
ER	1	2.0%	1	0	2.0	0	1	0	2.0%	0	0	2.0	0	0
WL	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
WT	13	2.0%	13	0	2.0	0	13	36	2.0%	35	1	2.0	2	37
WR	16	2.0%	16	0	2.0	0	16	19	2.0%	19	0	2.0	0	19
							100							174
North Leg Volumes								**North Leg Volumes**						
Approach	29	1	23	6	6.8		37	Approach	41	1	32	9	6.8	52
Depart	36	0	36	0	6.3		36	Depart	62	0	61	1	6.3	63
Total	65	1	59	6	13.0		73	Total	103	1	93	10	13.0	115
South Leg Volumes								**South Leg Volumes**						
Approach	2	1	2	0	6.8		2	Approach	1	1	1	0	6.8	1
Depart	1	0	1	0	6.3		1	Depart	0	0	0	0	6.3	0
Total	3	1	3	0	13.0		3	Total	1	1	1	0	13.0	1
East Leg Volumes								**East Leg Volumes**						
Approach	29	0	29	0	6.0		29	Approach	55	0	54	1	6.0	56
Depart	29	0	26	3	6.5		33	Depart	39	0	35	4	6.5	44
Total	58	1	55	3	12.5		62	Total	94	1	89	5	12.5	100
West Leg Volumes								**West Leg Volumes**						
Approach	32	0	32	0	6.0		32	Approach	64	0	63	1	6.0	65
Depart	26	0	23	3	6.5		30	Depart	60	0	54	6	6.5	67
Total	58	1	55	3	12.5		62	Total	124	1	117	7	12.5	132
All Legs								**All Legs**						
Approach	92	1	86	6	25.5		100	Approach	161	1	150	11	25.5	174
Depart	92	1	86	6	25.5		100	Depart	161	1	150	11	25.5	174
Total	184	3	172	12	51.1		200	Total	322	3	300	22	51.1	348

Existing Peak Hour Volumes - Non-Classification Counts

27 **Lenwood Rd & SR 58 EB Ramps**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	21.3%	0	0	2.3	0	0
NT	17	21.3%	13	4	2.3	9	22
NR	12	21.3%	9	3	2.3	7	16
SL	14	21.3%	11	3	2.3	7	18
ST	13	21.3%	10	3	2.3	7	17
SR	0	21.3%	0	0	2.3	0	0
EL	3	2.0%	3	0	2.0	0	3
ET	0	2.0%	0	0	2.0	0	0
ER	20	2.0%	20	0	2.0	0	20
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							96
North Leg Volumes							
Approach	27	1	21	6	6.8		35
Depart	20	0	16	4	6.3		25
Total	47	1	37	10	13.0		60
South Leg Volumes							
Approach	29	1	22	7	6.8		38
Depart	33	0	30	3	6.3		37
Total	62	1	52	10	13.0		75
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	26	0	20	6	6.5		34
Total	26	1	20	6	12.5		34
West Leg Volumes							
Approach	23	0	23	0	6.0		23
Depart	0	0	0	0	6.5		0
Total	23	1	23	0	12.5		23
All Legs							
Approach	79	1	66	13	25.5		96
Depart	79	1	66	13	25.5		96
Total	158	3	132	26	51.1		192

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	21.3%	0	0	2.3	0	0
NT	35	21.3%	28	7	2.3	16	44
NR	17	21.3%	13	4	2.3	9	22
SL	8	21.3%	6	2	2.3	5	11
ST	30	21.3%	24	6	2.3	14	38
SR	0	21.3%	0	0	2.3	0	0
EL	4	2.0%	4	0	2.0	0	4
ET	1	2.0%	1	0	2.0	0	1
ER	20	2.0%	20	0	2.0	0	20
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							140
North Leg Volumes							
Approach	38	1	30	8	6.8		49
Depart	39	0	32	7	6.3		48
Total	77	1	62	15	13.0		97
South Leg Volumes							
Approach	52	1	41	11	6.8		66
Depart	50	0	44	6	6.3		58
Total	102	1	85	17	13.0		124
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	26	0	20	6	6.5		34
Total	26	1	20	6	12.5		34
West Leg Volumes							
Approach	25	0	25	0	6.0		25
Depart	0	0	0	0	6.5		0
Total	25	1	25	0	12.5		25
All Legs							
Approach	115	1	96	19	25.5		140
Depart	115	1	96	19	25.5		140
Total	230	3	192	38	51.1		280

Existing Peak Hour Volumes - Non-Classification Counts

28 **Lenwood Rd & SR 58 WB Ramps**

	AM Peak Hour Volumes							PM Peak Hour Volumes						
		Truck Volumes					Total		Truck Volumes					Total
	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume
NL	14	21.3%	11	3	2.3	7	18	21	21.3%	17	4	2.3	9	26
NT	0	21.3%	0	0	2.3	0	0	0	21.3%	0	0	2.3	0	0
NR	11	21.3%	9	2	2.3	5	14	14	21.3%	11	3	2.3	7	18
SL	0	21.3%	0	0	2.3	0	0	0	21.3%	0	0	2.3	0	0
ST	0	21.3%	0	0	2.3	0	0	0	21.3%	0	0	2.3	0	0
SR	0	21.3%	0	0	2.3	0	0	0	21.3%	0	0	2.3	0	0
EL	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
ET	1	2.0%	1	0	2.0	0	1	20	2.0%	20	0	2.0	0	20
ER	21	2.0%	21	0	2.0	0	21	31	2.0%	30	1	2.0	2	32
WL	8	2.0%	8	0	2.0	0	8	15	2.0%	15	0	2.0	0	15
WT	6	2.0%	6	0	2.0	0	6	14	2.0%	14	0	2.0	0	14
WR	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
							68							125
North Leg Volumes								**North Leg Volumes**						
Approach	0	1	0	0	6.8		0	Approach	0	1	0	0	6.8	0
Depart	0	0	0	0	6.3		0	Depart	0	0	0	0	6.3	0
Total	0	1	0	0	13.0		0	Total	0	1	0	0	13.0	0
South Leg Volumes								**South Leg Volumes**						
Approach	25	1	20	5	6.8		32	Approach	35	1	28	7	6.8	44
Depart	29	0	29	0	6.3		29	Depart	46	0	45	1	6.3	47
Total	54	1	49	5	13.0		61	Total	81	1	73	8	13.0	91
East Leg Volumes								**East Leg Volumes**						
Approach	14	0	14	0	6.0		14	Approach	29	0	29	0	6.0	29
Depart	12	0	10	2	6.5		15	Depart	34	0	31	3	6.5	38
Total	26	1	24	2	12.5		29	Total	63	1	60	3	12.5	67
West Leg Volumes								**West Leg Volumes**						
Approach	22	0	22	0	6.0		22	Approach	51	0	50	1	6.0	52
Depart	20	0	17	3	6.5		24	Depart	35	0	31	4	6.5	40
Total	42	1	39	3	12.5		46	Total	86	1	81	5	12.5	92
All Legs								**All Legs**						
Approach	61	1	56	5	25.5		68	Approach	115	1	107	8	25.5	125
Depart	61	1	56	5	25.5		68	Depart	115	1	107	8	25.5	125
Total	122	3	112	10	51.1		136	Total	230	3	214	16	51.1	250

Existing Peak Hour Volumes - Non-Classification Counts

29 **Arco Dwy & Main St**

	AM Peak Hour Volumes							PM Peak Hour Volumes						
		Truck Volumes					Total		Truck Volumes					Total
	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume
NL	76	2.0%	74	2	2.0	4	78	142	2.0%	139	3	2.0	6	145
NT	18	2.0%	18	0	2.0	0	18	32	2.0%	31	1	2.0	2	33
NR	149	2.0%	146	3	2.0	6	152	175	2.0%	172	3	2.0	6	178
SL	17	2.0%	17	0	2.0	0	17	24	2.0%	24	0	2.0	0	24
ST	26	2.0%	25	1	2.0	2	27	39	2.0%	38	1	2.0	2	40
SR	12	2.0%	12	0	2.0	0	12	31	2.0%	30	1	2.0	2	32
EL	12	14.6%	10	2	1.6	3	13	23	14.6%	20	3	1.6	5	25
ET	271	14.6%	231	40	1.6	64	295	214	14.6%	183	31	1.6	49	232
ER	97	14.6%	83	14	1.6	22	105	109	14.6%	93	16	1.6	25	118
WL	118	14.6%	101	17	1.6	27	128	216	14.6%	185	31	1.6	49	234
WT	147	14.6%	126	21	1.6	33	159	262	14.6%	224	38	1.6	60	284
WR	2	14.6%	2	0	1.6	0	2	3	14.6%	3	0	1.6	0	3
							1,006							1,348
North Leg Volumes								**North Leg Volumes**						
Approach	55	0	54	1	6.0		56	Approach	94	0	92	2	6.0	96
Depart	32	0	30	2	5.2		33	Depart	58	0	54	4	5.2	61
Total	87	0	84	3	11.2		89	Total	152	0	146	6	11.2	157
South Leg Volumes								**South Leg Volumes**						
Approach	243	0	238	5	6.0		248	Approach	349	0	342	7	6.0	356
Depart	241	0	209	32	5.2		260	Depart	364	0	316	48	5.2	392
Total	484	0	447	37	11.2		508	Total	713	0	658	55	11.2	748
East Leg Volumes								**East Leg Volumes**						
Approach	267	0	229	38	4.8		289	Approach	481	0	412	69	4.8	521
Depart	437	0	394	43	5.6		464	Depart	413	0	379	34	5.6	434
Total	704	1	623	81	10.4		753	Total	894	1	791	103	10.4	955
West Leg Volumes								**West Leg Volumes**						
Approach	380	0	324	56	4.8		413	Approach	346	0	296	50	4.8	375
Depart	235	0	212	23	5.6		249	Depart	435	0	393	42	5.6	461
Total	615	1	536	79	10.4		662	Total	781	1	689	92	10.4	836
All Legs								**All Legs**						
Approach	945	1	845	100	21.5		1,006	Approach	1,270	1	1,142	128	21.5	1,348
Depart	945	1	845	100	21.5		1,006	Depart	1,270	1	1,142	128	21.5	1,348
Total	1,890	2	1,690	200	43.1		2,012	Total	2,540	2	2,284	256	43.1	2,696

Existing Peak Hour Volumes - Non-Classification Counts

30 **Ave H & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	46	2.0%	45	1	2.0	2	47
NT	2	2.0%	2	0	2.0	0	2
NR	87	2.0%	85	2	2.0	4	89
SL	25	2.0%	25	0	2.0	0	25
ST	2	2.0%	2	0	2.0	0	2
SR	11	2.0%	11	0	2.0	0	11
EL	15	14.6%	13	2	1.6	3	16
ET	409	14.6%	349	60	1.6	95	444
ER	25	14.6%	21	4	1.6	6	27
WL	47	14.6%	40	7	1.6	11	51
WT	255	14.6%	218	37	1.6	59	277
WR	16	14.6%	14	2	1.6	3	17
							1,008
North Leg Volumes							
Approach	38	0	38	0	6.0		38
Depart	33	0	29	4	5.2		35
Total	71	0	67	4	11.2		73
South Leg Volumes							
Approach	135	0	132	3	6.0		138
Depart	74	0	63	11	5.2		80
Total	209	0	195	14	11.2		218
East Leg Volumes							
Approach	318	0	272	46	4.8		345
Depart	521	0	459	62	5.6		558
Total	839	1	731	108	10.4		903
West Leg Volumes							
Approach	449	0	383	66	4.8		487
Depart	312	0	274	38	5.6		335
Total	761	1	657	104	10.4		822
All Legs							
Approach	940	1	825	115	21.5		1,008
Depart	940	1	825	115	21.5		1,008
Total	1,880	2	1,650	230	43.1		2,016

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	48	2.0%	47	1	2.0	2	49
NT	1	2.0%	1	0	2.0	0	1
NR	85	2.0%	83	2	2.0	4	87
SL	11	2.0%	11	0	2.0	0	11
ST	3	2.0%	3	0	2.0	0	3
SR	10	2.0%	10	0	2.0	0	10
EL	7	14.6%	6	1	1.6	2	8
ET	387	14.6%	331	56	1.6	89	420
ER	51	14.6%	44	7	1.6	11	55
WL	89	14.6%	76	13	1.6	21	97
WT	453	14.6%	387	66	1.6	105	492
WR	9	14.6%	8	1	1.6	2	10
							1,243
North Leg Volumes							
Approach	24	0	24	0	6.0		24
Depart	17	0	15	2	5.2		19
Total	41	0	39	2	11.2		43
South Leg Volumes							
Approach	134	0	131	3	6.0		137
Depart	143	0	123	20	5.2		155
Total	277	0	254	23	11.2		292
East Leg Volumes							
Approach	551	0	471	80	4.8		599
Depart	483	0	425	58	5.6		518
Total	1,034	1	896	138	10.4		1,117
West Leg Volumes							
Approach	445	0	381	64	4.8		483
Depart	511	0	444	67	5.6		551
Total	956	1	825	131	10.4		1,034
All Legs							
Approach	1,154	1	1,007	147	21.5		1,243
Depart	1,154	1	1,007	147	21.5		1,243
Total	2,308	2	2,014	294	43.1		2,486

Existing Peak Hour Volumes - Non-Classification Counts

31 **Ave A & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
		Truck Volumes					
NL	54	2.0%	53	1	2.0	2	55
NT	2	2.0%	2	0	2.0	0	2
NR	16	2.0%	16	0	2.0	0	16
SL	4	2.0%	4	0	2.0	0	4
ST	0	2.0%	0	0	2.0	0	0
SR	1	2.0%	1	0	2.0	0	1
EL	8	14.6%	7	1	1.6	2	9
ET	407	14.6%	348	59	1.6	94	442
ER	80	14.6%	68	12	1.6	19	87
WL	11	14.6%	9	2	1.6	3	12
WT	355	14.6%	303	52	1.6	83	386
WR	6	14.6%	5	1	1.6	2	7
							1,021
North Leg Volumes							
Approach	5	0	5	0	6.0		5
Depart	16	0	14	2	5.2		18
Total	21	0	19	2	11.2		23
South Leg Volumes							
Approach	72	0	71	1	6.0		73
Depart	91	0	77	14	5.2		99
Total	163	0	148	15	11.2		172
East Leg Volumes							
Approach	372	0	317	55	4.8		405
Depart	427	0	368	59	5.6		462
Total	799	1	685	114	10.4		867
West Leg Volumes							
Approach	495	0	423	72	4.8		538
Depart	410	0	357	53	5.6		442
Total	905	1	780	125	10.4		980
All Legs							
Approach	944	1	816	128	21.5		1,021
Depart	944	1	816	128	21.5		1,021
Total	1,888	2	1,632	256	43.1		2,042

PM Peak Hour Volumes

	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
		Truck Volumes					
NL	81	2.0%	79	2	2.0	4	83
NT	0	2.0%	0	0	2.0	0	0
NR	33	2.0%	32	1	2.0	2	34
SL	6	2.0%	6	0	2.0	0	6
ST	2	2.0%	2	0	2.0	0	2
SR	5	2.0%	5	0	2.0	0	5
EL	2	14.6%	2	0	1.6	0	2
ET	478	14.6%	408	70	1.6	111	519
ER	69	14.6%	59	10	1.6	16	75
WL	31	14.6%	26	5	1.6	8	34
WT	510	14.6%	436	74	1.6	118	554
WR	4	14.6%	3	1	1.6	2	5
							1,319
North Leg Volumes							
Approach	13	0	13	0	6.0		13
Depart	6	0	5	1	5.2		7
Total	19	0	18	1	11.2		20
South Leg Volumes							
Approach	114	0	111	3	6.0		117
Depart	102	0	87	15	5.2		111
Total	216	0	198	18	11.2		228
East Leg Volumes							
Approach	545	0	465	80	4.8		593
Depart	517	0	446	71	5.6		559
Total	1,062	1	911	151	10.4		1,152
West Leg Volumes							
Approach	549	0	469	80	4.8		596
Depart	596	0	520	76	5.6		642
Total	1,145	1	989	156	10.4		1,238
All Legs							
Approach	1,221	1	1,058	163	21.5		1,319
Depart	1,221	1	1,058	163	21.5		1,319
Total	2,442	2	2,116	326	43.1		2,638

Existing Peak Hour Volumes - Non-Classification Counts

32 **1st Ave & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	31	2.0%	30	1	2.0	2	32
NT	22	2.0%	22	0	2.0	0	22
NR	22	2.0%	22	0	2.0	0	22
SL	137	2.0%	134	3	2.0	6	140
ST	38	2.0%	37	1	2.0	2	39
SR	127	2.0%	124	3	2.0	6	130
EL	99	11.4%	88	11	1.6	18	106
ET	301	11.4%	267	34	1.6	55	322
ER	20	11.4%	18	2	1.6	3	21
WL	21	11.4%	19	2	1.6	3	22
WT	236	11.4%	209	27	1.6	44	253
WR	90	11.4%	80	10	1.6	16	96
							1,205
North Leg Volumes							
Approach	302	0	295	7	6.0		309
Depart	211	0	190	21	5.2		224
Total	513	0	485	28	11.2		533
South Leg Volumes							
Approach	75	0	74	1	6.0		76
Depart	79	0	74	5	5.2		82
Total	154	0	148	6	11.2		158
East Leg Volumes							
Approach	347	0	308	39	4.9		371
Depart	460	0	423	37	5.6		484
Total	807	0	731	76	10.5		855
West Leg Volumes							
Approach	420	0	373	47	4.9		449
Depart	394	0	363	31	5.6		415
Total	814	0	736	78	10.5		864
All Legs							
Approach	1,144	1	1,050	94	21.7		1,205
Depart	1,144	1	1,050	94	21.7		1,205
Total	2,288	2	2,100	188	43.4		2,410

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	29	2.0%	28	1	2.0	2	30
NT	24	2.0%	24	0	2.0	0	24
NR	16	2.0%	16	0	2.0	0	16
SL	175	2.0%	172	3	2.0	6	178
ST	29	2.0%	28	1	2.0	2	30
SR	170	2.0%	167	3	2.0	6	173
EL	96	11.4%	85	11	1.6	18	103
ET	402	11.4%	356	46	1.6	74	430
ER	22	11.4%	19	3	1.6	5	24
WL	16	11.4%	14	2	1.6	3	17
WT	379	11.4%	336	43	1.6	70	406
WR	114	11.4%	101	13	1.6	21	122
							1,553
North Leg Volumes							
Approach	374	0	367	7	6.0		381
Depart	234	0	210	24	5.2		249
Total	608	0	577	31	11.2		630
South Leg Volumes							
Approach	69	0	68	1	6.0		70
Depart	67	0	61	6	5.2		71
Total	136	0	129	7	11.2		141
East Leg Volumes							
Approach	509	0	451	58	4.9		545
Depart	593	0	544	49	5.6		624
Total	1,102	0	995	107	10.5		1,169
West Leg Volumes							
Approach	520	0	460	60	4.9		557
Depart	578	0	531	47	5.6		609
Total	1,098	0	991	107	10.5		1,166
All Legs							
Approach	1,472	1	1,346	126	21.7		1,553
Depart	1,472	1	1,346	126	21.7		1,553
Total	2,944	2	2,692	252	43.4		3,106

Existing Peak Hour Volumes - Non-Classification Counts

33 **& Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	112	9.2%	102	10	1.6	16	118
NT	0	9.2%	0	0	1.6	0	0
NR	51	9.2%	46	5	1.6	8	54
SL	0	9.2%	0	0	1.6	0	0
ST	0	9.2%	0	0	1.6	0	0
SR	0	9.2%	0	0	1.6	0	0
EL	0	11.4%	0	0	1.6	0	0
ET	312	11.4%	276	36	1.6	58	334
ER	116	11.4%	103	13	1.6	21	124
WL	42	11.4%	37	5	1.6	8	45
WT	239	11.4%	212	27	1.6	44	256
WR	0	11.4%	0	0	1.6	0	0
							931
North Leg Volumes							
Approach	0	0	0	0	4.8		0
Depart	0	0	0	0	4.8		0
Total	0	1	0	0	9.6		0
South Leg Volumes							
Approach	163	0	148	15	4.8		172
Depart	158	0	140	18	4.8		169
Total	321	1	288	33	9.6		341
East Leg Volumes							
Approach	281	0	249	32	4.9		301
Depart	363	0	322	41	4.8		388
Total	644	1	571	73	9.7		689
West Leg Volumes							
Approach	428	0	379	49	4.9		458
Depart	351	0	314	37	4.8		374
Total	779	1	693	86	9.7		832
All Legs							
Approach	872	1	776	96	19.2		931
Depart	872	1	776	96	19.2		931
Total	1,744	2	1,552	192	38.5		1,862

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	165	9.2%	150	15	1.6	24	174
NT	0	9.2%	0	0	1.6	0	0
NR	71	9.2%	64	7	1.6	11	75
SL	0	9.2%	0	0	1.6	0	0
ST	0	9.2%	0	0	1.6	0	0
SR	0	9.2%	0	0	1.6	0	0
EL	0	11.4%	0	0	1.6	0	0
ET	402	11.4%	356	46	1.6	74	430
ER	169	11.4%	150	19	1.6	31	181
WL	91	11.4%	81	10	1.6	16	97
WT	351	11.4%	311	40	1.6	65	376
WR	0	11.4%	0	0	1.6	0	0
							1,333
North Leg Volumes							
Approach	0	0	0	0	4.8		0
Depart	0	0	0	0	4.8		0
Total	0	1	0	0	9.6		0
South Leg Volumes							
Approach	236	0	214	22	4.8		249
Depart	260	0	231	29	4.8		278
Total	496	1	445	51	9.6		527
East Leg Volumes							
Approach	442	0	392	50	4.9		473
Depart	473	0	420	53	4.8		505
Total	915	1	812	103	9.7		978
West Leg Volumes							
Approach	571	0	506	65	4.9		611
Depart	516	0	461	55	4.8		550
Total	1,087	1	967	120	9.7		1,161
All Legs							
Approach	1,249	1	1,112	137	19.2		1,333
Depart	1,249	1	1,112	137	19.2		1,333
Total	2,498	2	2,224	274	38.5		2,666

Existing Peak Hour Volumes - Non-Classification Counts

34 **Barstow Rd & Virginia Way**

	AM Peak Hour Volumes							PM Peak Hour Volumes						
		Truck Volumes					Total		Truck Volumes					Total
	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume
NL	20	9.2%	18	2	1.6	3	21	36	9.2%	33	3	1.6	5	38
NT	402	9.2%	365	37	1.6	59	424	366	9.2%	332	34	1.6	54	386
NR	155	9.2%	141	14	1.6	22	163	227	9.2%	206	21	1.6	33	239
SL	58	9.2%	53	5	1.6	8	61	92	9.2%	84	8	1.6	13	97
ST	250	9.2%	227	23	1.6	37	264	458	9.2%	416	42	1.6	67	483
SR	6	9.2%	5	1	1.6	2	7	4	9.2%	4	0	1.6	0	4
EL	1	2.0%	1	0	2.0	0	1	9	2.0%	9	0	2.0	0	9
ET	37	2.0%	36	1	2.0	2	38	61	2.0%	60	1	2.0	2	62
ER	35	2.0%	34	1	2.0	2	36	67	2.0%	66	1	2.0	2	68
WL	128	2.0%	125	3	2.0	6	131	226	2.0%	221	5	2.0	10	231
WT	35	2.0%	34	1	2.0	2	36	42	2.0%	41	1	2.0	2	43
WR	54	2.0%	53	1	2.0	2	55	82	2.0%	80	2	2.0	4	84
							1,237							1,744
North Leg Volumes								**North Leg Volumes**						
Approach	314	0	285	29	4.8		332	Approach	554	0	504	50	4.8	584
Depart	457	0	419	38	5.6		480	Depart	457	0	421	36	5.6	479
Total	771	0	704	67	10.4		812	Total	1,011	0	925	86	10.4	1,063
South Leg Volumes								**South Leg Volumes**						
Approach	577	0	524	53	4.8		608	Approach	629	0	571	58	4.8	663
Depart	413	0	386	27	5.6		431	Depart	751	0	703	48	5.6	782
Total	990	0	910	80	10.4		1,039	Total	1,380	0	1,274	106	10.4	1,445
East Leg Volumes								**East Leg Volumes**						
Approach	217	0	212	5	6.0		222	Approach	350	0	342	8	6.0	358
Depart	250	0	230	20	5.2		262	Depart	380	0	350	30	5.2	398
Total	467	0	442	25	11.2		484	Total	730	0	692	38	11.2	756
West Leg Volumes								**West Leg Volumes**						
Approach	73	0	71	2	6.0		75	Approach	137	0	135	2	6.0	139
Depart	61	0	57	4	5.2		64	Depart	82	0	78	4	5.2	85
Total	134	0	128	6	11.2		139	Total	219	0	213	6	11.2	224
All Legs								**All Legs**						
Approach	1,181	1	1,092	89	21.5		1,237	Approach	1,670	1	1,552	118	21.5	1,744
Depart	1,181	1	1,092	89	21.5		1,237	Depart	1,670	1	1,552	118	21.5	1,744
Total	2,362	1	2,184	178	43.1		2,474	Total	3,340	1	3,104	236	43.1	3,488

Existing Peak Hour Volumes - Non-Classification Counts

35 **Barstow Rd & I-15 SB Off-Ramp**

	AM Peak Hour Volumes							PM Peak Hour Volumes						
		Truck Volumes					Total		Truck Volumes					Total
	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume
NL	128	9.2%	116	12	1.6	19	135	238	9.2%	216	22	1.6	35	251
NT	565	9.2%	513	52	1.6	83	596	603	9.2%	547	56	1.6	89	636
NR	0	9.2%	0	0	1.6	0	0	0	9.2%	0	0	1.6	0	0
SL	0	9.2%	0	0	1.6	0	0	0	9.2%	0	0	1.6	0	0
ST	310	9.2%	281	29	1.6	46	327	518	9.2%	470	48	1.6	76	546
SR	165	9.2%	150	15	1.6	24	174	328	9.2%	298	30	1.6	48	346
EL	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
WL	48	2.0%	47	1	2.0	2	49	156	2.0%	153	3	2.0	6	159
WT	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
WR	81	2.0%	79	2	2.0	4	83	126	2.0%	123	3	2.0	6	129
							1,364							2,067
North Leg Volumes								**North Leg Volumes**						
Approach	475	0	431	44	4.8		501	Approach	846	0	768	78	4.8	892
Depart	646	0	592	54	5.6		679	Depart	729	0	670	59	5.6	765
Total	1,121	0	1,023	98	10.4		1,180	Total	1,575	0	1,438	137	10.4	1,657
South Leg Volumes								**South Leg Volumes**						
Approach	693	0	629	64	4.8		731	Approach	841	0	763	78	4.8	887
Depart	358	0	328	30	5.6		376	Depart	674	0	623	51	5.6	705
Total	1,051	0	957	94	10.4		1,107	Total	1,515	0	1,386	129	10.4	1,592
East Leg Volumes								**East Leg Volumes**						
Approach	129	0	126	3	6.0		132	Approach	282	0	276	6	6.0	288
Depart	0	0	0	0	5.2		0	Depart	0	0	0	0	5.2	0
Total	129	0	126	3	11.2		132	Total	282	0	276	6	11.2	288
West Leg Volumes								**West Leg Volumes**						
Approach	0	0	0	0	6.0		0	Approach	0	0	0	0	6.0	0
Depart	293	0	266	27	5.2		309	Depart	566	0	514	52	5.2	597
Total	293	0	266	27	11.2		309	Total	566	0	514	52	11.2	597
All Legs								**All Legs**						
Approach	1,297	1	1,186	111	21.5		1,364	Approach	1,969	1	1,807	162	21.5	2,067
Depart	1,297	1	1,186	111	21.5		1,364	Depart	1,969	1	1,807	162	21.5	2,067
Total	2,594	1	2,372	222	43.1		2,728	Total	3,938	1	3,614	324	43.1	4,134

Existing Peak Hour Volumes - Non-Classification Counts

36 **Barstow Rd & I-15 NB Ramps**

	AM Peak Hour Volumes							PM Peak Hour Volumes						
		Truck Volumes					Total		Truck Volumes					Total
	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume
NL	77	9.5%	70	7	2.0	14	84	52	9.5%	47	5	2.0	10	57
NT	480	9.5%	434	46	2.0	92	526	643	9.5%	582	61	2.0	122	704
NR	0	9.5%	0	0	2.0	0	0	0	9.5%	0	0	2.0	0	0
SL	0	9.5%	0	0	2.0	0	0	0	9.5%	0	0	2.0	0	0
ST	247	9.5%	223	24	2.0	48	271	597	9.5%	540	57	2.0	114	654
SR	59	9.5%	53	6	2.0	12	65	77	9.5%	70	7	2.0	14	84
EL	264	2.0%	259	5	2.0	10	269	198	2.0%	194	4	2.0	8	202
ET	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
ER	199	2.0%	195	4	2.0	8	203	253	2.0%	248	5	2.0	10	258
WL	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0	0	2.0%	0	0	2.0	0	0
							1,418							1,959
North Leg Volumes								**North Leg Volumes**						
Approach	306	0	276	30	6.0		336	Approach	674	0	610	64	6.0	738
Depart	744	0	693	51	6.0		795	Depart	841	0	776	65	6.0	906
Total	1,050	0	969	81	12.0		1,131	Total	1,515	0	1,386	129	12.0	1,644
South Leg Volumes								**South Leg Volumes**						
Approach	557	0	504	53	6.0		610	Approach	695	0	629	66	6.0	761
Depart	446	0	418	28	6.0		474	Depart	850	0	788	62	6.0	912
Total	1,003	0	922	81	12.0		1,084	Total	1,545	0	1,417	128	12.0	1,673
East Leg Volumes								**East Leg Volumes**						
Approach	0	0	0	0	6.0		0	Approach	0	0	0	0	6.0	0
Depart	0	0	0	0	6.0		0	Depart	0	0	0	0	6.0	0
Total	0	0	0	0	12.0		0	Total	0	0	0	0	12.0	0
West Leg Volumes								**West Leg Volumes**						
Approach	463	0	454	9	6.0		472	Approach	451	0	442	9	6.0	460
Depart	136	0	123	13	6.0		149	Depart	129	0	117	12	6.0	141
Total	599	0	577	22	12.0		621	Total	580	0	559	21	12.0	601
All Legs								**All Legs**						
Approach	1,326	1	1,234	92	24.0		1,418	Approach	1,820	1	1,681	139	24.0	1,959
Depart	1,326	1	1,234	92	24.0		1,418	Depart	1,820	1	1,681	139	24.0	1,959
Total	2,652	1	2,468	184	47.9		2,836	Total	3,640	1	3,362	278	47.9	3,918

Existing Peak Hour Volumes - Non-Classification Counts

37 **Barstow Rd & Armory Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	9	9.5%	8	1	2.0	2	10
NT	304	9.5%	275	29	2.0	58	333
NR	25	9.5%	23	2	2.0	4	27
SL	129	9.5%	117	12	2.0	24	141
ST	308	9.5%	279	29	2.0	58	337
SR	6	9.5%	5	1	2.0	2	7
EL	45	2.0%	44	1	2.0	2	46
ET	9	2.0%	9	0	2.0	0	9
ER	16	2.0%	16	0	2.0	0	16
WL	29	2.0%	28	1	2.0	2	30
WT	13	2.0%	13	0	2.0	0	13
WR	170	2.0%	167	3	2.0	6	173
							1,142
North Leg Volumes							
Approach	443	0	401	42	6.0		485
Depart	519	0	486	33	6.0		552
Total	962	0	887	75	12.0		1,037
South Leg Volumes							
Approach	338	0	306	32	6.0		370
Depart	353	0	323	30	6.0		383
Total	691	0	629	62	12.0		753
East Leg Volumes							
Approach	212	0	208	4	6.0		216
Depart	163	0	149	14	6.0		177
Total	375	0	357	18	12.0		393
West Leg Volumes							
Approach	70	0	69	1	6.0		71
Depart	28	0	26	2	6.0		30
Total	98	0	95	3	12.0		101
All Legs							
Approach	1,063	1	984	79	24.0		1,142
Depart	1,063	1	984	79	24.0		1,142
Total	2,126	1	1,968	158	47.9		2,284

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	16	9.5%	14	2	2.0	4	18
NT	339	9.5%	307	32	2.0	64	371
NR	55	9.5%	50	5	2.0	10	60
SL	248	9.5%	224	24	2.0	48	272
ST	517	9.5%	468	49	2.0	98	566
SR	33	9.5%	30	3	2.0	6	36
EL	76	2.0%	74	2	2.0	4	78
ET	19	2.0%	19	0	2.0	0	19
ER	25	2.0%	25	0	2.0	0	25
WL	73	2.0%	72	1	2.0	2	74
WT	19	2.0%	19	0	2.0	0	19
WR	260	2.0%	255	5	2.0	10	265
							1,803
North Leg Volumes							
Approach	798	0	722	76	6.0		874
Depart	675	0	636	39	6.0		714
Total	1,473	0	1,358	115	12.0		1,588
South Leg Volumes							
Approach	410	0	371	39	6.0		449
Depart	615	0	565	50	6.0		665
Total	1,025	0	936	89	12.0		1,114
East Leg Volumes							
Approach	352	0	346	6	6.0		358
Depart	322	0	293	29	6.0		351
Total	674	0	639	35	12.0		709
West Leg Volumes							
Approach	120	0	118	2	6.0		122
Depart	68	0	63	5	6.0		73
Total	188	0	181	7	12.0		195
All Legs							
Approach	1,680	1	1,557	123	24.0		1,803
Depart	1,680	1	1,557	123	24.0		1,803
Total	3,360	1	3,114	246	47.9		3,606

Existing Peak Hour Volumes - Non-Classification Counts

38 **Barstow Rd & Rimrock Rd**

	AM Peak Hour Volumes							PM Peak Hour Volumes						
		Truck Volumes					Total		Truck Volumes					Total
	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume	Total Vehicles	Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	PCE Volume
NL	12	9.5%	11	1	2.0	2	13	26	9.5%	24	2	2.0	4	28
NT	81	9.5%	73	8	2.0	16	89	160	9.5%	145	15	2.0	30	175
NR	13	9.5%	12	1	2.0	2	14	28	9.5%	25	3	2.0	6	31
SL	116	9.5%	105	11	2.0	22	127	142	9.5%	128	14	2.0	28	156
ST	115	9.5%	104	11	2.0	22	126	145	9.5%	131	14	2.0	28	159
SR	65	9.5%	59	6	2.0	12	71	164	9.5%	148	16	2.0	32	180
EL	92	2.0%	90	2	2.0	4	94	112	2.0%	110	2	2.0	4	114
ET	96	2.0%	94	2	2.0	4	98	203	2.0%	199	4	2.0	8	207
ER	26	2.0%	25	1	2.0	2	27	22	2.0%	22	0	2.0	0	22
WL	35	2.0%	34	1	2.0	2	36	42	2.0%	41	1	2.0	2	43
WT	152	2.0%	149	3	2.0	6	155	181	2.0%	177	4	2.0	8	185
WR	99	2.0%	97	2	2.0	4	101	78	2.0%	76	2	2.0	4	80
							951							1,380
North Leg Volumes								**North Leg Volumes**						
Approach	296	0	268	28	6.0		324	Approach	451	0	407	44	6.0	495
Depart	272	0	260	12	6.0		284	Depart	350	0	331	19	6.0	369
Total	568	0	528	40	12.0		608	Total	801	0	738	63	12.0	864
South Leg Volumes								**South Leg Volumes**						
Approach	106	0	96	10	6.0		116	Approach	214	0	194	20	6.0	234
Depart	176	0	163	13	6.0		189	Depart	209	0	194	15	6.0	224
Total	282	0	259	23	12.0		305	Total	423	0	388	35	12.0	458
East Leg Volumes								**East Leg Volumes**						
Approach	286	0	280	6	6.0		292	Approach	301	0	294	7	6.0	308
Depart	225	0	211	14	6.0		239	Depart	373	0	352	21	6.0	394
Total	511	0	491	20	12.0		531	Total	674	0	646	28	12.0	702
West Leg Volumes								**West Leg Volumes**						
Approach	214	0	209	5	6.0		219	Approach	337	0	331	6	6.0	343
Depart	229	0	219	10	6.0		239	Depart	371	0	349	22	6.0	393
Total	443	0	428	15	12.0		458	Total	708	0	680	28	12.0	736
All Legs								**All Legs**						
Approach	902	1	853	49	24.0		951	Approach	1,303	1	1,226	77	24.0	1,380
Depart	902	1	853	49	24.0		951	Depart	1,303	1	1,226	77	24.0	1,380
Total	1,804	1	1,706	98	47.9		1,902	Total	2,606	1	2,452	154	47.9	2,760

Existing Peak Hour Volumes - Non-Classification Counts

39 **0 & Hinkley Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	1	2.0%	1	0	2.0	0	1
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	1	2.0%	1	0	2.0	0	1
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							2
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
South Leg Volumes							
Approach	1	0	1	0	6.0		1
Depart	1	0	1	0	6.0		1
Total	2	0	2	0	12.0		2
East Leg Volumes							
Approach	1	0	1	0	6.0		1
Depart	0	0	0	0	6.0		0
Total	1	0	1	0	12.0		1
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	1	0	1	0	6.0		1
Total	1	0	1	0	12.0		1
All Legs							
Approach	2	0	2	0	24.0		2
Depart	2	0	2	0	24.0		2
Total	4	0	4	0	48.0		4

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	1	2.0%	1	0	2.0	0	1
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	1	2.0%	1	0	2.0	0	1
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							2
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
South Leg Volumes							
Approach	1	0	1	0	6.0		1
Depart	1	0	1	0	6.0		1
Total	2	0	2	0	12.0		2
East Leg Volumes							
Approach	1	0	1	0	6.0		1
Depart	0	0	0	0	6.0		0
Total	1	0	1	0	12.0		1
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	1	0	1	0	6.0		1
Total	1	0	1	0	12.0		1
All Legs							
Approach	2	0	2	0	24.0		2
Depart	2	0	2	0	24.0		2
Total	4	0	4	0	48.0		4

Existing Peak Hour Volumes - Non-Classification Counts

40 **0 & Main St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	2	2.0%	2	0	2.0	0	2
NT	0	2.0%	0	0	2.0	0	0
NR	3	2.0%	3	0	2.0	0	3
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	7.4%	0	0	1.9	0	0
ET	271	7.4%	251	20	1.9	39	290
ER	2	7.4%	2	0	1.9	0	2
WL	4	7.4%	4	0	1.9	0	4
WT	207	7.4%	192	15	1.9	29	221
WR	0	7.4%	0	0	1.9	0	0
							522
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
South Leg Volumes							
Approach	5	0	5	0	6.0		5
Depart	6	0	6	0	5.9		6
Total	11	0	11	0	11.9		11
East Leg Volumes							
Approach	211	0	196	15	5.8		225
Depart	274	0	254	20	5.9		293
Total	485	0	450	35	11.7		518
West Leg Volumes							
Approach	273	0	253	20	5.8		292
Depart	209	0	194	15	5.9		223
Total	482	0	447	35	11.7		515
All Legs							
Approach	489	1	454	35	23.6		522
Depart	489	1	454	35	23.6		522
Total	978	1	908	70	47.2		1,044

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	1	2.0%	1	0	2.0	0	1
NT	0	2.0%	0	0	2.0	0	0
NR	18	2.0%	18	0	2.0	0	18
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	7.4%	0	0	1.9	0	0
ET	344	7.4%	318	26	1.9	50	368
ER	0	7.4%	0	0	1.9	0	0
WL	12	7.4%	11	1	1.9	2	13
WT	450	7.4%	416	34	1.9	66	482
WR	0	7.4%	0	0	1.9	0	0
							882
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	5.9		0
Total	0	0	0	0	11.9		0
South Leg Volumes							
Approach	19	0	19	0	6.0		19
Depart	12	0	11	1	5.9		13
Total	31	0	30	1	11.9		32
East Leg Volumes							
Approach	462	0	427	35	5.8		495
Depart	362	0	336	26	5.9		386
Total	824	0	763	61	11.7		881
West Leg Volumes							
Approach	344	0	318	26	5.8		368
Depart	451	0	417	34	5.9		483
Total	795	0	735	60	11.7		851
All Legs							
Approach	825	1	764	61	23.6		882
Depart	825	1	764	61	23.6		882
Total	1,650	1	1,528	122	47.2		1,764

Existing Peak Hour Volumes - Non-Classification Counts

41 **A St & Hinkley Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							0
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
All Legs							
Approach	0	0	0	0	24.0		0
Depart	0	0	0	0	24.0		0
Total	0	0	0	0	48.0		0

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							0
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
All Legs							
Approach	0	0	0	0	24.0		0
Depart	0	0	0	0	24.0		0
Total	0	0	0	0	48.0		0

Existing Peak Hour Volumes - Non-Classification Counts

42 **B St & Hinkley Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							0
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
All Legs							
Approach	0	0	0	0	24.0		0
Depart	0	0	0	0	24.0		0
Total	0	0	0	0	48.0		0

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							0
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
All Legs							
Approach	0	0	0	0	24.0		0
Depart	0	0	0	0	24.0		0
Total	0	0	0	0	48.0		0

Existing Peak Hour Volumes - Non-Classification Counts

43 **C St & Hinkley Rd**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							0
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
All Legs							
Approach	0	0	0	0	24.0		0
Depart	0	0	0	0	24.0		0
Total	0	0	0	0	48.0		0

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							0
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
All Legs							
Approach	0	0	0	0	24.0		0
Depart	0	0	0	0	24.0		0
Total	0	0	0	0	48.0		0

Existing Peak Hour Volumes - Non-Classification Counts

44 **C St & F St**

AM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							0
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
All Legs							
Approach	0	0	0	0	24.0		0
Depart	0	0	0	0	24.0		0
Total	0	0	0	0	48.0		0

PM Peak Hour Volumes

	Total Vehicles	Truck Volumes: Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE	Truck PCE	Total PCE Volume
NL	0	2.0%	0	0	2.0	0	0
NT	0	2.0%	0	0	2.0	0	0
NR	0	2.0%	0	0	2.0	0	0
SL	0	2.0%	0	0	2.0	0	0
ST	0	2.0%	0	0	2.0	0	0
SR	0	2.0%	0	0	2.0	0	0
EL	0	2.0%	0	0	2.0	0	0
ET	0	2.0%	0	0	2.0	0	0
ER	0	2.0%	0	0	2.0	0	0
WL	0	2.0%	0	0	2.0	0	0
WT	0	2.0%	0	0	2.0	0	0
WR	0	2.0%	0	0	2.0	0	0
							0
North Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
South Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
East Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
West Leg Volumes							
Approach	0	0	0	0	6.0		0
Depart	0	0	0	0	6.0		0
Total	0	0	0	0	12.0		0
All Legs							
Approach	0	0	0	0	24.0		0
Depart	0	0	0	0	24.0		0
Total	0	0	0	0	48.0		0

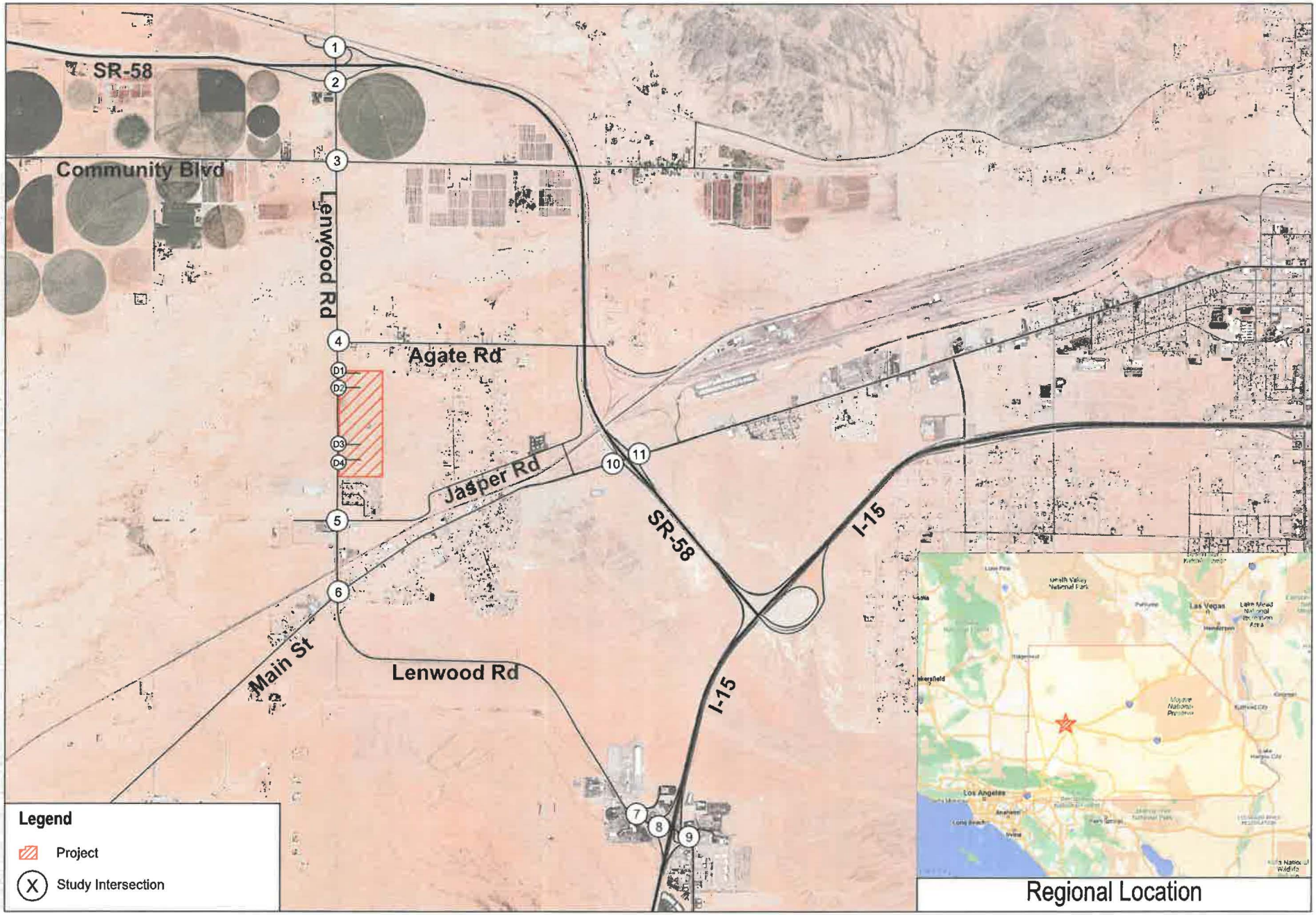
Int	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1	0	0	0	3	0	13	9	132	0	0	53	7	Hinkley Rd & Main St
2	0	0	6	0	0	0	0	120	0	2	78	0	Rail Yard Dwy & Main St
3	21	35	41	56	54	8	13	137	27	40	62	34	Lenwood Rd & Main St
4	0	99	0	0	108	1	3	0	0	0	0	0	Lenwood Rd & Sun Valley Dr
5	2	0	4	2	0	0	2	201	0	2	117	0	Holland St & Main St
6	2	0	0	2	0	0	2	205	1	2	117	0	Hannan St & Main St
7	2	0	0	2	0	0	2	202	2	2	114	1	Townsend St & Main St
8	2	0	0	2	0	0	2	217	0	2	107	0	Woods Ave & Main St
9	10	0	10	2	0	0	2	200	6	3	103	0	Frank St & Main St
10	8	0	15	0	0	0	0	211	4	16	96	0	Paris Ave & Main St
11	13	0	11	0	0	0	0	197	30	14	96	0	Ash Rd & Main St
12	4	0	31	0	0	0	0	203	3	11	125	0	Birch Rd & Main St
13	2	0	22	0	0	0	0	214	4	9	154	0	Western Dr & Main St
14	0	0	0	96	0	6	5	244	0	0	141	43	Pettit Rd & Main St
15	0	0	0	16	1	14	0	212	137	31	169	0	SR 58 EB Ramp & Main St
16	60	0	18	0	0	0	21	223	0	0	163	14	SR 58 WB Ramp & Main St
17	26	95	11	5	84	23	10	1	23	1	0	0	Lenwood Rd & Love's Travel Stop Dwy
18	59	134	0	0	107	6	3	0	78	0	0	0	Lenwood Rd & High Desert Rd
19	6	0	76	11	0	8	1	164	11	48	155	18	Truck Freightliner Service Point Dwy & Lenwood Rd
20	6	2	42	108	5	16	15	231	11	46	207	82	Commerce Pkwy & Lenwood Rd
21	0	0	0	182	0	189	0	216	0	0	174	0	I-15 SB Off Ramps & Lenwood Rd
22	103	61	173	4	0	162	63	174	0	0	316	28	High Point Pkwy & Lenwood Rd
23	6	54	11	2	56	0	0	1	3	28	0	3	Lenwood Rd & Jasper Rd
24	0	42	15	2	39	0	0	0	0	18	0	3	Lenwood Rd & Cam del Sol
25	1	1	34	0	8	0	0	0	2	17	0	0	Lenwood Rd & Agate Rd
26	0	2	0	20	0	17	18	13	1	0	13	16	Lenwood Rd & Community Blvd
27	0	22	16	18	17	0	3	0	20	0	0	0	Lenwood Rd & SR 58 EB Ramps
28	18	0	14	0	0	0	0	1	21	8	6	0	Lenwood Rd & SR 58 WB Ramps
29	78	18	152	17	27	12	13	295	105	128	159	2	Arco Dwy & Main St
30	47	2	89	25	2	11	16	444	27	51	277	17	Ave H & Main St
31	55	2	16	4	0	1	9	442	87	12	386	7	Ave A & Main St
32	32	22	22	140	39	130	106	322	21	22	253	96	1st Ave & Main St
33	118	0	54	0	0	0	0	334	124	45	256	0	& Main St
34	21	424	163	61	264	7	1	38	36	131	36	55	Barstow Rd & Virginia Way
35	135	596	0	0	327	174	0	0	0	49	0	83	Barstow Rd & I-15 SB Off-Ramp
36	84	526	0	0	271	65	269	0	203	0	0	0	Barstow Rd & I-15 NB Ramps
37	10	333	27	141	337	7	46	9	16	30	13	173	Barstow Rd & Armory Rd
38	13	89	14	127	126	71	94	98	27	36	155	101	Barstow Rd & Rimrock Rd
39	1	0	0	0	0	0	0	0	0	1	0	0	0 & Hinkley Rd
40	2	0	3	0	0	0	0	290	2	4	221	0	0 & Main St
41	0	0	0	0	0	0	0	0	0	0	0	0	A St & Hinkley Rd
42	0	0	0	0	0	0	0	0	0	0	0	0	B St & Hinkley Rd
43	0	0	0	0	0	0	0	0	0	0	0	0	C St & Hinkley Rd
44	0	0	0	0	0	0	0	0	0	0	0	0	C St & F St

Int	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1	0	0	0	8	0	30	7	78	0	0	269	9	Hinkley Rd & Main St
2	0	0	10	0	0	0	0	92	3	22	282	0	Rail Yard Dwy & Main St
3	33	46	68	46	74	31	7	90	36	42	146	67	Lenwood Rd & Main St
4	2	202	0	0	126	0	0	0	2	0	0	0	Lenwood Rd & Sun Valley Dr
5	2	0	3	2	0	2	2	196	2	3	342	0	Holland St & Main St
6	2	0	0	2	0	0	2	199	0	2	344	0	Hannan St & Main St
7	2	0	0	2	0	4	2	198	1	2	340	0	Townsend St & Main St
8	3	0	0	3	0	0	2	198	1	2	342	1	Woods Ave & Main St
9	20	0	13	2	1	0	2	186	18	16	322	0	Frank St & Main St
10	3	0	7	0	0	0	0	195	10	15	339	0	Paris Ave & Main St
11	21	0	19	0	0	0	0	176	21	20	322	0	Ash Rd & Main St
12	7	0	27	0	0	0	0	196	9	57	338	0	Birch Rd & Main St
13	4	0	17	0	0	0	0	221	4	25	407	0	Western Dr & Main St
14	0	0	0	83	0	11	13	229	0	0	422	116	Pettit Rd & Main St
15	0	0	0	21	4	20	0	227	91	17	521	0	SR 58 EB Ramp & Main St
16	172	0	20	0	0	0	21	243	0	0	383	23	SR 58 WB Ramp & Main St
17	28	184	6	1	111	15	17	0	18	13	0	2	Lenwood Rd & Love's Travel Stop Dwy
18	71	185	0	0	145	4	1	0	64	0	0	0	Lenwood Rd & High Desert Rd
19	6	0	46	4	0	6	7	192	15	88	271	19	Truck Freightliner Service Point Dwy & Lenwood Rd
20	14	1	67	130	3	13	13	243	15	55	305	99	Commerce Pkwy & Lenwood Rd
21	0	0	0	372	0	249	0	281	0	0	240	0	I-15 SB Off Ramps & Lenwood Rd
22	131	85	172	33	0	237	150	366	0	0	553	91	High Point Pkwy & Lenwood Rd
23	2	81	26	3	62	0	1	0	5	27	0	3	Lenwood Rd & Jasper Rd
24	0	56	29	2	47	0	0	0	0	16	0	2	Lenwood Rd & Cam del Sol
25	0	54	16	12	42	0	0	0	0	14	0	4	Lenwood Rd & Agate Rd
26	0	1	0	22	0	30	43	22	0	0	37	19	Lenwood Rd & Community Blvd
27	0	44	22	11	38	0	4	1	20	0	0	0	Lenwood Rd & SR 58 EB Ramps
28	26	0	18	0	0	0	0	20	32	15	14	0	Lenwood Rd & SR 58 WB Ramps
29	145	33	178	24	40	32	25	232	118	234	284	3	Arco Dwy & Main St
30	49	1	87	11	3	10	8	420	55	97	492	10	Ave H & Main St
31	83	0	34	6	2	5	2	519	75	34	554	5	Ave A & Main St
32	30	24	16	178	30	173	103	430	24	17	406	122	1st Ave & Main St
33	174	0	75	0	0	0	0	430	181	97	376	0	& Main St
34	38	386	239	97	483	4	9	62	68	231	43	84	Barstow Rd & Virginia Way
35	251	636	0	0	546	346	0	0	0	159	0	129	Barstow Rd & I-15 SB Off-Ramp
36	57	704	0	0	654	84	202	0	258	0	0	0	Barstow Rd & I-15 NB Ramps
37	18	371	60	272	566	36	78	19	25	74	19	265	Barstow Rd & Armory Rd
38	28	175	31	156	159	180	114	207	22	43	185	80	Barstow Rd & Rimrock Rd
39	1	0	0	0	0	0	0	0	0	1	0	0	0 & Hinkley Rd
40	1	0	18	0	0	0	0	368	0	13	482	0	0 & Main St
41	0	0	0	0	0	0	0	0	0	0	0	0	A St & Hinkley Rd
42	0	0	0	0	0	0	0	0	0	0	0	0	B St & Hinkley Rd
43	0	0	0	0	0	0	0	0	0	0	0	0	C St & Hinkley Rd
44	0	0	0	0	0	0	0	0	0	0	0	0	C St & F St

Roadway Segment Count PCE Conversion

	Count Year	2021	2021	2023	2023	2021	2023	2021	2023	2023	2021	2021	2021	2021	2021	2021	2023	2023	2021	2021	2021	2021
	Study Segment #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	A1
	Road	Main Street	Main Street	Main Street	Main Street	Main Street	Main Street	Main Street	Main Street	Barstow Road	Barstow Road	Barstow Road	Barstow Road	Lenwood Road	Lenwood Road	Lenwood Road	Lenwood Road	Lenwood Road	Lenwood Road	Hinkley Rd	Hinkley Rd	Lenwood Road
	Study Limits	Hinkley Road to Country Club Drive	Country Club Drive to Lenwood Road	Lenwood Road to County/City Boundary	County/City Boundary to SR 58 Eastbound Ramps	SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	SR 58 Westbound Ramps to L Street	L Street to 1st St	Avenue A to Barstow Road	Main Street to I-15 Southbound Ramps	I-15 Southbound Ramps to I-15 Northbound Ramps	I-15 Northbound ramps to Rimrock Road	SR 58 Westbound Ramps to Community Boulevard	Community Boulevard to Agate Road	Agate Road to Jasper Road	Jasper Road to Main Street	Main Street to High Desert Road	High Desert Road to I-15 Southbound Off Ramp	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	SR 58 Westbound Ramp to Project Driveway	Project Driveway to Main Street	N/A
	Count Location	National Trails Hwy W/O Viejo Ct	National Trails Hwy W/O Viejo Ct	Main St W/O SR-58	Main St W/O SR-58	Averaged from Segments 4 and 6	Main St E/O SR-58	Main St- Ave H to Ave D	Main St btw 1st Ave and Barstow Rd	Barstow Rd btw Mountain View and Virgina Way	Averaged from Segments 9 and 11	Barstow Rd-Armory Way to Rimrock Rd	Lenwood Rd btw Barstow-Bakersfeild Hwy and Community Bvld	Lenwood Rd btw Barstow-Bakersfeild Hwy and Community Bvld	Averaged from Segments 13 and 15	Lenwood Rd - W. Main St to Jasper Rd	S of Main St	Lenwood Rd S of High Point Rd. (Note count loc. Outside of study limits)	Averaged from Segments 17 and A1	Hinkley Rd N/O National Trails Hwy	Hinkley Rd N/O National Trails Hwy	I-15 to Mercantile Way
	Included in GPU?		Y		Y		Y	Y	Y	Y		Y			Y	Y		Y	Y			
	Count Set	BIG	BIG	GPU	GPU	GPU	GPU	BIG	GPU	GPU	N/A	Big	BIG	BIG	BIG	BIG	GPU	GPU	GPU	BIG	BIG	BIG
	Link to Count Sheet	K:\ORA_PLAN\195	K:\ORA_PLAN\195	"K:\ORA_PLAN\19	"K:\ORA_PLAN\195	165003 - BNSF Fe	K:\ORA_PLAN\195	K:\ORA_PLAN\195	K:\ORA_PLAN\195	K:\ORA_PLAN\195	N/A	K:\ORA_PLAN\195	K:\ORA_PLAN\195	K:\ORA_PLAN\195	K:\ORA_PLAN\195	K:\ORA_PLAN\195	"K:\ORA_PLAN\1	K:\ORA_PLAN\19	K:\ORA_PLAN\19	K:\ORA_PLAN\19	K:\ORA_PLAN\19	K:\ORA_PLAN\19
	ADT	3,610	3,610	9,642	9,642	8,316	6,990	12,794	12,188	11,062	11,099	11,136	1,289	1,289	3,829	6,368	3,608	10,581	8,972	353	353	7,362
	NB/EB	1,811	1,811	4,882	4,882	4,162	3,441	6,651	6,177	5,538	5,404	5,269	641	641	1,985	3,329	1,930	7,108	5,335	184	184	3,562
	SB/WB	1,799	1,799	4,760	4,760	4,155	3,549	6,143	6,011	5,524	5,696	5,867	648	648	1,844	3,039	1,678	3,473	3,637	169	169	3,800
	AM	214	214	686	686	579	471		844	745			238	238			204	927		27	27	561
	PM	337	337	873	873	775	676		1,080	994			410	410			293	1,043		27	27	696
Classification Number	PCE 1 (#1-3)	3,376	3,376	8,924	8,924	N/A	6,186	10,929	10,797	10,042	N/A	10,075	1,014	1,014	N/A	5,471	2,987	9,267	N/A	299	299	6,793
Classification Number	PCE 1.5 (#4-5)	166	166	442	442	N/A	320	1,712	1,220	935	N/A	652	136	136	N/A	838	378	887	N/A	40	40	358
Classification Number	PCE 2 (#6)	32	32	102	102	N/A	101	63	92	36	N/A	89	0	0	N/A	29	19	95	N/A	4	4	9
Classification Number	PCE 3 (#7+)	36	36	174	174	N/A	383	90	79	49	N/A	320	139	139	N/A	30	224	332	N/A	10	10	202
Classification %	PCE 1 (#1-3)	93.5%	94%	93%	92.6%	N/A	88.5%	85.4%	89%	91%	N/A	90%	79%	79%	N/A	86%	83%	88%	N/A	85%	85%	92%
Classification %	PCE 1.5 (#4-5)	5%	5%	5%	4.6%	N/A	4.6%	13.4%	10%	8%	N/A	6%	11%	11%	N/A	13%	10%	8%	N/A	11%	11%	5%
Classification %	PCE 2 (#6)	1%	1%	1%	1.1%	N/A	1.4%	0.5%	1%	0%	N/A	1%	0%	0%	N/A	0%	1%	1%	N/A	1%	1%	0%
Classification %	PCE 3 (#7+)	1%	1%	2%	1.8%	N/A	5.5%	0.7%	1%	0%	N/A	3%	11%	11%	N/A	0%	6%	3%	N/A	3%	3%	3%
	% Heavy Vehicles (Class #4-#13)	6.5%	6.5%	7.4%	7.4%	N/A	11.5%	14.6%	11.4%	9.2%	N/A	9.5%	21.3%	21.3%	N/A	14.1%	17.2%	12.4%	N/A	15.3%	15.3%	7.7%
	PCE Total	1.05	1.05	1.07	1.07	N/A	1.15	1.09	1.07	1.05	N/A	1.09	1.27	1.27	N/A	1.08	1.18	1.11	N/A	1.12	1.12	1.08
	PCE Trucks	1.80	1.80	1.93	1.93	N/A	2.28	1.59	1.62	1.59	N/A	1.99	2.26	2.26	N/A	1.57	2.06	1.92	N/A	1.81	1.81	2.04
	ADT (PCE)	3,797	3,797	10,313	10,313	N/A	8,017	13,893	13,048	11,664	N/A	12,191	1,635	1,635	N/A	6,876	4,264	11,784	N/A	397	397	7,954
	AM Peak (PCE)	225	225	734	734	N/A	540	0	904	786	N/A	0	302	302	N/A	0	241	1,032	N/A	30	30	606
	PM Peak (PCE)	354	354	934	934	N/A	775	0	1,156	1,048	N/A	0	520	520	N/A	0	346	1,162	N/A	30	30	752

Appendix F: Cumulative Projects Near Term Volumes



SOURCE: Google Earth 2023

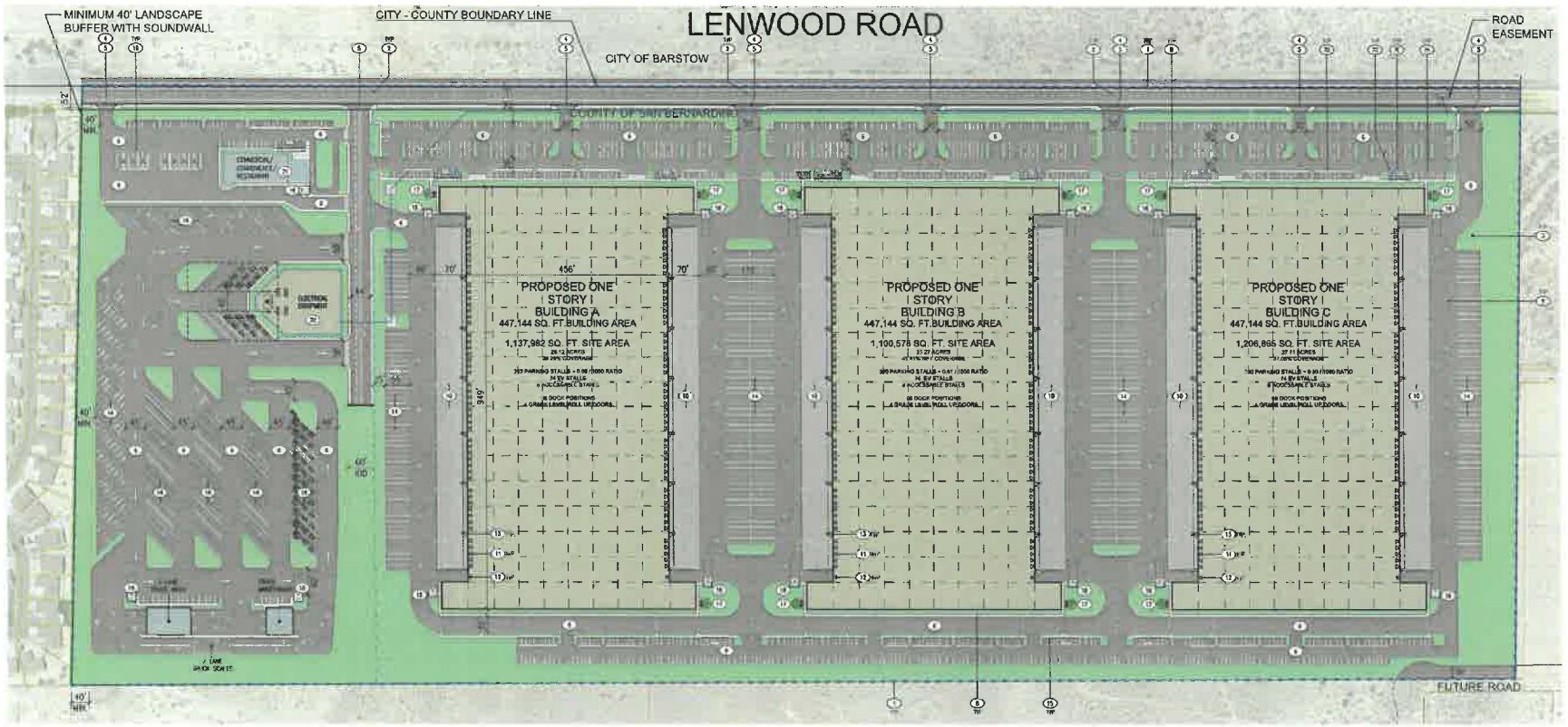
DUDEK

Not to Scale

FIGURE 1

Project Location and Study Area

EV Charging Truck Stop & Distribution Center



OVERALL SITE INFORMATION

APN	048-214-202, 048-214-204, 048-214-214, 048-214-216
ZONING	CURRENT: RL - RURAL LIVING PROPOSED: IC- COMMUNITY INDUSTRIAL
TOTAL GROSS SITE AREA:	4,247,007 S.F. = 94.65 ACRES
NET SITE AREA:	4,216,377 S.F. = 96.79 ACRES
BUILDING AREA:	1,341,432 S.F. OF INDUSTRIAL, AND UP TO 10,000 S.F COMMERCIAL USES
SITE COVERAGE:	32.17%
CONSTRUCTION TYPE:	II-B (II-B OR V-B
BUILDING HEIGHT:	50'-0" TO UNDER SIDE OF PARAPET DECK, MAXIMUM OVERALL ALLOWABLE 75'-0"
NUMBER OF STORIES:	1

LOT COVERAGE / FLOOR AREA RATIO ANALYSIS:

LAND USE ZONING	PROPOSED LOT COVERAGE	LOT SIZE	MAXIMUM LOT COVERAGE ALLOWED	TOTAL LOT COVERAGE
PROPOSED IC- COMMUNITY INDUSTRIAL	3,570,488 SQ. FT.	4,216,377 N.S.F.	85%	3,570,488 / 4,216,377 = 0.8468

LAND USE ZONING	FLOOR AREA RATIO (MAXIMUM COVERAGE)	TOTAL BUILDING AREA	TOTAL LOT AREA	TOTAL FAR
PROPOSED IC - COMMUNITY INDUSTRIAL	.32 : 1	1,341,432 SQ. FT.	4,216,377 N.S.F.	1,341,432 / 4,216,377 = .32

LANDSCAPING STANDARDS ANALYSIS:

LAND USE ZONING	MINIMUM LANDSCAPE AREA	
	AS A % OF LOT AREA	AREA IN SQ. FT.
PREDOMINANTLY INDUSTRIAL / WAREHOUSING	10 %	1,900 SQ. FT.

TOTAL LANDSCAPED AREA = 2,627,641 SQ. FT. = 15%

ELECTRIC VEHICLE CHARGING AND COMMERCIAL

TOTAL GROSS SITE AREA:	905,824 S.F. = 20.79 ACRES
NET SITE AREA:	874,176 N.S.F. = 20.11 ACRES
BUILDING AREA:	UP TO 10,000 SQ.FT. COMMERCIAL USES APPROXIMATELY 6,000 SQ.FT. TRUCK WASH APPROXIMATELY 4,000 SQ.FT. TRUCK MAINTENANCE
SITE COVERAGE:	2.29%
CONSTRUCTION TYPE	II-B OR V-B
BUILDING HEIGHT:	1 STORY
NUMBER OF STORIES:	1
PARKING:	91 STALLS TOTAL
MEDIUM DUTY PARKING:	16 STALLS TOTAL
TRUCK PARKING:	121 STALLS TOTAL

PARKING STANDARDS (SAN BERNARDINO COUNTY ZONING CODE TABLE 83-13):

• GENERAL RETAIL	1/250 S.F. (1,000 S.F. @ 1/250 S.F. = 10 TOTAL STALLS
• REPAIR AND SERVICE STATIONS	3 STALLS FOR EACH SERVICE BAY 6 BAYS = @ TRUCK WASH AND 4 @ MAINTENANCE) = 10 STALLS
** REQUIRED: 79 STALLS ** PROVIDED: 91 STALLS	
• STANDARD STALLS: 91	9' X 19' (17' WITH A 2'-0" OVERHANG)
• COMPACT STALLS: 0	8' X 16' (14' WITH A 2'-0" OVERHANG), 0% OF TOTAL STALLS

ACCESSIBLE & DESIGNATED PARKING STALLS (REQUIRED AND PROVIDED):

PER 2019 CBC TABLE 11B-208.2: 76 TO 100 STALLS, 4 STALLS REQUIRED TO BE ACCESSIBLE
STALLS EVERY 8 OR FRACTION OF 8D, AT LEAST ONE SHALL BE VAN PARKING.
4 ADA STALLS (INCLUDING 1 VAN ACCESSIBLE STALL) PROVIDED

PER 2019 CALIFORNIA GREEN BUILDING CODE TABLE 5.106.5.3.1: 76 TO 100 STALLS, 17 REQUIRED
EV CAPABLE SPACES OF THESE 4 ARE REQUIRED TO BE PROVIDED WITH EVSE.
23 EV STALLS PROVIDED ALL TO HAVE EVSE

PER CBC TABLE 11B-228.3.2.1: 5 TO 25 EVCR STALLS: 1 VAN ACCESSIBLE EVCR, 1 STANDARD ACCESSIBLE EVCR AND 2 AMBULATORY EVCS ARE REQUIRED
OF THE 23 EVCS REQUIRED: 1 VAN EVCS, 1 STANDARD ADA EVCS, AND 8 AMBULATORY EVCS ARE PROVIDED AS SHOWN

THREE BUILDING LOGISTICS FACILITY

TOTAL GROSS SITE AREA:	3,446,986 G.S.F. = 79.14 ACRES
NET SITE AREA:	3,338,986 N.S.F. = 76.67 ACRES
BUILDING AREA:	1,341,432 S.F TOTAL OF BUILDINGS A, B, AND C
SITE COVERAGE:	40.19%
CONSTRUCTION TYPE	II-B OR V-B
BUILDING HEIGHT	MAXIMUM OVERALL ALLOWABLE 50'-0"
CLEAR HEIGHT	36'-0"
NUMBER OF STORIES:	1
PARKING	1983 STALLS TOTAL
TRAILER PARKING	334 STALLS TOTAL

PARKING STANDARDS (SAN BERNARDINO COUNTY ZONING CODE TABLE 83-13):

• WAREHOUSING	1/1,000 S.F. FOR THE FIRST 40,000 S.F., 1/4,000 S.F. FOR ALL WAREHOUSE EXCESSING 40,000 S.F. (40,000 S.F. @ 1/1,000 S.F. = 40 STALLS) + (1,300,000 S.F. @ 1/4,000 S.F. = 325 STALLS) = 365 TOTAL STALLS
• POTENTIAL OFFICE SPACE (@ 14.25% OF BUILDING AREA (MAX)	1,559 S.F. (1,559 S.F. @ 1/250) * 3 BUILDINGS = 18 TOTAL STALLS
** REQUIRED: 1983 STALLS ** PROVIDED: 1983 STALLS	
• STANDARD STALLS: 1983	9' X 19' (17' WITH A 2'-0" OVERHANG)
• COMPACT STALLS: 0	8' X 16' (14' WITH A 2'-0" OVERHANG), 0% OF TOTAL STALLS

ACCESSIBLE & DESIGNATED PARKING STALLS (REQUIRED AND PROVIDED):

PER 2019 CBC TABLE 11B-208.2: 1001 TO 2000 STALLS, 2% OF TOTAL STALLS
BUILDING A: 2 VAN ACCESSIBLE AND 6 STANDARD ACCESSIBLE STALLS REQUIRED
BUILDING B: 2 VAN ACCESSIBLE AND 6 STANDARD ACCESSIBLE STALLS REQUIRED
BUILDING C: 2 VAN ACCESSIBLE AND 6 STANDARD ACCESSIBLE STALLS REQUIRED

PER 2019 CALIFORNIA GREEN BUILDING CODE TABLE 5.106.5.3.1: OVER 201 STALLS, 20% OF TOTAL REQUIRED TO BE EV CAPABLE SPACES. 1983 X 0.2 = 313 STALLS OF THESE, 89% ARE TO BE PROVIDED WITH EVSE. 312 X 0.25 = 56 STALLS.
312 EV STALLS PROVIDED AND 25 TO HAVE EVSE INSTALLED

PER CBC TABLE 11B-228.3.2.1:
BUILDING A: 1 EV VAN ACCESSIBLE, 2 EV STANDARD ACCESSIBLE, AND 2 EV AMBULATORY REQUIRED
BUILDING B: 1 EV VAN ACCESSIBLE, 2 EV STANDARD ACCESSIBLE, AND 2 EV AMBULATORY REQUIRED
BUILDING C: 1 EV VAN ACCESSIBLE, 2 EV STANDARD ACCESSIBLE, AND 2 EV AMBULATORY REQUIRED

KEYNOTES:

1. EXISTING PROPERTY LINES
2. PROPOSED NEW PARCEL LINES
3. TYPICAL LANDSCAPE AREAS
4. ENHANCED PAVING AT DRIVE ENTRIES.
5. PROPOSED LOCATION OF NEW SITE ACCESS DRIVE CURB CUT
6. TYPICAL DRIVE ISLE
7. TYPICAL PARKING:
   A. STANDARD STALLS: 9' X 19' OR 9' X 17' WITH 2' PARKING OVERHANG.
   B. COMPACT STALLS: 8' X 16' OR 8' X 14' WITH 2' PARKING OVERHANG (MAX MAY). *FINAL DESIGN MAY INCORPORATE COMPACT STALLS
   C. ACCESSIBLE PARKING STALLS: 9' X 19' MIN. WITH 2' PARKING OVERHANG WITH 5' OR 8' WIDE LOADING ZONE
   D. ELECTRIC VEHICLE CHARGING SPACES (STALLS LABELED "ELECTRIC VEHICLE CHARGING"). TO FOLLOW REQUIREMENTS PER CBSC 5.106.5.3.1.
   E. ACCESSIBLE ELECTRIC VEHICLE CHARGING STALLS, VAN, STANDARD, AND AMBULATORY.
8. NEW CONCRETE PEDESTRIAN WALKS, ASSUME ALL SIDEWALKS TO BE ACCESSIBLE PATH OF TRAVEL. SLOPE NOT TO EXCEED 1:20 (5%) IN DIRECTION OF TRAVEL. CROSS SLOPE NOT TO EXCEED 1:50 (2%) WHERE PARKING OVERHANG OCCURS, INCREASE WIDTH OF SIDEWALK TO 6'-0" MIN.
9. SEMI TRACTOR TRAILER TEMPLATE SHOWN FOR REFERENCE ONLY
10. 60' DEPRESSED CONCRETE TRUCK DOCK WITH CURB AND GUARDRAIL AT EACH SIDE
11. LOADING DOCK ROLL UP DOOR, TYPICAL
12. GRADE LEVEL ROLL UP DOOR, TYPICAL
13. PREFABRICATED PAINTED STEEL DOCK STAIR AND BOLLARDS
14. TRAILER PARKING STALLS WITH CONCRETE DOLLY PADS
15. DASHED LINE INDICATES 2'-0" PARKING OVERHANG
16. SEMI TRUCK AND TRAILER PARKING STALLS
17. EMPLOYEE AMENITY AREAS
18. TRASH ENCLOSURE WITH 40' APPROACH. DESIGN TO COMPLY WITH COUNTY STANDARDS. CAPACITY TO MEET MINIMUMS IN COUNTY DEVELOPMENT CODE 84.24.040.
19. LIGHT/MEDIUM DUTY PULL THROUGH CHARGING
20. INCLUDES ELECTRICAL VEHICLE SUPPLY EQUIPMENT (EVSE), POTENTIAL SOLAR STORAGE BATTERIES, AND ELECTRICAL SUBSTATION (IF NEEDED)
21. UP TO 13,000 SQ. FT. COMMERCIAL BUILDING WITH DRIVE THRU WINDOW

SITE LEGEND:

BUILDING AREA
SITE CONCRETE
COMMERCIAL AREA
ASPHALT AREA
LANDSCAPE AREA
EXISTING PROPERTY LINE
NEW PARCEL LINE
9' X 10' OVERHEAD DOCK LEVEL DOOR
12' X 14' OVERHEAD GRADE LEVEL DOOR
FIRE DEPARTMENT TURN RADIUS: R30' R45'

PRELIMINARY SITE MASTER PLAN
SCALE: 1" = 100'-0"
1

RMW
RMW Architecture Interiors
1718 Third Street Suite 101 Sacramento California 95811
Office 916 449-1400
rmw.com

OWNER / DEVELOPER

PRELIMINARY VISION DRAWINGS FOR:

ELECTRIC VEHICLE CHARGING STATION AND LOGISTICS FACILITY

SAN BERNARDINO COUNTY, CALIFORNIA

approved for the owner by :

approved for the architect by :

issue	description	date
A	ISSUED FOR DESIGN REVIEW	06-06-2023
B	ISSUED FOR CLIENT REVIEW	03-05-2024
C	ISSUED FOR CLIENT REVIEW	04-01-2024
D	ISSUED FOR CLIENT REVIEW	04-15-2024

GENERAL CONTRACTOR:

drawn by : TLG plot date 05-06-2024

checked by : JDL

stamp

scale : AS NOTED

project number : 2234548.00

PRELIMINARY MASTER SITE PLAN

sheet no : A01.0

Table 1 - Electric Vehicle Charging Station and Logistics Facility Project Trip Generation Summary

Land Use	ITE Code	Size/Units	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
TRIP RATES [1]									
Strip Retail Plaza	822	TSF	54.45	1.42	0.94	2.36	3.30	3.30	6.59
Fast food with drive-thru	934	TSF	467.48	22.75	21.86	44.61	17.18	15.85	33.03
EV Charging Station	N/A	see assumptions below[6]							
High-Cube Fulfillment Center Warehouse (non-sort)	155	TSF	1.81	0.12	0.03	0.15	0.06	0.10	0.16
TRIP GENERATION									
Strip Retail[2]	822	12 TSF	653	17	11	28	40	40	79
Fast food with drive-thru[2]	934	3	1,402	68	66	134	52	48	99
EV Charging- Autos	N/A	8 fast chargers	439	13	13	26	15	15	30
EV Charging- Trucks[6]	N/A	30+15 fast chargers	658	23	23	46	24	24	47
Warehouse	155	1341.432 TSF	2,428	163	38	201	84	131	215
		Subtotal (Non-PCE)	**5,580**	**284**	**151**	**436**	**213**	**257**	**470**
TRIP GENERATION BY VEHICLE MIX (Non-PCE)									
Vehicle Mix- Commercial									
Passenger Vehicles	100.0%		2,056	85	77	162	91	87	178
Vehicle Mix- Auto Chargers									
Passenger Vehicles	100.0%		439	13	13	26	15	15	30
Vehicle Mix- EV Truck Chargers[3]									
2-Axle Trucks	40.0%		263	9	9	18	9	9	19
3-Axle Trucks	10.0%		66	2	2	5	2	2	5
4+-Axle Trucks	50.0%		329	12	12	23	12	12	24
EV Truck Chargers Total (Non-PCE)			**658**	**23**	**23**	**46**	**24**	**24**	**47**
Vehicle Mix- Warehouse[4]									
Passenger Vehicles	72.5%		1,760	118	28	146	61	95	156
2-Axle Trucks	4.6%		112	7	2	9	4	6	10
3-Axle Trucks	5.7%		138	9	2	11	5	7	12
4+-Axle Trucks	17.2%		418	28	7	35	14	23	37
Warehouse Total (Non-PCE)			***2,428***	***162***	***39***	***201***	***84***	***131***	***215***
Total Site									
		Total Passenger Vehicles	4,255	217	118	334	167	197	364
		Total Trucks	1,325	68	34	101	47	60	106
Total Trip Generation (Non-PCE)			**5,580**	**284**	**151**	**436**	**213**	**257**	**470**
TRIP GENERATION BY VEHICLE MIX (PCE)									
Commercial Total (PCE)			**2,056**	**85**	**77**	**162**	**91**	**87**	**178**
Auto Chargers Total (PCE)			**439**	**13**	**13**	**26**	**15**	**15**	**30**
EV Truck Chargers (PCE, by Vehicle Classification)									
Vehicle Mix	**PCE**[5]								
Passenger Vehicles	n/a								
2-Axle Trucks	1.5		395	14	14	28	14	14	28
3-Axle Trucks	2.0		132	5	5	9	5	5	9
4+-Axle Trucks	3.0		986	35	35	69	35	35	71
		Total Passenger Vehicles	0	0	0	0	0	0	0
		Total Trucks	1,513	53	53	106	54	54	108
		EV Charging Total (PCE)	**1,513**	**53**	**53**	**106**	**54**	**54**	**108**

Warehouse (PCE, by Vehicle Classification)								
Vehicle Mix	**PCE[5]**							
Passenger Vehicles	1.0	1,760	118	28	146	61	95	156
2-Axle Trucks	1.5	168	11	3	14	6	9	15
3-Axle Trucks	2.0	277	19	4	23	10	15	25
4+-Axle Trucks	3.0	1,253	84	20	104	43	68	111
	Total Passenger Vehicles	1,760	118	28	146	61	95	156
	Total Trucks	1,698	114	27	141	59	92	151
	Warehouse Total (PCE)	**3,458**	**232**	**55**	**287**	**120**	**187**	**307**
Total Site Trip Generation (PCE)		**7,466**	**383**	**198**	**581**	**280**	**343**	**623**

NOTES: Rounding discrepancies may occur. TSF = Thousand Square Feet**;** PCE = Passenger Car Equivalent

[1]Trip rates from the Institute of Transportation Engineers (ITE), *Trip Generation, 11th Edition, 2021.*

[2]Assumes commercial land use consists of 12,000 SF of general commercial and 3,000 SF of fast food restaurant with drive-through.

[3]Based on assumed project operations, 40% of trucks would be 2-axle, 10% would be 3-axle, and 50% would be 4+-axle.

[4]Vehicle mix and percent from SCAQMD Warehouse Truck Trip Study Data Results and Usage, July 17, 2014.

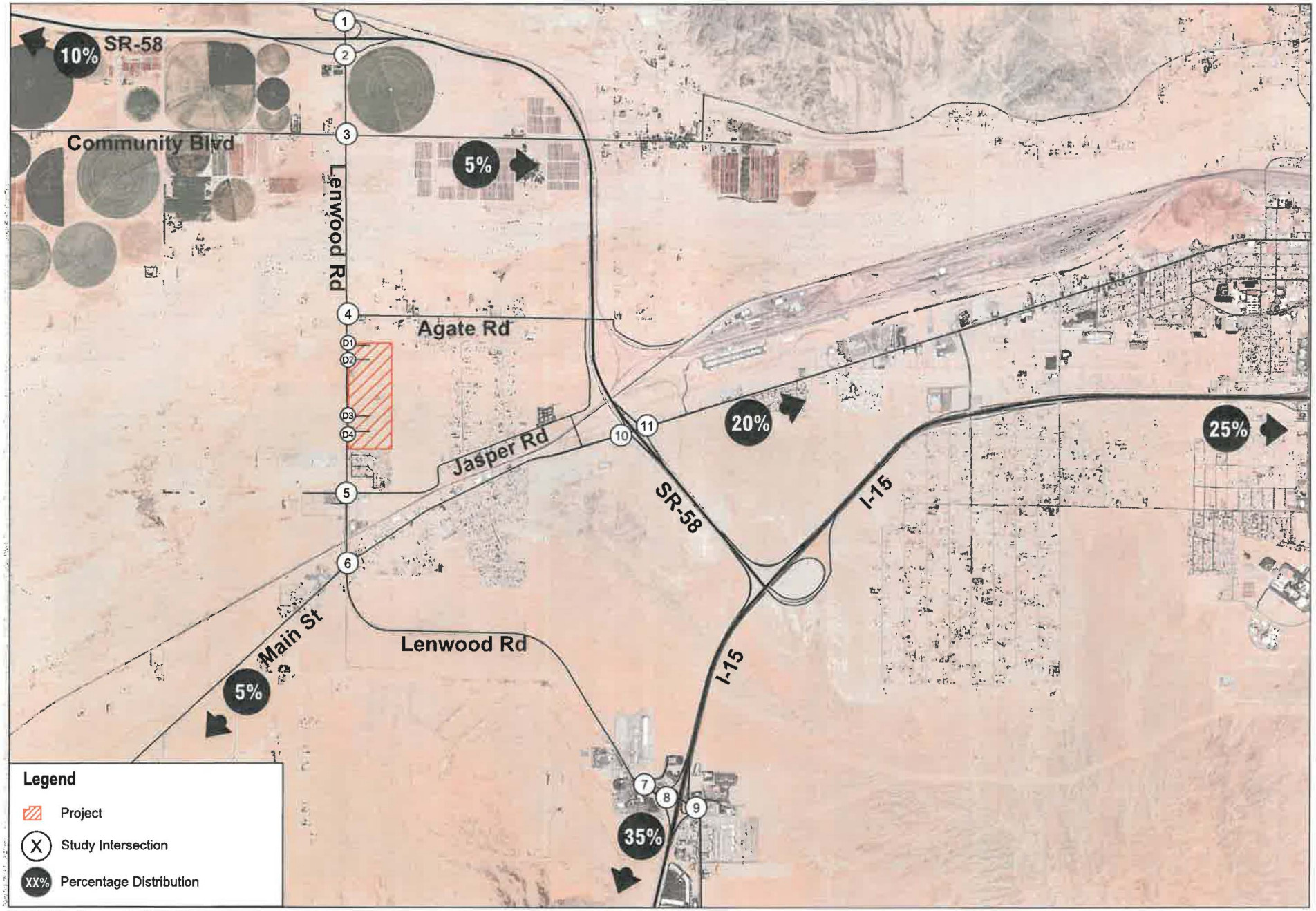
[5]Passenger Car Equivalent (PCE) factors from the San Bernardino County CMP, Appendix B - Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County, 2016.

[6]Charging Station Assumptions:

Assumptions for the EV Charging Station

EV Autos- 8 DC Fast chargers			
Count	8		
Max rate (kw)	250		
Avg Battery Capacity (kWh)	75		
Avg Amount Charged	70%		
kWh Charged / Visit	52.5		
Fast Charger Dwell Time (hrs)	0.21		
Theoretical Max (auto/hr)	38.10		
Theoretical Maximum (vehicle/day)	914.29		
Average Utilization	24%	https://www.upside.com/blog/why-measuring-capacity-utilization-is-essential-for-fuel-retailers	
Average vehicles per day	219.43	438.86	daily trips
AM Peak, equal split, 6% of daily total occurs during AM peak	6%	Based on ITE peak hour rates for truck stop	
PM Peak, equal split, assumes 7% of daily total occurs during PM peak	7%	Based on ITE peak hour rates for truck stop	

EV Trucks- 30 DC Fast chargers (slower) + 15 DC Fast chargers					
See EV Charging Calculator tab for details	**LD Trucks**	**MD Trucks**	**HD Trucks**		
Total Theoretical Max / Hour	102.9	51.4	21.4		
Theoretical Maximum (vehicle/day)	2469.6	1233.6	513.6		
Average Utilization	40%	40%	40%		
Utilization Rate Avg Vehicle/Day	987.8	493.4	205.4	1686.7	
Percent of Truck Traffic (same as warehouse vehicle mix)	40.0%	10.0%	50.0%		
Vehicles/Day Based on % of Traffic	132	33	164	329	daily trips
Average Daily Trucks	263	66	329	658	daily trips
AM Peak, equal split, 6% of daily total occurs during AM peak	6%	Based on ITE peak hour rates for truck stop			
PM Peak, equal split, assumes 7% of daily total occurs during PM peak	7%	Based on ITE peak hour rates for truck stop			



SOURCE: Google Earth 2023

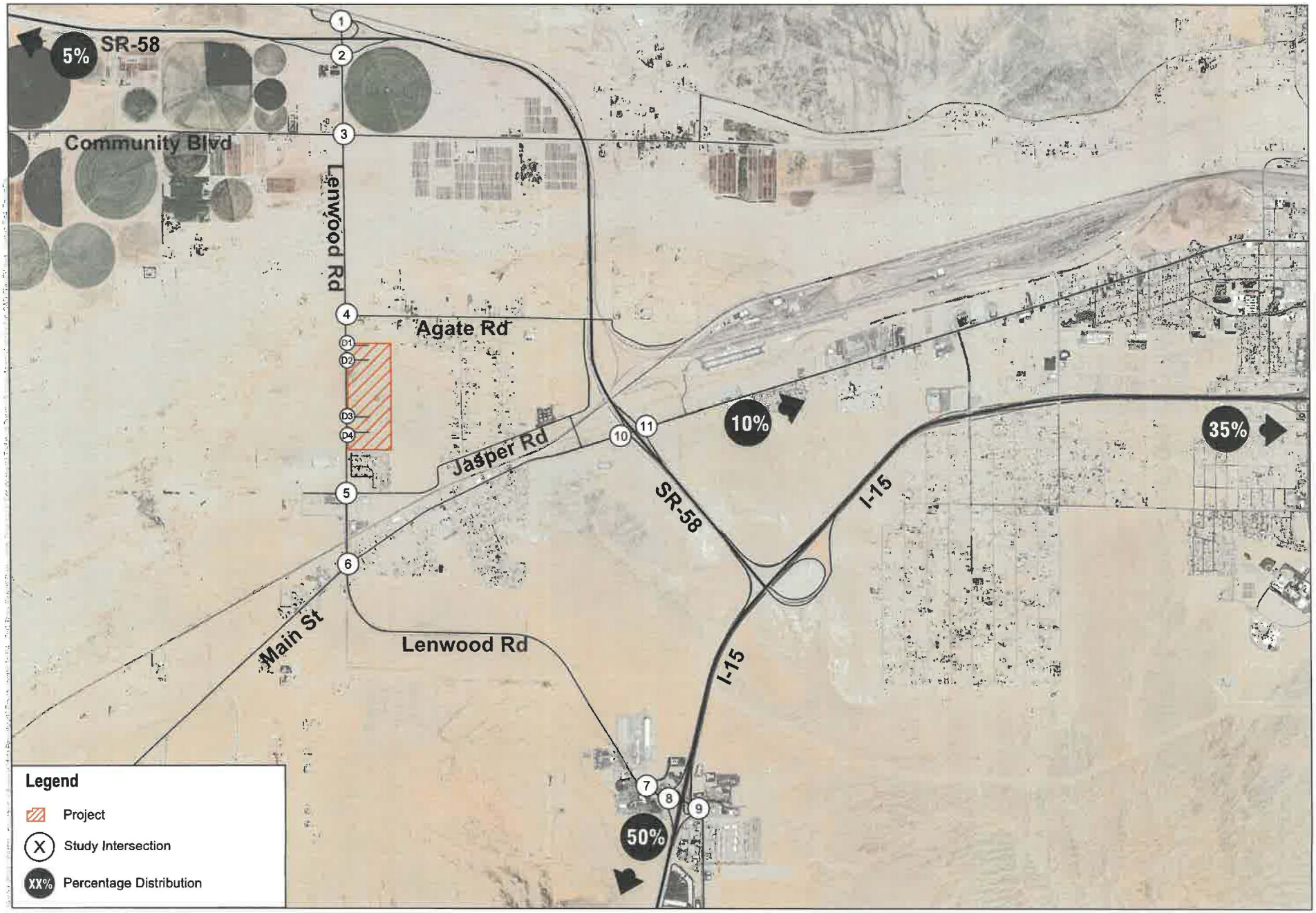
FIGURE 3

Project Passenger Vehicle Trip Distribution

EV Charging Truck Stop & Distribution Center

DUDEK

Not to Scale



SOURCE: Google Earth 2023

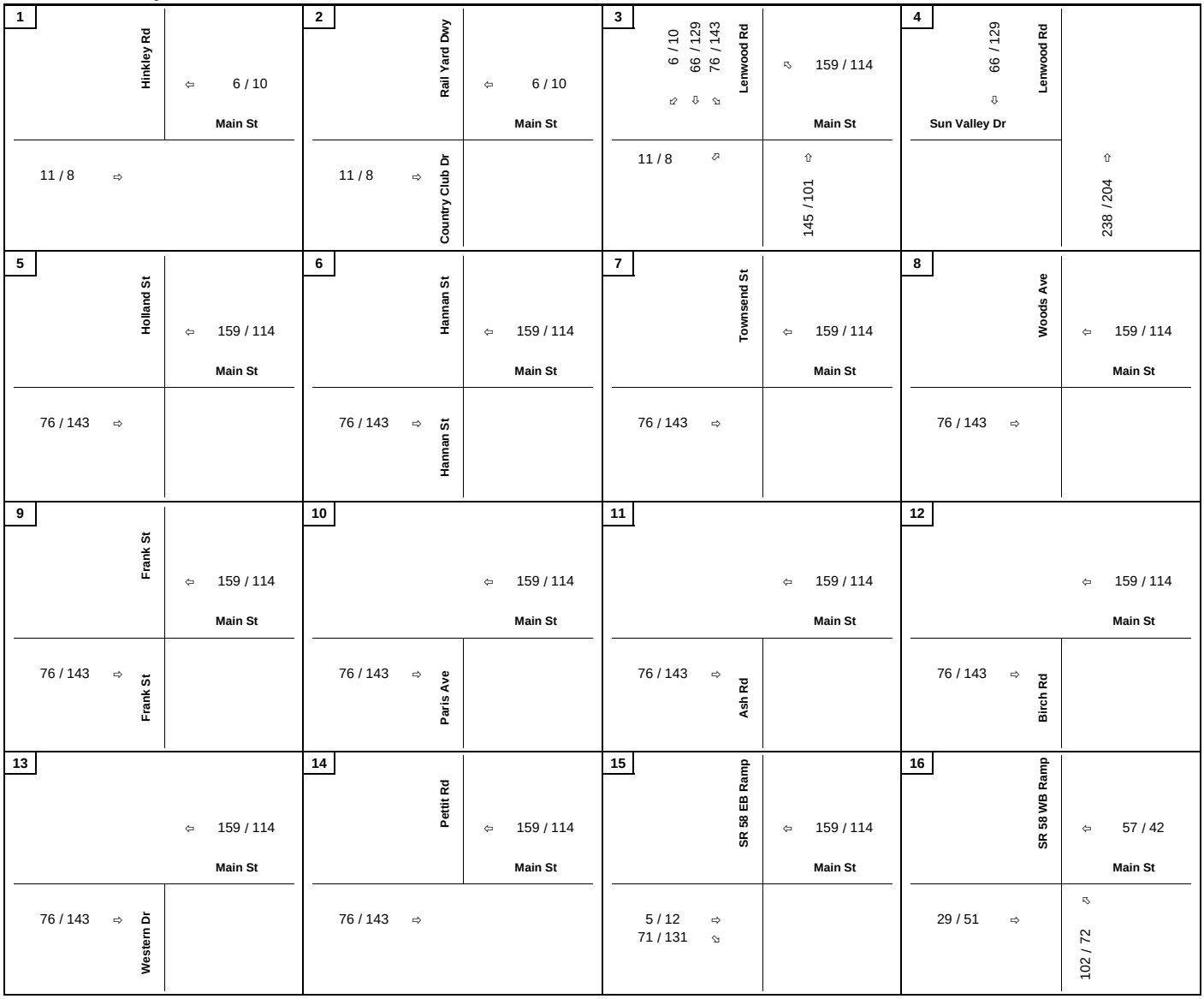
DUDEK Not to Scale

FIGURE 4

Project Truck Trip Distribution

EV Charging Truck Stop & Distribution Center

BNSF Feasibility Assessment



Legend

X / Y = AM / PM PEAK HOUR TURNING VOLUMES

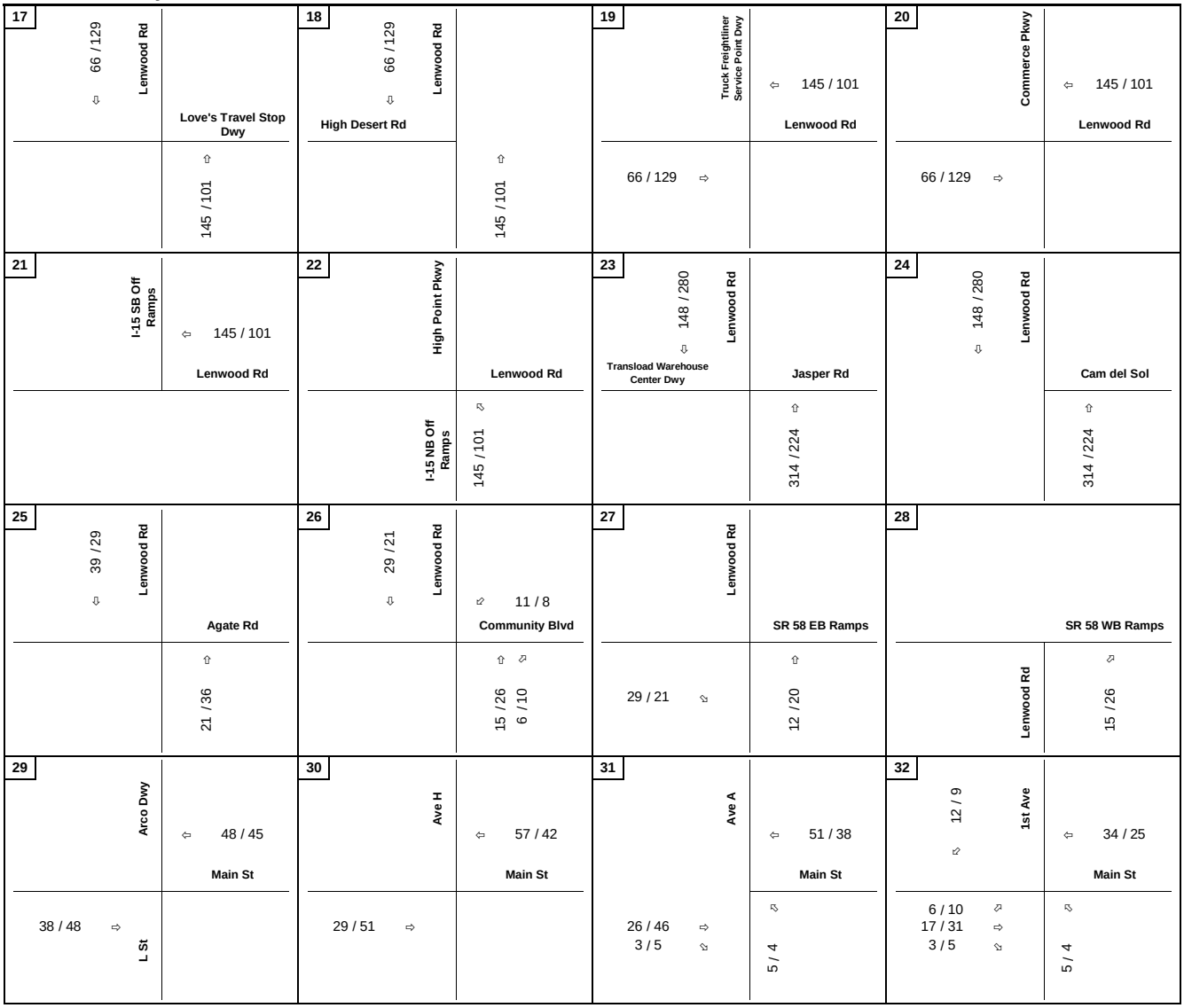
NOT TO SCALE

Kimley»Horn

Cumulative Project 1 (Combined Vehicles)

Transload Facility Trip Assignment - Study Intersections

BNSF Feasibility Assessment



Legend

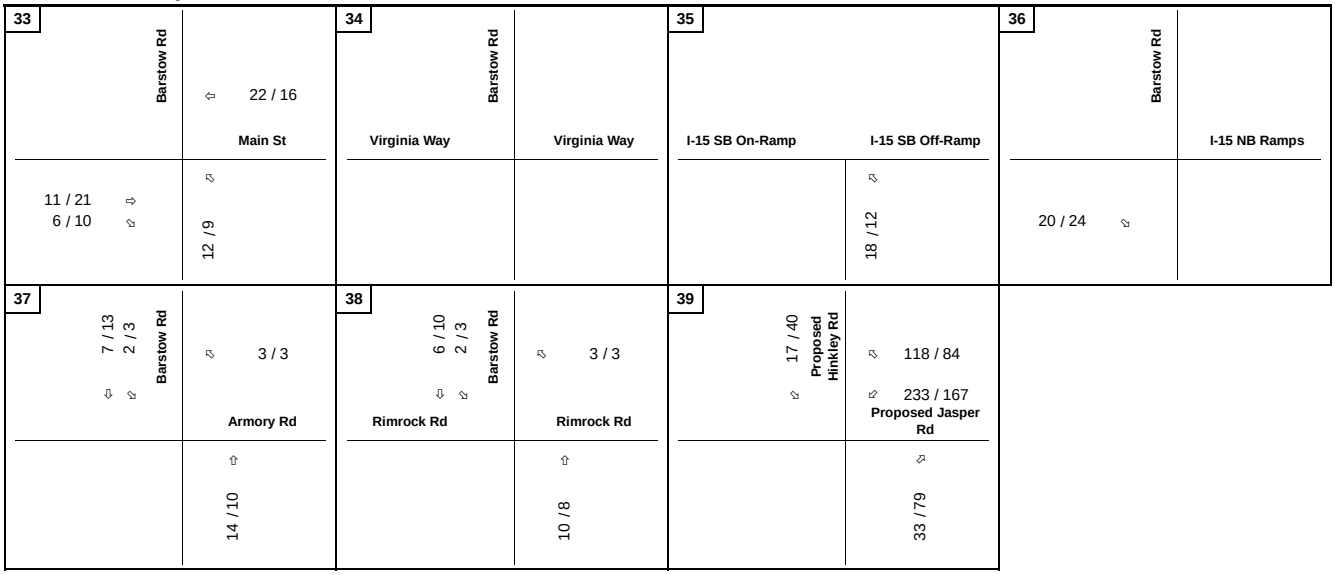
X / Y = AM / PM PEAK HOUR TURNING VOLUMES

NOT TO SCALE

Kimley»Horn

Cumulative Project 1 (Combined Vehicles)

Transload Facility Trip Assignment - Study Intersections (cont.)



Legend

X / Y = AM / PM PEAK HOUR TURNING VOLUMES

NOT TO SCALE

Appendix G: Synchro Analysis Worksheets

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	132	53	7	3	13
Future Vol, veh/h	9	132	53	7	3	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	81	81	50	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	138	65	9	6	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	74	0	-	0	226	70
Stage 1	-	-	-	-	70	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1538	-	-	-	767	999
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	877	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1538	-	-	-	762	999
Mov Cap-2 Maneuver	-	-	-	-	762	-
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	877	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.47	0	8.95
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	115	-	-	-	944
HCM Lane V/C Ratio	0.006	-	-	-	0.034
HCM Control Delay (s/veh)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

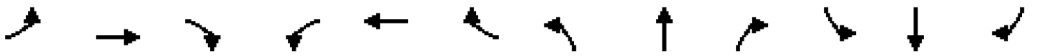
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	120	0	2	78	0	6
Future Vol, veh/h	120	0	2	78	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	86	86	50	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	156	0	2	91	0	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	156	0	251	156
Stage 1	-	-	-	-	156	-
Stage 2	-	-	-	-	95	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1437	-	742	895
Stage 1	-	-	-	-	877	-
Stage 2	-	-	-	-	933	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1437	-	740	895
Mov Cap-2 Maneuver	-	-	-	-	740	-
Stage 1	-	-	-	-	877	-
Stage 2	-	-	-	-	932	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.19	9.08
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	895	-	-	45	-
HCM Lane V/C Ratio	0.013	-	-	0.002	-
HCM Control Delay (s/veh)	9.1	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	126	27	40	62	34	21	35	37	51	54	8
Future Volume (veh/h)	13	126	27	40	62	34	21	35	37	51	54	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	15	148	0	51	78	0	23	38	40	55	59	9
Peak Hour Factor	0.85	0.85	0.85	0.79	0.79	0.79	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	25	808		69	901		36	349	311	73	408	345
Arrive On Green	0.02	0.24	0.00	0.04	0.26	0.00	0.02	0.20	0.20	0.04	0.23	0.23
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	1710	1525	1619	1800	1525
Grp Volume(v), veh/h	15	148	0	51	78	0	23	38	40	55	59	9
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1525	1619	1800	1525
Q Serve(g_s), s	0.4	1.5	0.0	1.3	0.7	0.0	0.6	0.8	0.9	1.4	1.1	0.2
Cycle Q Clear(g_c), s	0.4	1.5	0.0	1.3	0.7	0.0	0.6	0.8	0.9	1.4	1.1	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	25	808		69	901		36	349	311	73	408	345
V/C Ratio(X)	0.61	0.18		0.74	0.09		0.63	0.11	0.13	0.75	0.14	0.03
Avail Cap(c_a), veh/h	765	3231		765	3231		574	1616	1441	574	1701	1441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	12.9	0.0	20.0	11.8	0.0	20.5	13.7	13.8	20.0	13.1	12.7
Incr Delay (d2), s/veh	8.6	0.1	0.0	5.6	0.0	0.0	6.6	0.1	0.2	5.8	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.4	0.0	0.5	0.2	0.0	0.2	0.2	0.2	0.5	0.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.3	13.0	0.0	25.7	11.8	0.0	27.2	13.9	14.0	25.8	13.3	12.8
LnGrp LOS	C	B		C	B		C	B	B	C	B	B
Approach Vol, veh/h		163			129			101			123	
Approach Delay, s/veh		14.5			17.3			16.9			18.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	15.4	4.9	16.2	4.6	16.6	5.9	15.2
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	20.0	40.0	15.0	40.0	20.0	40.0	15.0	* 40
Max Q Clear Time (g_c+I1), s	3.3	3.5	2.6	3.1	2.4	2.7	3.4	2.9
Green Ext Time (p_c), s	0.0	0.8	0.0	0.3	0.0	0.4	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	16.7
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	0	0	99	108	1
Future Vol, veh/h	3	0	0	99	108	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	81	81	68	68
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	0	0	122	159	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	282	160	160	0	-	0
Stage 1	160	-	-	-	-	-
Stage 2	122	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	713	891	1431	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	908	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	713	891	1431	-	-	-
Mov Cap-2 Maneuver	713	-	-	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	908	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.08	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1431	-	713	-	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s/veh)	0	-	10.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	201	0	2	117	0	2	0	4	2	0	0
Future Vol, veh/h	2	201	0	2	117	0	2	0	4	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	84	84	84	59	59	59	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	207	0	2	139	0	3	0	7	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	139	0	0	207	0	0	286	355	104	252	355	70
Stage 1	-	-	-	-	-	-	211	211	-	144	144	-
Stage 2	-	-	-	-	-	-	74	144	-	108	211	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1457	-	-	1376	-	-	650	573	938	686	573	985
Stage 1	-	-	-	-	-	-	777	731	-	850	782	-
Stage 2	-	-	-	-	-	-	932	782	-	892	731	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1457	-	-	1376	-	-	647	572	938	679	572	985
Mov Cap-2 Maneuver	-	-	-	-	-	-	647	572	-	679	572	-
Stage 1	-	-	-	-	-	-	776	730	-	848	780	-
Stage 2	-	-	-	-	-	-	931	780	-	884	730	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	0.14	9.47	10.32
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	816	35	-	-	61	-	-	679
HCM Lane V/C Ratio	0.012	0.001	-	-	0.002	-	-	0.004
HCM Control Delay (s/veh)	9.5	7.5	0	-	7.6	0	-	10.3
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	205	1	2	117	0	2	0	0	2	0	0
Future Vol, veh/h	2	205	1	2	117	0	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	92	92	92	78	78	78	53	53	53
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	247	1	2	127	0	3	0	0	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	127	0	0	248	0	0	320	384	124	260	385	64
Stage 1	-	-	-	-	-	-	252	252	-	132	132	-
Stage 2	-	-	-	-	-	-	68	132	-	128	253	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1471	-	-	1329	-	-	614	553	910	677	552	994
Stage 1	-	-	-	-	-	-	735	702	-	864	791	-
Stage 2	-	-	-	-	-	-	940	791	-	868	701	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1471	-	-	1329	-	-	612	551	910	675	550	994
Mov Cap-2 Maneuver	-	-	-	-	-	-	612	551	-	675	550	-
Stage 1	-	-	-	-	-	-	734	701	-	863	790	-
Stage 2	-	-	-	-	-	-	939	790	-	866	700	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	0.14	10.91	10.36
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	612	34	-	-	61	-	-	675
HCM Lane V/C Ratio	0.004	0.002	-	-	0.002	-	-	0.006
HCM Control Delay (s/veh)	10.9	7.5	0	-	7.7	0	-	10.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	202	2	2	114	1	2	0	0	2	0	0
Future Vol, veh/h	2	202	2	2	114	1	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	84	84	84	88	88	88	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	235	2	2	136	1	2	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	137	0	0	237	0	0	313	382	119	263	383	68
Stage 1	-	-	-	-	-	-	241	241	-	141	141	-
Stage 2	-	-	-	-	-	-	73	142	-	122	242	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1460	-	-	1342	-	-	621	554	917	674	553	987
Stage 1	-	-	-	-	-	-	747	710	-	853	784	-
Stage 2	-	-	-	-	-	-	934	783	-	875	709	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1460	-	-	1342	-	-	619	552	917	671	552	987
Mov Cap-2 Maneuver	-	-	-	-	-	-	619	552	-	671	552	-
Stage 1	-	-	-	-	-	-	746	709	-	852	782	-
Stage 2	-	-	-	-	-	-	933	782	-	874	708	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	0.14	10.84	10.39
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	619	34	-	-	61	-	-	671
HCM Lane V/C Ratio	0.004	0.002	-	-	0.002	-	-	0.005
HCM Control Delay (s/veh)	10.8	7.5	0	-	7.7	0	-	10.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	217	0	2	107	0	2	0	0	2	0	0
Future Vol, veh/h	2	217	0	2	107	0	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	71	71	71	25	25	25	72	72	72	70	70	70
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	306	0	8	428	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	428	0	0	306	0	0	541	755	153	602	755	214
Stage 1	-	-	-	-	-	-	311	311	-	444	444	-
Stage 2	-	-	-	-	-	-	230	444	-	158	311	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1142	-	-	1267	-	-	428	340	872	387	340	797
Stage 1	-	-	-	-	-	-	680	662	-	568	579	-
Stage 2	-	-	-	-	-	-	758	579	-	834	662	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1142	-	-	1267	-	-	424	337	872	384	337	797
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	337	-	384	337	-
Stage 1	-	-	-	-	-	-	678	660	-	564	574	-
Stage 2	-	-	-	-	-	-	752	574	-	831	660	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.2	13.54	14.46
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	424	33	-	-	66	-	-	384
HCM Lane V/C Ratio	0.007	0.002	-	-	0.006	-	-	0.007
HCM Control Delay (s/veh)	13.5	8.2	0	-	7.9	0.1	-	14.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	200	6	3	103	0	10	0	10	2	0	0
Future Vol, veh/h	2	200	6	3	103	0	10	0	10	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	80	80	80	92	92	92	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	222	7	4	129	0	11	0	11	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	129	0	0	229	0	0	302	366	114	252	370	64
Stage 1	-	-	-	-	-	-	230	230	-	136	136	-
Stage 2	-	-	-	-	-	-	72	136	-	116	233	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1470	-	-	1351	-	-	633	565	923	686	563	993
Stage 1	-	-	-	-	-	-	758	718	-	859	788	-
Stage 2	-	-	-	-	-	-	935	788	-	883	715	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1470	-	-	1351	-	-	630	563	923	675	561	993
Mov Cap-2 Maneuver	-	-	-	-	-	-	630	563	-	675	561	-
Stage 1	-	-	-	-	-	-	757	717	-	856	785	-
Stage 2	-	-	-	-	-	-	933	785	-	871	714	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	0.24	9.95	10.35
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	749	33	-	-	102	-	-	675
HCM Lane V/C Ratio	0.029	0.002	-	-	0.003	-	-	0.003
HCM Control Delay (s/veh)	10	7.5	0	-	7.7	0	-	10.3
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	211	4	16	96	8	15
Future Vol, veh/h	211	4	16	96	8	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	85	85	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	224	4	19	113	8	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	229	0	321	114
Stage 1	-	-	-	-	227	-
Stage 2	-	-	-	-	94	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1351	-	653	923
Stage 1	-	-	-	-	796	-
Stage 2	-	-	-	-	925	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1351	-	644	923
Mov Cap-2 Maneuver	-	-	-	-	644	-
Stage 1	-	-	-	-	796	-
Stage 2	-	-	-	-	912	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.17	9.63
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	802	-	-	514	-
HCM Lane V/C Ratio	0.03	-	-	0.014	-
HCM Control Delay (s/veh)	9.6	-	-	7.7	0.1
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	197	30	14	96	13	11
Future Vol, veh/h	197	30	14	96	13	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	33	33	75	75	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	597	91	19	128	15	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	688	0	744	344
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	101	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	916	-	355	658
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	917	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	916	-	347	658
Mov Cap-2 Maneuver	-	-	-	-	347	-
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	898	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.28	13.68
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	443	-	-	458	-
HCM Lane V/C Ratio	0.064	-	-	0.02	-
HCM Control Delay (s/veh)	13.7	-	-	9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	203	3	11	125	4	31
Future Vol, veh/h	203	3	11	125	4	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	75	75	70	70
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	226	3	15	167	6	44

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	229	0	340	114
Stage 1	-	-	-	-	227	-
Stage 2	-	-	-	-	113	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1351	-	636	923
Stage 1	-	-	-	-	795	-
Stage 2	-	-	-	-	906	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1351	-	628	923
Mov Cap-2 Maneuver	-	-	-	-	628	-
Stage 1	-	-	-	-	795	-
Stage 2	-	-	-	-	895	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.69	9.36
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	876	-	-	291	-
HCM Lane V/C Ratio	0.057	-	-	0.011	-
HCM Control Delay (s/veh)	9.4	-	-	7.7	0.1
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	214	4	9	154	2	22
Future Vol, veh/h	214	4	9	154	2	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	25	25	59	59	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	856	16	15	261	2	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	872	0	1025	436
Stage 1	-	-	-	-	864	-
Stage 2	-	-	-	-	161	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	782	-	234	574
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	857	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	782	-	229	574
Mov Cap-2 Maneuver	-	-	-	-	229	-
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	839	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.71	12.43
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	510	-	-	199	-
HCM Lane V/C Ratio	0.051	-	-	0.02	-
HCM Control Delay (s/veh)	12.4	-	-	9.7	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

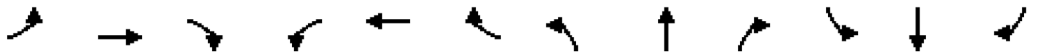
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	244	141	43	96	6
Future Vol, veh/h	5	244	141	43	96	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	61	61	66	66	65	65
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	400	214	65	148	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	279	0	-	0	463	139
Stage 1	-	-	-	-	246	-
Stage 2	-	-	-	-	216	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1296	-	-	-	533	890
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	805	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1296	-	-	-	530	890
Mov Cap-2 Maneuver	-	-	-	-	601	-
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	805	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.16	0	12.88
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1296	-	-	-	613
HCM Lane V/C Ratio	0.006	-	-	-	0.256
HCM Control Delay (s/veh)	7.8	-	-	-	12.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	212	137	31	169	0	0	0	0	16	1	14
Future Volume (veh/h)	0	212	137	31	169	0	0	0	0	16	1	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	283	183	37	201	0				25	3	22
Peak Hour Factor	0.75	0.75	0.75	0.84	0.84	0.84				0.63	0.63	0.63
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1124	706	56	2266	0				69	8	58
Arrive On Green	0.00	0.62	0.62	0.04	0.74	0.00				0.05	0.05	0.05
Sat Flow, veh/h	0	1896	1139	1457	3159	0				1457	168	1231
Grp Volume(v), veh/h	0	239	227	37	201	0				25	0	25
Grp Sat Flow(s),veh/h/ln	0	1539	1415	1457	1539	0				1457	0	1398
Q Serve(g_s), s	0.0	4.2	4.4	1.5	1.1	0.0				1.0	0.0	1.0
Cycle Q Clear(g_c), s	0.0	4.2	4.4	1.5	1.1	0.0				1.0	0.0	1.0
Prop In Lane	0.00		0.81	1.00		0.00				1.00		0.88
Lane Grp Cap(c), veh/h	0	953	877	56	2266	0				69	0	66
V/C Ratio(X)	0.00	0.25	0.26	0.66	0.09	0.00				0.36	0.00	0.38
Avail Cap(c_a), veh/h	0	953	877	226	2266	0				121	0	117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.1	5.2	28.5	2.2	0.0				27.7	0.0	27.7
Incr Delay (d2), s/veh	0.0	0.6	0.7	4.9	0.1	0.0				1.2	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.8	0.5	0.1	0.0				0.4	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	5.8	5.9	33.4	2.3	0.0				28.9	0.0	29.1
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		466			238						50	
Approach Delay, s/veh		5.8			7.1						29.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.0	43.2		9.8		50.2
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0
Max Green Setting (Gmax), s	9.3	28.0		5.0		42.0
Max Q Clear Time (g_c+I1), s	3.5	6.4		3.0		3.1
Green Ext Time (p_c), s	0.0	1.4		0.0		0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	7.8
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	223	0	0	163	14	60	0	18	0	0	0
Future Volume (veh/h)	21	223	0	0	163	14	60	0	18	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	24	259	0	0	206	18	74	0	22			
Peak Hour Factor	0.86	0.86	0.86	0.79	0.79	0.79	0.81	0.81	0.81			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	44	2452	0	0	2090	932	114	0	101			
Arrive On Green	0.01	0.24	0.00	0.00	0.61	0.61	0.07	0.00	0.07			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	24	259	0	0	206	18	74	0	22			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.9	3.6	0.0	0.0	1.5	0.3	2.5	0.0	0.8			
Cycle Q Clear(g_c), s	0.9	3.6	0.0	0.0	1.5	0.3	2.5	0.0	0.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	44	2452	0	0	2090	932	114	0	101			
V/C Ratio(X)	0.54	0.11	0.00	0.00	0.10	0.02	0.65	0.00	0.22			
Avail Cap(c_a), veh/h	324	2452	0	0	2090	932	343	0	305			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.99	0.99	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.4	7.8	0.0	0.0	4.8	4.6	27.3	0.0	26.5			
Incr Delay (d2), s/veh	3.7	0.1	0.0	0.0	0.1	0.0	2.3	0.0	0.4			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.3	0.3	0.0	0.0	0.3	0.1	1.1	0.0	0.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.1	7.9	0.0	0.0	4.9	4.6	29.6	0.0	26.9			
LnGrp LOS	C	A			A	A	C		C			
Approach Vol, veh/h		283			224			96				
Approach Delay, s/veh		10.1			4.9			29.0				
Approach LOS		B			A			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		49.0			6.3	42.7		11.0				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		35.0			12.0	18.0		12.0				
Max Q Clear Time (g_c+I1), s		5.6			2.9	3.5		4.5				
Green Ext Time (p_c), s		0.9			0.0	0.6		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh			11.2									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	23	1	0	0	26	95	11	5	84	23
Future Vol, veh/h	10	1	23	1	0	0	26	95	11	5	84	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	85	85	85	71	71	71	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	1	31	1	0	0	37	134	15	6	93	26

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	324	340	59	265	337	134	119	0	0	149	0	0
Stage 1	117	117	-	207	207	-	-	-	-	-	-	-
Stage 2	207	223	-	58	130	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	621	585	1000	681	587	921	1482	-	-	1444	-	-
Stage 1	881	802	-	800	734	-	-	-	-	-	-	-
Stage 2	800	723	-	952	792	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	604	568	1000	640	570	921	1482	-	-	1444	-	-
Mov Cap-2 Maneuver	604	568	-	640	570	-	-	-	-	-	-	-
Stage 1	877	799	-	780	716	-	-	-	-	-	-	-
Stage 2	780	705	-	918	789	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.63	10.63	1.48	0.33
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1482	-	-	823	640	1444	-	-
HCM Lane V/C Ratio	0.025	-	-	0.055	0.002	0.004	-	-
HCM Control Delay (s/veh)	7.5	-	-	9.6	10.6	7.5	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	78	0	0	0	59	134	0	0	107	6
Future Vol, veh/h	3	0	78	0	0	0	59	134	0	0	107	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	70	70	70	92	92	92	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	0	100	0	0	0	64	146	0	0	132	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	337	410	70	340	413	73	140	0	0	146	0	0
Stage 1	136	136	-	274	274	-	-	-	-	-	-	-
Stage 2	201	274	-	66	140	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	598	535	985	595	532	981	1456	-	-	1449	-	-
Stage 1	859	788	-	714	687	-	-	-	-	-	-	-
Stage 2	788	687	-	943	785	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	572	511	985	511	509	981	1456	-	-	1449	-	-
Mov Cap-2 Maneuver	572	511	-	511	509	-	-	-	-	-	-	-
Stage 1	859	788	-	683	657	-	-	-	-	-	-	-
Stage 2	753	657	-	847	785	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.15	0	2.32	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1456	-	-	572	985	-	1449	-	-
HCM Lane V/C Ratio	0.044	-	-	0.007	0.101	-	-	-	-
HCM Control Delay (s/veh)	7.6	-	-	11.3	9.1	0	0	-	-
HCM Lane LOS	A	-	-	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0.3	-	0	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	164	11	48	155	18	6	0	76	11	0	8
Future Vol, veh/h	1	164	11	48	155	18	6	0	76	11	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	81	81	81	55	55	55	50	50	50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	180	12	59	191	22	11	0	138	22	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	214	0	0	192	0	0	403	521	96	413	515	107
Stage 1	-	-	-	-	-	-	188	188	-	321	321	-
Stage 2	-	-	-	-	-	-	214	332	-	92	195	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1369	-	-	1393	-	-	537	463	948	528	466	933
Stage 1	-	-	-	-	-	-	801	748	-	671	655	-
Stage 2	-	-	-	-	-	-	774	648	-	910	743	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1369	-	-	1393	-	-	505	443	948	431	446	933
Mov Cap-2 Maneuver	-	-	-	-	-	-	505	443	-	431	446	-
Stage 1	-	-	-	-	-	-	800	747	-	642	627	-
Stage 2	-	-	-	-	-	-	728	620	-	777	743	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.04	1.67	9.85	11.93
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	891	1369	-	-	1393	-	-	558
HCM Lane V/C Ratio	0.167	0.001	-	-	0.043	-	-	0.068
HCM Control Delay (s/veh)	9.9	7.6	-	-	7.7	-	-	11.9
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.2

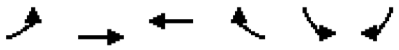
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	231	11	46	207	82	6	2	42	108	5	16
Future Volume (veh/h)	15	231	11	46	207	82	6	2	42	108	5	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	19	292	14	64	288	114	8	3	55	128	0	18
Peak Hour Factor	0.79	0.79	0.79	0.72	0.72	0.72	0.77	0.77	0.77	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	34	921	44	113	1153	427	141	157	133	1246	0	564
Arrive On Green	0.02	0.28	0.28	0.07	0.33	0.33	0.09	0.09	0.09	0.37	0.00	0.37
Sat Flow, veh/h	1619	3323	159	1619	3532	1309	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	19	150	156	64	266	136	8	3	55	128	0	18
Grp Sat Flow(s),veh/h/ln	1619	1710	1771	1619	1638	1564	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	1.1	6.4	6.4	3.5	5.5	5.9	0.4	0.1	3.1	2.3	0.0	0.7
Cycle Q Clear(g_c), s	1.1	6.4	6.4	3.5	5.5	5.9	0.4	0.1	3.1	2.3	0.0	0.7
Prop In Lane	1.00		0.09	1.00		0.84	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	474	491	113	1069	511	141	157	133	1246	0	564
V/C Ratio(X)	0.56	0.32	0.32	0.56	0.25	0.27	0.06	0.02	0.41	0.10	0.00	0.03
Avail Cap(c_a), veh/h	88	474	491	192	1069	511	317	352	299	1246	0	564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	26.3	26.3	41.4	22.7	22.8	38.5	38.4	39.7	19.0	0.0	18.5
Incr Delay (d2), s/veh	13.7	0.4	0.4	4.3	0.6	1.3	0.2	0.0	2.1	0.2	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.5	2.6	1.5	2.1	2.3	0.2	0.1	1.3	0.9	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.3	26.7	26.7	45.7	23.3	24.1	38.7	38.4	41.8	19.1	0.0	18.6
LnGrp LOS	E	C	C	D	C	C	D	D	D	B		B
Approach Vol, veh/h		325			466			66			146	
Approach Delay, s/veh		28.5			26.6			41.3			19.1	
Approach LOS		C			C			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	30.0		38.5	6.4	34.5		12.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.9	24.1		34.0	5.0	30.0		18.0				
Max Q Clear Time (g_c+I1), s	5.5	8.4		4.3	3.1	7.9		5.1				
Green Ext Time (p_c), s	0.0	1.4		0.5	0.0	2.4		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.1
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	216	174	0	182	189
Future Volume (veh/h)	0	216	174	0	182	189
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	245	229	0	202	210
Peak Hour Factor	0.88	0.88	0.76	0.76	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1857	1857	0	844	453
Arrive On Green	0.00	0.54	0.54	0.00	0.29	0.29
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	245	229	0	202	210
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	2.5	2.3	0.0	3.7	7.6
Cycle Q Clear(g_c), s	0.0	2.5	2.3	0.0	3.7	7.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1857	1857	0	844	453
V/C Ratio(X)	0.00	0.13	0.12	0.00	0.24	0.46
Avail Cap(c_a), veh/h	0	1857	1857	0	845	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	7.9	7.8	0.0	19.2	20.6
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.2	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.7	0.0	1.2	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.0	8.0	0.0	19.3	21.5
LnGrp LOS		A	A		B	C
Approach Vol, veh/h		245	229		412	
Approach Delay, s/veh		8.0	8.0		20.4	
Approach LOS		A	A		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	44.0	26.0	44.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	38.0	20.0	38.0
Max Q Clear Time (g_c+I1), s	4.5	9.6	4.3
Green Ext Time (p_c), s	1.3	1.4	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	13.8
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	174	0	0	316	28	103	61	173	4	0	162
Future Volume (veh/h)	63	174	0	0	316	28	103	61	173	4	0	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	72	198	0	0	376	33	200	220	422	4	0	169
Peak Hour Factor	0.88	0.88	0.88	0.84	0.84	0.84	0.41	0.41	0.41	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	350	2067	0	0	817	71	453	504	854	0	0	0
Arrive On Green	0.12	0.42	0.00	0.00	0.18	0.18	0.28	0.28	0.28	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4768	398	1619	1800	3051		0	
Grp Volume(v), veh/h	72	198	0	0	266	143	200	220	422		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1728	1619	1800	1525			
Q Serve(g_s), s	0.9	1.0	0.0	0.0	2.9	3.0	4.1	4.0	4.6			
Cycle Q Clear(g_c), s	0.9	1.0	0.0	0.0	2.9	3.0	4.1	4.0	4.6			
Prop In Lane	1.00		0.00	0.00		0.23	1.00		1.00			
Lane Grp Cap(c), veh/h	350	2067	0	0	581	307	453	504	854			
V/C Ratio(X)	0.21	0.10	0.00	0.00	0.46	0.47	0.44	0.44	0.49			
Avail Cap(c_a), veh/h	811	6742	0	0	3187	1681	1494	1661	2816			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	16.0	7.0	0.0	0.0	14.8	14.8	11.9	11.8	12.1			
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.4	0.8	0.8	0.7	0.5			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.0	0.0	0.9	1.0	1.1	1.2	1.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.2	7.0	0.0	0.0	15.2	15.6	12.7	12.6	12.6			
LnGrp LOS	B	A			B	B	B	B	B			
Approach Vol, veh/h		270			409			842				
Approach Delay, s/veh		9.5			15.3			12.6				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		22.9			9.8	13.1		17.2				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		55.0			11.0	39.0		37.0				
Max Q Clear Time (g_c+I1), s		3.0			2.9	5.0		6.6				
Green Ext Time (p_c), s		1.1			0.1	2.1		4.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.8
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	3	28	0	3	6	54	11	2	56	0
Future Vol, veh/h	0	1	3	28	0	3	6	54	11	2	56	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	0	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	73	73	73	56	56	56	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1	3	38	0	4	11	96	20	3	75	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	198	218	75	198	198	96	75	0	0	116	0	0
Stage 1	80	80	-	118	118	-	-	-	-	-	-	-
Stage 2	118	138	-	81	80	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	765	684	992	765	701	965	1538	-	-	1485	-	-
Stage 1	934	832	-	892	802	-	-	-	-	-	-	-
Stage 2	892	787	-	933	832	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	755	678	992	754	695	965	1538	-	-	1485	-	-
Mov Cap-2 Maneuver	755	678	-	754	695	-	-	-	-	-	-	-
Stage 1	932	831	-	885	796	-	-	-	-	-	-	-
Stage 2	882	781	-	927	831	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.07	9.95	0.62	0.26
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1538	-	-	889	770	1485	-	-
HCM Lane V/C Ratio	0.007	-	-	0.005	0.055	0.002	-	-
HCM Control Delay (s/veh)	7.4	-	-	9.1	9.9	7.4	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	3	42	15	2	39
Future Vol, veh/h	18	3	42	15	2	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	90	90	64	64
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	4	47	17	3	61

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	114	47	0	0	63	0
Stage 1	47	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	887	1028	-	-	1552	-
Stage 1	981	-	-	-	-	-
Stage 2	961	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	886	1028	-	-	1552	-
Mov Cap-2 Maneuver	886	-	-	-	-	-
Stage 1	981	-	-	-	-	-
Stage 2	959	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.1	0	0.36
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	904	88	-
HCM Lane V/C Ratio	-	-	0.029	0.002	-
HCM Control Delay (s/veh)	-	-	9.1	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	17	0	0	1	1	34	0	8	0
Future Vol, veh/h	0	0	2	17	0	0	1	1	34	0	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	77	77	77	25	25	25	50	50	50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	2	22	0	0	4	4	136	0	16	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	28	164	16	96	96	72	16	0	0	140	0	0
Stage 1	16	16	-	80	80	-	-	-	-	-	-	-
Stage 2	12	148	-	16	16	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	987	732	1069	891	798	996	1615	-	-	1456	-	-
Stage 1	1009	886	-	934	832	-	-	-	-	-	-	-
Stage 2	1014	779	-	1009	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	984	730	1069	887	796	996	1615	-	-	1456	-	-
Mov Cap-2 Maneuver	984	730	-	887	796	-	-	-	-	-	-	-
Stage 1	1009	886	-	931	830	-	-	-	-	-	-	-
Stage 2	1011	776	-	1007	886	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.37	9.16	0.2	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	42	-	-	1069	887	1456	-	-
HCM Lane V/C Ratio	0.002	-	-	0.002	0.025	-	-	-
HCM Control Delay (s/veh)	7.2	0	-	8.4	9.2	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	13	1	0	13	16	0	2	0	20	0	17
Future Vol, veh/h	18	13	1	0	13	16	0	2	0	20	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	74	74	74	25	25	25	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	20	15	1	0	18	22	0	8	0	24	0	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	74	65	10	62	75	8	20	0	0	8	0	0
Stage 1	57	57	-	8	8	-	-	-	-	-	-	-
Stage 2	17	8	-	54	67	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	921	830	1077	937	819	1080	1609	-	-	1625	-	-
Stage 1	960	851	-	1019	893	-	-	-	-	-	-	-
Stage 2	1008	893	-	963	843	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	871	818	1077	906	807	1080	1609	-	-	1625	-	-
Mov Cap-2 Maneuver	871	818	-	906	807	-	-	-	-	-	-	-
Stage 1	946	839	-	1019	893	-	-	-	-	-	-	-
Stage 2	968	893	-	931	831	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.41	9.01	0	3.92
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1609	-	-	853	938	1625	-	-
HCM Lane V/C Ratio	-	-	-	0.043	0.042	0.014	-	-
HCM Control Delay (s/veh)	0	-	-	9.4	9	7.2	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	20	0	0	0	0	22	16	18	17	0
Future Vol, veh/h	3	0	20	0	0	0	0	22	16	18	17	0
Peak Hour Factor	0.85	0.85	0.85	0.72	0.72	0.72	0.42	0.42	0.42	0.25	0.25	0.25
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	0	24	0	0	0	0	52	38	72	68	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.3	8	8.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	58%	0%	0%	0%	100%
Vol Right, %	42%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	3	20	18	17
LT Vol	0	3	0	18	0
Through Vol	22	0	0	0	17
RT Vol	16	0	20	0	0
Lane Flow Rate	90	4	24	72	68
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.11	0.005	0.028	0.102	0.087
Departure Headway (Hd)	4.394	5.557	4.353	5.092	4.591
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	808	648	827	703	779
Service Time	2.463	3.257	2.053	2.827	2.326
HCM Lane V/C Ratio	0.111	0.006	0.029	0.102	0.087
HCM Control Delay, s/veh	8	8.3	7.2	8.4	7.8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0	0.1	0.3	0.3

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	21	8	6	18	14
Future Vol, veh/h	1	21	8	6	18	14
Peak Hour Factor	0.71	0.71	0.81	0.81	0.67	0.67
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	30	10	7	27	21
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	6.8	7.7	7.4
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	14	1	21	8	6
LT Vol	18	0	0	0	8	0
Through Vol	0	0	1	0	0	6
RT Vol	0	14	0	21	0	0
Lane Flow Rate	27	21	1	30	10	7
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.038	0.023	0.002	0.032	0.014	0.009
Departure Headway (Hd)	5.082	3.881	4.593	3.892	5.1	4.599
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	705	921	777	916	701	776
Service Time	2.808	1.608	2.332	1.631	2.839	2.339
HCM Lane V/C Ratio	0.038	0.023	0.001	0.033	0.014	0.009
HCM Control Delay, s/veh	8	6.7	7.3	6.8	7.9	7.4
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0	0.1	0	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	295	105	128	159	2	78	18	152	17	27	12
Future Volume (veh/h)	13	295	105	128	159	2	78	18	152	17	27	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	15	351	125	162	201	3	108	25	211	20	31	14
Peak Hour Factor	0.84	0.84	0.84	0.79	0.79	0.79	0.72	0.72	0.72	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	31	621	218	204	1231	18	448	383	324	467	498	210
Arrive On Green	0.02	0.25	0.25	0.13	0.36	0.36	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1619	2483	870	1619	3449	51	1237	1800	1525	1334	2343	989
Grp Volume(v), veh/h	15	240	236	162	99	105	108	25	211	20	22	23
Grp Sat Flow(s),veh/h/ln	1619	1710	1643	1619	1710	1791	1237	1800	1525	1334	1710	1622
Q Serve(g_s), s	0.3	4.4	4.6	3.5	1.4	1.4	2.8	0.4	4.6	0.4	0.4	0.4
Cycle Q Clear(g_c), s	0.3	4.4	4.6	3.5	1.4	1.4	3.2	0.4	4.6	0.8	0.4	0.4
Prop In Lane	1.00		0.53	1.00		0.03	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	31	428	411	204	610	639	448	383	324	467	364	345
V/C Ratio(X)	0.48	0.56	0.57	0.79	0.16	0.16	0.24	0.07	0.65	0.04	0.06	0.07
Avail Cap(c_a), veh/h	469	1849	1777	469	1849	1937	1598	2056	1742	1707	1953	1853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	11.9	11.9	15.4	8.0	8.0	12.7	11.4	13.0	11.7	11.4	11.4
Incr Delay (d2), s/veh	10.9	1.2	1.3	6.8	0.1	0.1	0.3	0.1	2.2	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.1	1.1	1.3	0.3	0.3	0.6	0.1	1.4	0.1	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	13.0	13.2	22.2	8.1	8.1	12.9	11.5	15.2	11.8	11.5	11.5
LnGrp LOS	C	B	B	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		491			366			344			65	
Approach Delay, s/veh		13.6			14.3			14.2			11.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	14.9		12.3	5.2	18.7		12.3				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	10.5	39.2		41.4	10.5	39.2		41.4				
Max Q Clear Time (g_c+I1), s	5.5	6.6		6.6	2.3	3.4		2.8				
Green Ext Time (p_c), s	0.2	2.5		1.3	0.0	1.0		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.9
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	444	27	51	277	17	47	2	89	25	2	11
Future Volume (veh/h)	16	444	27	51	277	17	47	2	89	25	2	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	20	562	34	60	326	20	59	2	111	42	3	19
Peak Hour Factor	0.79	0.79	0.79	0.85	0.85	0.85	0.80	0.80	0.80	0.59	0.59	0.59
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	595	1393	84	484	1392	85	428	269	228	446	32	201
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	940	3276	198	747	3274	200	1263	1800	1525	1286	212	1345
Grp Volume(v), veh/h	20	293	303	60	170	176	59	2	111	42	0	22
Grp Sat Flow(s),veh/h/ln	940	1710	1764	747	1710	1764	1263	1800	1525	1286	0	1558
Q Serve(g_s), s	0.4	3.4	3.4	1.7	1.8	1.8	1.2	0.0	1.9	0.8	0.0	0.3
Cycle Q Clear(g_c), s	2.2	3.4	3.4	5.1	1.8	1.8	1.5	0.0	1.9	0.8	0.0	0.3
Prop In Lane	1.00		0.11	1.00		0.11	1.00		1.00	1.00		0.86
Lane Grp Cap(c), veh/h	595	727	750	484	727	750	428	269	228	446	0	233
V/C Ratio(X)	0.03	0.40	0.40	0.12	0.23	0.24	0.14	0.01	0.49	0.09	0.00	0.09
Avail Cap(c_a), veh/h	1369	2134	2202	1098	2134	2201	1798	2221	1882	1914	0	2010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	5.6	5.6	7.4	5.2	5.2	11.0	10.2	11.0	10.6	0.0	10.4
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.1	0.2	0.2	0.1	0.0	1.6	0.1	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.1	0.2	0.2	0.3	0.0	0.6	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.9	6.0	6.0	7.5	5.3	5.3	11.2	10.2	12.6	10.7	0.0	10.5
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		616			406			172			64	
Approach Delay, s/veh		6.0			5.7			12.1			10.6	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.8	10.4	17.8	10.4
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	35.2	34.8	35.2	* 36
Max Q Clear Time (g_c+I1), s	5.4	3.9	7.1	2.8
Green Ext Time (p_c), s	3.5	0.6	2.3	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	442	87	12	386	7	55	2	16	4	0	1
Future Volume (veh/h)	9	442	87	12	386	7	55	2	16	4	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	12	574	113	15	489	9	67	2	20	6	0	2
Peak Hour Factor	0.77	0.77	0.77	0.79	0.79	0.79	0.82	0.82	0.82	0.63	0.63	0.63
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	622	1343	264	540	1619	30	439	4	153	461	0	153
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.10	0.10	0.10	0.10	0.00	0.10
Sat Flow, veh/h	818	2850	559	686	3435	63	1345	40	1525	1527	0	1525
Grp Volume(v), veh/h	12	344	343	15	243	255	69	0	20	6	0	2
Grp Sat Flow(s),veh/h/ln	818	1710	1699	686	1710	1789	1385	0	1525	1527	0	1525
Q Serve(g_s), s	0.2	3.1	3.1	0.3	2.0	2.0	1.0	0.0	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.3	3.1	3.1	3.5	2.0	2.0	1.1	0.0	0.3	0.1	0.0	0.0
Prop In Lane	1.00		0.33	1.00		0.04	0.97		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	622	806	801	540	806	843	443	0	153	461	0	153
V/C Ratio(X)	0.02	0.43	0.43	0.03	0.30	0.30	0.16	0.00	0.13	0.01	0.00	0.01
Avail Cap(c_a), veh/h	1029	1657	1646	882	1657	1733	2213	0	2119	2216	0	2119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.5	4.1	4.1	5.2	3.8	3.8	9.9	0.0	9.6	9.5	0.0	9.5
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.0	0.2	0.2	0.2	0.0	0.4	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.2	0.2	0.2	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.5	4.4	4.4	5.3	4.0	4.0	10.1	0.0	10.0	9.5	0.0	9.5
LnGrp LOS	A	A	A	A	A	A	B		A	A		A
Approach Vol, veh/h		699			513			89			8	
Approach Delay, s/veh		4.4			4.0			10.1			9.5	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.4	6.9	16.4	6.9
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	22.6	32.4	22.6	32.4
Max Q Clear Time (g_c+I1), s	5.1	3.1	5.5	2.1
Green Ext Time (p_c), s	3.7	0.4	2.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	4.7
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	322	21	22	253	96	32	22	22	140	39	130
Future Volume (veh/h)	106	322	21	22	253	96	32	22	22	140	39	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	138	418	27	25	288	109	41	28	28	184	51	171
Peak Hour Factor	0.77	0.77	0.77	0.88	0.88	0.88	0.78	0.78	0.78	0.76	0.76	0.76
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	325	703	45	156	527	195	139	67	67	348	78	261
Arrive On Green	0.10	0.22	0.22	0.09	0.22	0.22	0.08	0.08	0.08	0.20	0.20	0.20
Sat Flow, veh/h	1714	3262	210	1810	2443	904	1810	872	872	1714	383	1285
Grp Volume(v), veh/h	138	218	227	25	200	197	41	0	56	184	0	222
Grp Sat Flow(s),veh/h/ln	1714	1710	1762	1810	1710	1637	1810	0	1743	1714	0	1669
Q Serve(g_s), s	3.4	5.3	5.4	0.6	4.8	5.0	1.0	0.0	1.4	4.4	0.0	5.7
Cycle Q Clear(g_c), s	3.4	5.3	5.4	0.6	4.8	5.0	1.0	0.0	1.4	4.4	0.0	5.7
Prop In Lane	1.00		0.12	1.00		0.55	1.00		0.50	1.00		0.77
Lane Grp Cap(c), veh/h	325	369	380	156	369	353	139	0	134	348	0	339
V/C Ratio(X)	0.42	0.59	0.60	0.16	0.54	0.56	0.29	0.00	0.42	0.53	0.00	0.66
Avail Cap(c_a), veh/h	543	844	870	527	973	932	406	0	391	957	0	932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.8	16.4	16.4	19.6	16.2	16.2	20.2	0.0	20.4	16.5	0.0	17.0
Incr Delay (d2), s/veh	0.9	1.5	1.5	0.5	1.2	1.4	1.2	0.0	2.1	1.2	0.0	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.0	2.0	0.2	1.8	1.8	0.4	0.0	0.6	1.6	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.7	17.9	17.9	20.1	17.4	17.6	21.4	0.0	22.5	17.8	0.0	19.1
LnGrp LOS	B	B	B	C	B	B	C		C	B		B
Approach Vol, veh/h		583			422			97			406	
Approach Delay, s/veh		18.1			17.7			22.0			18.5	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	15.1		8.2	9.1	14.6		14.5				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	13.5	* 23		10.4	10.5	26.4		25.9				
Max Q Clear Time (g_c+I1), s	2.6	7.4		3.4	5.4	7.0		7.7				
Green Ext Time (p_c), s	0.0	2.3		0.2	0.1	2.3		1.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.3
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	334	124	45	256	118	54
Future Volume (veh/h)	334	124	45	256	118	54
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	451	168	58	332	136	62
Peak Hour Factor	0.74	0.74	0.77	0.77	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	893	330	103	1979	214	202
Arrive On Green	0.37	0.37	0.06	0.58	0.13	0.13
Sat Flow, veh/h	2534	903	1619	3510	1619	1525
Grp Volume(v), veh/h	314	305	58	332	136	62
Grp Sat Flow(s),veh/h/ln	1710	1637	1619	1710	1619	1525
Q Serve(g_s), s	4.3	4.4	1.0	1.4	2.4	1.1
Cycle Q Clear(g_c), s	4.3	4.4	1.0	1.4	2.4	1.1
Prop In Lane		0.55	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	625	598	103	1979	214	202
V/C Ratio(X)	0.50	0.51	0.56	0.17	0.63	0.31
Avail Cap(c_a), veh/h	1358	1300	565	4022	1447	1363
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.4	7.4	13.7	3.0	12.4	11.8
Incr Delay (d2), s/veh	0.6	0.7	4.7	0.0	3.1	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.0	0.4	0.1	0.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.1	8.1	18.4	3.0	15.5	12.7
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h	619			390	198	
Approach Delay, s/veh	8.1			5.3	14.6	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.4	15.6		8.1		22.0
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	10.5	* 24		26.9		35.4
Max Q Clear Time (g_c+I1), s	3.0	6.4		4.4		3.4
Green Ext Time (p_c), s	0.1	3.7		0.5		2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	8.2
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	38	36	131	36	55	21	424	163	61	264	7
Future Volume (veh/h)	1	38	36	131	36	55	21	424	163	61	264	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	2	58	55	158	43	66	23	456	0	84	362	10
Peak Hour Factor	0.65	0.65	0.65	0.83	0.83	0.83	0.93	0.93	0.93	0.73	0.73	0.73
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	410	211	200	408	159	244	46	598		124	1293	36
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.03	0.33	0.00	0.08	0.38	0.38
Sat Flow, veh/h	1167	849	806	1163	640	983	1619	1800	1525	1619	3399	94
Grp Volume(v), veh/h	2	0	113	158	0	109	23	456	0	84	182	190
Grp Sat Flow(s),veh/h/ln	1167	0	1655	1163	0	1623	1619	1800	1525	1619	1710	1783
Q Serve(g_s), s	0.1	0.0	2.2	5.0	0.0	2.1	0.6	8.9	0.0	2.0	2.9	2.9
Cycle Q Clear(g_c), s	2.2	0.0	2.2	7.2	0.0	2.1	0.6	8.9	0.0	2.0	2.9	2.9
Prop In Lane	1.00		0.49	1.00		0.61	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	410	0	411	408	0	403	46	598		124	650	678
V/C Ratio(X)	0.00	0.00	0.27	0.39	0.00	0.27	0.50	0.76		0.68	0.28	0.28
Avail Cap(c_a), veh/h	654	0	757	651	0	742	206	1052		226	1021	1065
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	0.0	11.9	14.8	0.0	11.9	18.9	11.8	0.0	17.7	8.5	8.5
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.6	0.0	0.4	8.3	2.0	0.0	6.4	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.7	1.2	0.0	0.7	0.3	2.9	0.0	0.8	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.8	0.0	12.3	15.4	0.0	12.3	27.2	13.8	0.0	24.1	8.7	8.7
LnGrp LOS	B		B	B		B	C	B		C	A	A
Approach Vol, veh/h		115			267			479			456	
Approach Delay, s/veh		12.3			14.1			14.4			11.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	19.5		14.3	7.5	17.6		14.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.5	23.0		18.0				
Max Q Clear Time (g_c+I1), s	2.6	4.9		9.2	4.0	10.9		4.2				
Green Ext Time (p_c), s	0.0	1.9		0.8	0.0	2.2		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.2
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	49	0	83	135	596	0	0	327	174
Future Volume (veh/h)	0	0	0	49	0	83	135	596	0	0	327	174
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				56	0	95	155	685	0	0	442	0
Peak Hour Factor				0.87	0.87	0.87	0.87	0.87	0.87	0.74	0.74	0.74
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				232	0	206	694	2371	0	0	613	
Arrive On Green				0.14	0.00	0.14	0.43	0.69	0.00	0.00	0.18	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				56	0	95	155	685	0	0	442	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				2.0	0.0	4.0	4.2	5.4	0.0	0.0	8.5	0.0
Cycle Q Clear(g_c), s				2.0	0.0	4.0	4.2	5.4	0.0	0.0	8.5	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				232	0	206	694	2371	0	0	613	
V/C Ratio(X)				0.24	0.00	0.46	0.22	0.29	0.00	0.00	0.72	
Avail Cap(c_a), veh/h				245	0	218	694	2371	0	0	1026	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.87	0.87	0.00	0.00	0.97	0.00
Uniform Delay (d), s/veh				27.1	0.0	27.9	12.6	4.1	0.0	0.0	27.1	0.0
Incr Delay (d2), s/veh				0.5	0.0	1.6	0.1	0.3	0.0	0.0	7.0	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.8	0.0	1.5	1.4	1.3	0.0	0.0	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				27.6	0.0	29.5	12.7	4.4	0.0	0.0	34.1	0.0
LnGrp LOS				C		C	B	A			C	
Approach Vol, veh/h					151			840			442	
Approach Delay, s/veh					28.8			5.9			34.1	
Approach LOS					C			A			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.0	18.5		15.5		54.5
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0
Max Green Setting (Gmax), s	20.0	* 21		10.0		48.0
Max Q Clear Time (g_c+I1), s	6.2	10.5		6.0		7.4
Green Ext Time (p_c), s	0.2	2.0		0.2		5.2

Intersection Summary	
HCM 7th Control Delay, s/veh	17.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	269	203	84	526	271	65
Future Volume (veh/h)	269	203	84	526	271	65
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	289	218	115	721	475	114
Peak Hour Factor	0.93	0.93	0.73	0.73	0.57	0.57
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	351	330	244	1933	902	215
Arrive On Green	0.22	0.22	0.15	0.57	0.33	0.33
Sat Flow, veh/h	1619	1525	1619	3510	2829	653
Grp Volume(v), veh/h	289	218	115	721	295	294
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1682
Q Serve(g_s), s	9.4	7.2	3.6	6.4	7.7	7.8
Cycle Q Clear(g_c), s	9.4	7.2	3.6	6.4	7.7	7.8
Prop In Lane	1.00	1.00	1.00			0.39
Lane Grp Cap(c), veh/h	351	330	244	1933	563	554
V/C Ratio(X)	0.82	0.66	0.47	0.37	0.52	0.53
Avail Cap(c_a), veh/h	530	499	294	1933	563	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.98	0.98	0.98	0.98
Uniform Delay (d), s/veh	20.5	19.7	21.4	6.6	15.0	15.0
Incr Delay (d2), s/veh	3.8	0.8	0.5	0.5	3.4	3.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	2.4	1.3	1.8	3.1	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.3	20.5	21.9	7.1	18.4	18.5
LnGrp LOS	C	C	C	A	B	B
Approach Vol, veh/h	507			836	589	
Approach Delay, s/veh	22.7			9.2	18.4	
Approach LOS	C			A	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.0	24.1			37.1	17.9
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	10.3	10.3			25.0	18.0
Max Q Clear Time (g_c+I1), s	5.6	9.8			8.4	11.4
Green Ext Time (p_c), s	0.0	0.2			4.4	0.6

Intersection Summary		
HCM 7th Control Delay, s/veh	15.5	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	9	16	30	13	173	10	333	27	141	337	7
Future Volume (veh/h)	46	9	16	30	13	173	10	333	27	141	337	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	71	14	25	38	16	216	11	378	31	186	443	9
Peak Hour Factor	0.65	0.65	0.65	0.80	0.80	0.80	0.88	0.88	0.88	0.76	0.76	0.76
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	400	436	389	564	436	389	544	1335	109	563	1430	29
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1044	1710	1525	1244	1710	1525	853	3202	261	888	3428	70
Grp Volume(v), veh/h	71	14	25	38	16	216	11	201	208	186	221	231
Grp Sat Flow(s),veh/h/ln	1044	1710	1525	1244	1710	1525	853	1710	1753	888	1710	1787
Q Serve(g_s), s	1.7	0.2	0.3	0.7	0.2	3.4	0.2	2.1	2.2	4.8	2.4	2.4
Cycle Q Clear(g_c), s	5.1	0.2	0.3	1.0	0.2	3.4	2.6	2.1	2.2	7.0	2.4	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.04
Lane Grp Cap(c), veh/h	400	436	389	564	436	389	544	713	731	563	713	745
V/C Ratio(X)	0.18	0.03	0.06	0.07	0.04	0.56	0.02	0.28	0.28	0.33	0.31	0.31
Avail Cap(c_a), veh/h	819	1122	1001	1063	1122	1001	748	1122	1150	775	1122	1173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	7.7	7.7	8.1	7.7	8.9	6.2	5.3	5.3	7.6	5.4	5.4
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.0	0.0	1.2	0.0	0.2	0.2	0.3	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	0.1	0.0	0.8	0.0	0.2	0.2	0.5	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.3	7.7	7.8	8.2	7.7	10.1	6.2	5.5	5.5	7.9	5.6	5.6
LnGrp LOS	B	A	A	A	A	B	A	A	A	A	A	A
Approach Vol, veh/h		110			270			420			638	
Approach Delay, s/veh		10.0			9.7			5.5			6.3	
Approach LOS		B			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.9	11.5	15.9	11.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	4.6	7.1	9.0	5.4
Green Ext Time (p_c), s	1.8	0.3	2.5	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	7.0
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	98	27	36	155	101	13	89	14	127	126	71
Future Volume (veh/h)	94	98	27	36	155	101	13	89	14	127	126	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	124	129	36	44	191	125	14	98	15	157	156	88
Peak Hour Factor	0.76	0.76	0.76	0.81	0.81	0.81	0.91	0.91	0.91	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	566	830	224	622	561	476	558	872	131	628	629	337
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1084	2661	719	1110	1800	1525	1032	2982	447	1163	2151	1151
Grp Volume(v), veh/h	124	81	84	44	191	125	14	55	58	157	122	122
Grp Sat Flow(s),veh/h/ln	1084	1710	1671	1110	1800	1525	1032	1710	1719	1163	1710	1593
Q Serve(g_s), s	2.3	0.8	0.8	0.7	1.9	1.4	0.2	0.5	0.6	2.6	1.2	1.3
Cycle Q Clear(g_c), s	4.1	0.8	0.8	1.5	1.9	1.4	1.6	0.5	0.6	3.2	1.2	1.3
Prop In Lane	1.00		0.43	1.00		1.00	1.00		0.26	1.00		0.72
Lane Grp Cap(c), veh/h	566	533	521	622	561	476	558	500	503	628	500	466
V/C Ratio(X)	0.22	0.15	0.16	0.07	0.34	0.26	0.03	0.11	0.11	0.25	0.24	0.26
Avail Cap(c_a), veh/h	1086	1353	1322	1154	1425	1207	1073	1353	1361	1209	1353	1261
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.6	5.7	5.7	6.2	6.0	5.9	6.8	5.9	5.9	7.0	6.1	6.2
Incr Delay (d2), s/veh	0.2	0.1	0.1	0.0	0.4	0.3	0.0	0.1	0.1	0.2	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.1	0.1	0.4	0.2	0.0	0.1	0.1	0.2	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.8	5.8	5.8	6.3	6.4	6.2	6.8	6.0	6.0	7.3	6.4	6.5
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		289			360			127			401	
Approach Delay, s/veh		6.7			6.3			6.1			6.7	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	11.2	11.6	11.2	11.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	3.6	6.1	5.2	3.9
Green Ext Time (p_c), s	0.4	1.1	1.5	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.5
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	290	2	4	221	2	3
Future Vol, veh/h	290	2	4	221	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	86	86	62	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	341	2	5	257	3	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	344	0	480	172
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	138	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1227	-	520	848
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1227	-	518	848
Mov Cap-2 Maneuver	-	-	-	-	582	-
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	877	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.14	10.08
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	717	-	-	1227	-
HCM Lane V/C Ratio	0.011	-	-	0.004	-
HCM Control Delay (s/veh)	10.1	-	-	7.9	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	78	269	9	8	30
Future Vol, veh/h	7	78	269	9	8	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	82	82	53	53
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	108	328	11	15	57

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	339	0	-	0	461	334
Stage 1	-	-	-	-	334	-
Stage 2	-	-	-	-	128	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1231	-	-	-	562	713
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	903	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1231	-	-	-	557	713
Mov Cap-2 Maneuver	-	-	-	-	557	-
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	903	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.65	0	10.98
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	148	-	-	-	673
HCM Lane V/C Ratio	0.008	-	-	-	0.106
HCM Control Delay (s/veh)	7.9	0	-	-	11
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

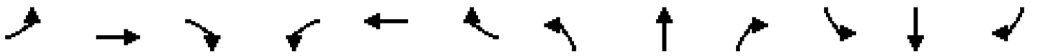
Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	92	3	22	282	0	10
Future Vol, veh/h	92	3	22	282	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	85	85	50	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	115	4	26	332	0	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	119	0	500	117
Stage 1	-	-	-	-	117	-
Stage 2	-	-	-	-	384	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1482	-	534	941
Stage 1	-	-	-	-	913	-
Stage 2	-	-	-	-	693	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1482	-	522	941
Mov Cap-2 Maneuver	-	-	-	-	522	-
Stage 1	-	-	-	-	913	-
Stage 2	-	-	-	-	678	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.54	8.91
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	941	-	-	130	-
HCM Lane V/C Ratio	0.021	-	-	0.017	-
HCM Control Delay (s/veh)	8.9	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	90	36	51	177	82	38	52	77	34	55	23
Future Volume (veh/h)	7	90	36	51	177	82	38	52	77	34	55	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	8	106	0	61	211	0	41	57	84	37	60	25
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	14	792		78	927		58	384	342	54	399	338
Arrive On Green	0.01	0.23	0.00	0.05	0.27	0.00	0.04	0.22	0.22	0.03	0.22	0.22
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	1710	1525	1619	1800	1525
Grp Volume(v), veh/h	8	106	0	61	211	0	41	57	84	37	60	25
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1525	1619	1800	1525
Q Serve(g_s), s	0.2	1.1	0.0	1.6	2.1	0.0	1.1	1.2	2.0	1.0	1.2	0.6
Cycle Q Clear(g_c), s	0.2	1.1	0.0	1.6	2.1	0.0	1.1	1.2	2.0	1.0	1.2	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	14	792		78	927		58	384	342	54	399	338
V/C Ratio(X)	0.58	0.13		0.78	0.23		0.70	0.15	0.25	0.69	0.15	0.07
Avail Cap(c_a), veh/h	749	3166		749	3166		562	1583	1412	562	1666	1412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	13.2	0.0	20.3	12.2	0.0	20.6	13.4	13.8	20.7	13.5	13.3
Incr Delay (d2), s/veh	13.7	0.1	0.0	6.3	0.1	0.0	5.6	0.2	0.4	5.7	0.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.0	0.6	0.6	0.0	0.4	0.3	0.5	0.4	0.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.0	13.2	0.0	26.6	12.4	0.0	26.2	13.6	14.1	26.4	13.7	13.4
LnGrp LOS	D	B		C	B		C	B	B	C	B	B
Approach Vol, veh/h		114			272			182			122	
Approach Delay, s/veh		14.8			15.6			16.7			17.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	15.4	5.6	16.2	4.4	17.1	5.4	16.3
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	20.0	40.0	15.0	40.0	20.0	40.0	15.0	* 40
Max Q Clear Time (g_c+I1), s	3.6	3.1	3.1	3.2	2.2	4.1	3.0	4.0
Green Ext Time (p_c), s	0.0	0.6	0.0	0.3	0.0	1.2	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	16.1
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	2	202	126	0
Future Vol, veh/h	0	2	2	202	126	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	25	25	83	83	89	89
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	8	2	243	142	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	390	142	142	0	-	0
Stage 1	142	-	-	-	-	-
Stage 2	248	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	618	912	1454	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	798	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	617	912	1454	-	-	-
Mov Cap-2 Maneuver	617	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.98	0.07	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	18	-	912	-	-
HCM Lane V/C Ratio	0.002	-	0.009	-	-
HCM Control Delay (s/veh)	7.5	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	196	2	3	342	0	2	0	3	2	0	2
Future Vol, veh/h	2	196	2	3	342	0	2	0	3	2	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	95	95	95	84	84	84	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	211	2	3	360	0	2	0	4	2	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	360	0	0	213	0	0	402	582	106	476	584	180
Stage 1	-	-	-	-	-	-	216	216	-	366	366	-
Stage 2	-	-	-	-	-	-	186	366	-	110	217	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1210	-	-	1369	-	-	537	427	934	477	426	838
Stage 1	-	-	-	-	-	-	772	728	-	631	626	-
Stage 2	-	-	-	-	-	-	803	626	-	890	727	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1210	-	-	1369	-	-	534	425	934	473	425	838
Mov Cap-2 Maneuver	-	-	-	-	-	-	534	425	-	473	425	-
Stage 1	-	-	-	-	-	-	770	726	-	629	624	-
Stage 2	-	-	-	-	-	-	799	624	-	884	726	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.09	10.05	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	718	35	-	-	31	-	-	604
HCM Lane V/C Ratio	0.008	0.002	-	-	0.002	-	-	0.008
HCM Control Delay (s/veh)	10.1	8	0	-	7.6	0	-	11
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	199	0	2	344	0	2	0	0	2	0	0
Future Vol, veh/h	2	199	0	2	344	0	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	81	81	81	75	75	75	50	50	50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	219	0	2	425	0	3	0	0	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	425	0	0	219	0	0	440	653	109	543	653	212
Stage 1	-	-	-	-	-	-	223	223	-	430	430	-
Stage 2	-	-	-	-	-	-	217	430	-	114	223	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1145	-	-	1363	-	-	505	389	930	427	389	799
Stage 1	-	-	-	-	-	-	765	723	-	579	587	-
Stage 2	-	-	-	-	-	-	771	587	-	885	723	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1145	-	-	1363	-	-	503	388	930	425	388	799
Mov Cap-2 Maneuver	-	-	-	-	-	-	503	388	-	425	388	-
Stage 1	-	-	-	-	-	-	763	721	-	578	586	-
Stage 2	-	-	-	-	-	-	769	586	-	883	721	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.06	12.19	13.55
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	503	36	-	-	21	-	-	425
HCM Lane V/C Ratio	0.005	0.002	-	-	0.002	-	-	0.009
HCM Control Delay (s/veh)	12.2	8.1	0	-	7.6	0	-	13.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	198	1	2	340	0	2	0	0	2	0	4
Future Vol, veh/h	2	198	1	2	340	0	2	0	0	2	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	236	1	2	405	0	2	0	0	2	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	405	0	0	237	0	0	448	651	118	532	651	202
Stage 1	-	-	-	-	-	-	241	241	-	410	410	-
Stage 2	-	-	-	-	-	-	207	410	-	123	242	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1165	-	-	1342	-	-	499	391	917	435	390	811
Stage 1	-	-	-	-	-	-	747	710	-	595	599	-
Stage 2	-	-	-	-	-	-	781	599	-	874	709	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1165	-	-	1342	-	-	494	389	917	433	389	811
Mov Cap-2 Maneuver	-	-	-	-	-	-	494	389	-	433	389	-
Stage 1	-	-	-	-	-	-	745	708	-	594	598	-
Stage 2	-	-	-	-	-	-	776	598	-	872	708	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.06	12.32	10.79
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	494	36	-	-	21	-	-	628
HCM Lane V/C Ratio	0.005	0.002	-	-	0.002	-	-	0.01
HCM Control Delay (s/veh)	12.3	8.1	0	-	7.7	0	-	10.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	198	1	2	342	1	3	0	0	3	0	0
Future Vol, veh/h	2	198	1	2	342	1	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	54	54	54	86	86	86	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	271	1	4	633	2	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	635	0	0	273	0	0	601	920	136	783	920	318
Stage 1	-	-	-	-	-	-	277	277	-	642	642	-
Stage 2	-	-	-	-	-	-	324	643	-	141	278	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	958	-	-	1302	-	-	388	273	894	288	273	684
Stage 1	-	-	-	-	-	-	711	685	-	434	472	-
Stage 2	-	-	-	-	-	-	668	472	-	853	684	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	958	-	-	1302	-	-	385	271	894	286	271	684
Mov Cap-2 Maneuver	-	-	-	-	-	-	385	271	-	286	271	-
Stage 1	-	-	-	-	-	-	709	682	-	433	471	-
Stage 2	-	-	-	-	-	-	666	470	-	851	682	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.11	0.07	14.42	17.75
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	385	36	-	-	21	-	-	286
HCM Lane V/C Ratio	0.009	0.003	-	-	0.003	-	-	0.012
HCM Control Delay (s/veh)	14.4	8.8	0	-	7.8	0	-	17.7
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	186	18	16	322	0	20	0	13	2	1	0
Future Vol, veh/h	2	186	18	16	322	0	20	0	13	2	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	83	83	83	92	92	92	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	207	20	19	388	0	22	0	14	2	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	388	0	0	227	0	0	454	648	113	534	658	194
Stage 1	-	-	-	-	-	-	221	221	-	427	427	-
Stage 2	-	-	-	-	-	-	233	427	-	108	231	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1182	-	-	1354	-	-	494	392	924	433	387	821
Stage 1	-	-	-	-	-	-	767	724	-	582	589	-
Stage 2	-	-	-	-	-	-	755	589	-	892	717	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1182	-	-	1354	-	-	484	385	924	419	380	821
Mov Cap-2 Maneuver	-	-	-	-	-	-	484	385	-	419	380	-
Stage 1	-	-	-	-	-	-	765	723	-	572	580	-
Stage 2	-	-	-	-	-	-	741	580	-	876	715	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.47	11.43	13.96
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	595	31	-	-	170	-	-	405
HCM Lane V/C Ratio	0.06	0.002	-	-	0.014	-	-	0.008
HCM Control Delay (s/veh)	11.4	8.1	0	-	7.7	0.1	-	14
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	195	10	15	339	3	7
Future Vol, veh/h	195	10	15	339	3	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	88	88	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	212	11	17	385	3	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	223	0	444	111
Stage 1	-	-	-	-	217	-
Stage 2	-	-	-	-	227	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1358	-	547	927
Stage 1	-	-	-	-	804	-
Stage 2	-	-	-	-	795	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1358	-	540	927
Mov Cap-2 Maneuver	-	-	-	-	540	-
Stage 1	-	-	-	-	804	-
Stage 2	-	-	-	-	784	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.42	9.79
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	763	-	-	153	-
HCM Lane V/C Ratio	0.014	-	-	0.013	-
HCM Control Delay (s/veh)	9.8	-	-	7.7	0.1
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	176	21	20	322	21	19
Future Vol, veh/h	176	21	20	322	21	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	66	66	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	463	55	30	488	26	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	518	0	795	259
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	305	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1058	-	329	746
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	728	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1058	-	318	746
Mov Cap-2 Maneuver	-	-	-	-	318	-
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	703	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.73	14.27
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	437	-	-	211	-
HCM Lane V/C Ratio	0.112	-	-	0.029	-
HCM Control Delay (s/veh)	14.3	-	-	8.5	0.3
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	196	9	57	338	7	27
Future Vol, veh/h	196	9	57	338	7	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	59	59	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	218	10	97	573	8	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	228	0	702	114
Stage 1	-	-	-	-	223	-
Stage 2	-	-	-	-	480	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1352	-	377	924
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	594	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1352	-	345	924
Mov Cap-2 Maneuver	-	-	-	-	345	-
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	544	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.56	10.55
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	686	-	-	519	-
HCM Lane V/C Ratio	0.055	-	-	0.071	-
HCM Control Delay (s/veh)	10.6	-	-	7.9	0.5
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	221	4	25	407	4	17
Future Vol, veh/h	221	4	25	407	4	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	64	64	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	243	4	39	636	4	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	247	0	641	124
Stage 1	-	-	-	-	245	-
Stage 2	-	-	-	-	396	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1330	-	412	910
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	655	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1330	-	397	910
Mov Cap-2 Maneuver	-	-	-	-	397	-
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	631	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.68	10.09
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	731	-	-	208	-
HCM Lane V/C Ratio	0.031	-	-	0.029	-
HCM Control Delay (s/veh)	10.1	-	-	7.8	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

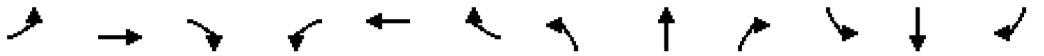
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	229	422	116	83	11
Future Vol, veh/h	13	229	422	116	83	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	60	79	79	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	382	534	147	98	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	681	0	-	0	842	341
Stage 1	-	-	-	-	608	-
Stage 2	-	-	-	-	234	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	921	-	-	-	307	661
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	789	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	921	-	-	-	300	661
Mov Cap-2 Maneuver	-	-	-	-	403	-
Stage 1	-	-	-	-	500	-
Stage 2	-	-	-	-	789	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.48	0	16.51
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	921	-	-	-	423
HCM Lane V/C Ratio	0.024	-	-	-	0.262
HCM Control Delay (s/veh)	9	-	-	-	16.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	227	91	17	521	0	0	0	0	21	4	20
Future Volume (veh/h)	0	227	91	17	521	0	0	0	0	21	4	20
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	280	112	25	755	0				33	6	32
Peak Hour Factor	0.81	0.81	0.81	0.69	0.69	0.69				0.63	0.63	0.63
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1338	523	41	2233	0				84	13	68
Arrive On Green	0.00	0.62	0.62	0.06	1.00	0.00				0.06	0.06	0.06
Sat Flow, veh/h	0	2244	844	1457	3159	0				1457	222	1185
Grp Volume(v), veh/h	0	197	195	25	755	0				33	0	38
Grp Sat Flow(s),veh/h/ln	0	1539	1468	1457	1539	0				1457	0	1407
Q Serve(g_s), s	0.0	3.4	3.5	1.0	0.0	0.0				1.3	0.0	1.6
Cycle Q Clear(g_c), s	0.0	3.4	3.5	1.0	0.0	0.0				1.3	0.0	1.6
Prop In Lane	0.00		0.58	1.00		0.00				1.00		0.84
Lane Grp Cap(c), veh/h	0	952	908	41	2233	0				84	0	81
V/C Ratio(X)	0.00	0.21	0.21	0.60	0.34	0.00				0.39	0.00	0.47
Avail Cap(c_a), veh/h	0	952	908	202	2233	0				194	0	188
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.98	0.98	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.0	5.0	28.0	0.0	0.0				27.2	0.0	27.4
Incr Delay (d2), s/veh	0.0	0.5	0.5	5.1	0.4	0.0				1.1	0.0	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.7	0.4	0.1	0.0				0.5	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	5.5	5.6	33.0	0.4	0.0				28.3	0.0	28.9
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		392			780						71	
Approach Delay, s/veh		5.5			1.4						28.7	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.4	43.1		10.5		49.5
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0
Max Green Setting (Gmax), s	8.3	26.0		8.0		39.0
Max Q Clear Time (g_c+I1), s	3.0	5.5		3.6		2.0
Green Ext Time (p_c), s	0.0	1.1		0.0		2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	4.3
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	243	0	0	383	23	172	0	20	0	0	0
Future Volume (veh/h)	21	243	0	0	383	23	172	0	20	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	24	273	0	0	416	25	212	0	25			
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.81	0.81	0.81			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	44	2154	0	0	1792	799	263	0	234			
Arrive On Green	0.03	0.63	0.00	0.00	0.52	0.52	0.15	0.00	0.15			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	24	273	0	0	416	25	212	0	25			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.9	1.9	0.0	0.0	4.0	0.5	7.2	0.0	0.8			
Cycle Q Clear(g_c), s	0.9	1.9	0.0	0.0	4.0	0.5	7.2	0.0	0.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	44	2154	0	0	1792	799	263	0	234			
V/C Ratio(X)	0.54	0.13	0.00	0.00	0.23	0.03	0.81	0.00	0.11			
Avail Cap(c_a), veh/h	324	2154	0	0	1792	799	343	0	305			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.99	0.99	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	28.8	4.5	0.0	0.0	7.7	6.9	24.5	0.0	21.9			
Incr Delay (d2), s/veh	3.7	0.1	0.0	0.0	0.3	0.1	7.8	0.0	0.1			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.0	0.0	1.0	0.1	3.3	0.0	0.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	4.6	0.0	0.0	8.0	7.0	32.3	0.0	21.9			
LnGrp LOS	C	A			A	A	C		C			
Approach Vol, veh/h		297			441			237				
Approach Delay, s/veh		6.8			8.0			31.2				
Approach LOS		A			A			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		43.8			6.3	37.4		16.2				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		35.0			12.0	18.0		12.0				
Max Q Clear Time (g_c+I1), s		3.9			2.9	6.0		9.2				
Green Ext Time (p_c), s		0.9			0.0	1.2		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			13.3									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	0	18	13	0	2	28	184	6	1	111	15
Future Vol, veh/h	17	0	18	13	0	2	28	184	6	1	111	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	89	89	89	81	81	81	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	20	0	21	15	0	2	35	227	7	1	123	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	430	438	70	360	439	227	140	0	0	235	0	0
Stage 1	134	134	-	296	296	-	-	-	-	-	-	-
Stage 2	296	304	-	64	142	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	526	516	985	587	515	817	1456	-	-	1345	-	-
Stage 1	861	789	-	717	672	-	-	-	-	-	-	-
Stage 2	717	667	-	945	783	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	512	503	985	561	502	817	1456	-	-	1345	-	-
Mov Cap-2 Maneuver	512	503	-	561	502	-	-	-	-	-	-	-
Stage 1	861	789	-	700	656	-	-	-	-	-	-	-
Stage 2	698	651	-	925	782	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.63	11.33	0.97	0.06
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1456	-	-	680	585	1345	-	-
HCM Lane V/C Ratio	0.024	-	-	0.059	0.029	0.001	-	-
HCM Control Delay (s/veh)	7.5	-	-	10.6	11.3	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	64	0	0	0	71	185	0	0	145	4
Future Vol, veh/h	1	0	64	0	0	0	71	185	0	0	145	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	92	92	92	92	92	92	74	74	74
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	0	73	0	0	0	77	201	0	0	196	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	454	554	101	453	557	101	201	0	0	201	0	0
Stage 1	199	199	-	355	355	-	-	-	-	-	-	-
Stage 2	255	355	-	98	201	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	494	443	942	495	442	942	1383	-	-	1383	-	-
Stage 1	790	740	-	640	633	-	-	-	-	-	-	-
Stage 2	733	633	-	904	738	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	467	418	942	431	417	942	1383	-	-	1383	-	-
Mov Cap-2 Maneuver	467	418	-	431	417	-	-	-	-	-	-	-
Stage 1	790	740	-	605	598	-	-	-	-	-	-	-
Stage 2	692	598	-	834	738	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.2	0	2.15	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1383	-	-	467	942	-	1383	-	-
HCM Lane V/C Ratio	0.056	-	-	0.002	0.077	-	-	-	-
HCM Control Delay (s/veh)	7.8	-	-	12.7	9.1	0	0	-	-
HCM Lane LOS	A	-	-	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0	0.3	-	0	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	192	15	88	271	19	6	0	46	4	0	6
Future Vol, veh/h	7	192	15	88	271	19	6	0	46	4	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	89	89	89	58	58	58	50	50	50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	211	16	99	304	21	10	0	79	8	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	326	0	0	227	0	0	585	758	114	634	756	163
Stage 1	-	-	-	-	-	-	235	235	-	513	513	-
Stage 2	-	-	-	-	-	-	350	524	-	121	243	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1245	-	-	1353	-	-	399	339	924	368	340	859
Stage 1	-	-	-	-	-	-	753	714	-	517	539	-
Stage 2	-	-	-	-	-	-	645	533	-	876	709	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1245	-	-	1353	-	-	362	312	924	310	313	859
Mov Cap-2 Maneuver	-	-	-	-	-	-	362	312	-	310	313	-
Stage 1	-	-	-	-	-	-	748	710	-	480	500	-
Stage 2	-	-	-	-	-	-	590	494	-	796	704	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.26	1.83	10.19	12.46
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	784	1245	-	-	1353	-	-	503
HCM Lane V/C Ratio	0.114	0.006	-	-	0.073	-	-	0.04
HCM Control Delay (s/veh)	10.2	7.9	-	-	7.9	-	-	12.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.2	-	-	0.1

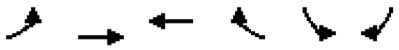
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	243	15	55	305	99	14	1	67	130	3	13
Future Volume (veh/h)	13	243	15	55	305	99	14	1	67	130	3	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	14	270	17	65	359	116	17	1	81	151	0	15
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.83	0.83	0.83	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	26	894	56	114	1220	376	142	157	133	1251	0	567
Arrive On Green	0.02	0.27	0.27	0.07	0.33	0.33	0.09	0.09	0.09	0.37	0.00	0.37
Sat Flow, veh/h	1619	3268	205	1619	3722	1147	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	14	141	146	65	314	161	17	1	81	151	0	15
Grp Sat Flow(s),veh/h/ln	1619	1710	1763	1619	1638	1593	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	0.8	6.0	6.0	3.6	6.5	6.9	0.9	0.0	4.7	2.7	0.0	0.6
Cycle Q Clear(g_c), s	0.8	6.0	6.0	3.6	6.5	6.9	0.9	0.0	4.7	2.7	0.0	0.6
Prop In Lane	1.00		0.12	1.00		0.72	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	26	468	482	114	1074	522	142	157	133	1251	0	567
V/C Ratio(X)	0.53	0.30	0.30	0.57	0.29	0.31	0.12	0.01	0.61	0.12	0.00	0.03
Avail Cap(c_a), veh/h	88	468	482	193	1074	522	319	354	300	1251	0	567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	26.3	26.3	41.2	22.9	23.0	38.5	38.1	40.2	18.9	0.0	18.2
Incr Delay (d2), s/veh	15.3	0.4	0.4	4.4	0.7	1.5	0.4	0.0	4.4	0.2	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.4	2.5	1.5	2.5	2.7	0.4	0.0	1.9	1.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.0	26.7	26.7	45.5	23.5	24.5	38.9	38.1	44.6	19.1	0.0	18.3
LnGrp LOS	E	C	C	D	C	C	D	D	D	B		B
Approach Vol, veh/h		301			540			99			166	
Approach Delay, s/veh		28.2			26.5			43.6			19.0	
Approach LOS		C			C			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	29.5		38.5	6.0	34.5		12.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.9	24.1		34.0	5.0	30.0		18.0				
Max Q Clear Time (g_c+I1), s	5.6	8.0		4.7	2.8	8.9		6.7				
Green Ext Time (p_c), s	0.0	1.3		0.5	0.0	2.9		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh		27.4
HCM 7th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	281	240	0	372	249
Future Volume (veh/h)	0	281	240	0	372	249
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	335	308	0	413	277
Peak Hour Factor	0.84	0.84	0.78	0.78	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1857	1857	0	845	453
Arrive On Green	0.00	0.54	0.54	0.00	0.29	0.29
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	335	308	0	413	277
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	3.5	3.2	0.0	8.1	10.6
Cycle Q Clear(g_c), s	0.0	3.5	3.2	0.0	8.1	10.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1857	1857	0	845	453
V/C Ratio(X)	0.00	0.18	0.17	0.00	0.49	0.61
Avail Cap(c_a), veh/h	0	1857	1857	0	845	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.1	8.0	0.0	20.8	21.6
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.5	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.1	1.0	0.0	2.8	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.3	8.2	0.0	21.3	24.2
LnGrp LOS		A	A		C	C
Approach Vol, veh/h		335	308		690	
Approach Delay, s/veh		8.3	8.2		22.5	
Approach LOS		A	A		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	44.0	26.0	44.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	38.0	20.0	38.0
Max Q Clear Time (g_c+I1), s	5.5	12.6	5.2
Green Ext Time (p_c), s	1.8	2.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	15.6
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	366	0	0	553	91	131	85	172	33	0	237
Future Volume (veh/h)	150	366	0	0	553	91	131	85	172	33	0	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	183	446	0	0	674	111	216	234	344	34	0	247
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.50	0.50	0.50	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	320	2426	0	0	1183	193	402	446	757	0	0	0
Arrive On Green	0.11	0.49	0.00	0.00	0.28	0.28	0.25	0.25	0.25	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4420	693	1619	1800	3051		0	
Grp Volume(v), veh/h	183	446	0	0	517	268	216	234	344		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1675	1619	1800	1525			
Q Serve(g_s), s	2.7	2.3	0.0	0.0	6.3	6.4	5.4	5.2	4.4			
Cycle Q Clear(g_c), s	2.7	2.3	0.0	0.0	6.3	6.4	5.4	5.2	4.4			
Prop In Lane	1.00		0.00	0.00		0.41	1.00		1.00			
Lane Grp Cap(c), veh/h	320	2426	0	0	910	465	402	446	757			
V/C Ratio(X)	0.57	0.18	0.00	0.00	0.57	0.58	0.54	0.52	0.45			
Avail Cap(c_a), veh/h	954	6451	0	0	2891	1478	1115	1240	2101			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	19.7	6.5	0.0	0.0	14.4	14.4	15.2	15.1	14.8			
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.0	0.4	0.8	1.4	1.2	0.5			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.9	0.6	0.0	0.0	2.0	2.1	1.7	1.8	1.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.9	6.6	0.0	0.0	14.8	15.3	16.5	16.3	15.3			
LnGrp LOS	C	A			B	B	B	B	B			
Approach Vol, veh/h		629			785			794				
Approach Delay, s/veh		10.7			15.0			15.9				
Approach LOS		B			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		28.9			10.0	18.9		17.5				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		61.0			15.0	41.0		32.0				
Max Q Clear Time (g_c+I1), s		4.3			4.7	8.4		7.4				
Green Ext Time (p_c), s		2.6			0.3	4.5		4.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	14.1
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	5	27	0	3	2	81	26	3	62	0
Future Vol, veh/h	1	0	5	27	0	3	2	81	26	3	62	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	0	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	80	80	80	92	92	92	25	25	25
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	0	6	34	0	4	2	88	28	12	248	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	364	393	248	364	364	88	248	0	0	116	0	0
Stage 1	272	272	-	92	92	-	-	-	-	-	-	-
Stage 2	92	121	-	272	272	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	595	547	796	595	567	976	1330	-	-	1485	-	-
Stage 1	738	688	-	920	822	-	-	-	-	-	-	-
Stage 2	920	800	-	738	688	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	587	541	796	585	561	976	1330	-	-	1485	-	-
Mov Cap-2 Maneuver	587	541	-	585	561	-	-	-	-	-	-	-
Stage 1	732	683	-	918	821	-	-	-	-	-	-	-
Stage 2	915	798	-	727	683	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.84	11.29	0.14	0.34
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1330	-	-	751	609	1485	-	-
HCM Lane V/C Ratio	0.002	-	-	0.01	0.062	0.008	-	-
HCM Control Delay (s/veh)	7.7	-	-	9.8	11.3	7.4	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	2	56	29	2	47
Future Vol, veh/h	16	2	56	29	2	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	75	75	38	38
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	20	2	75	39	5	124

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	209	75	0	0	113	0
Stage 1	75	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	784	992	-	-	1489	-
Stage 1	953	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	781	992	-	-	1489	-
Mov Cap-2 Maneuver	781	-	-	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	894	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.63	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	800	73	-
HCM Lane V/C Ratio	-	-	0.027	0.004	-
HCM Control Delay (s/veh)	-	-	9.6	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	14	0	4	0	54	16	12	42	0
Future Vol, veh/h	0	0	0	14	0	4	0	54	16	12	42	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	92	92	92	50	50	50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	17	0	5	0	59	17	24	84	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	191	208	84	199	199	67	84	0	0	76	0	0
Stage 1	132	132	-	67	67	-	-	-	-	-	-	-
Stage 2	59	76	-	132	132	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	774	692	981	764	700	1002	1526	-	-	1536	-	-
Stage 1	876	791	-	948	843	-	-	-	-	-	-	-
Stage 2	958	836	-	876	791	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	758	682	981	752	689	1002	1526	-	-	1536	-	-
Mov Cap-2 Maneuver	758	682	-	752	689	-	-	-	-	-	-	-
Stage 1	863	779	-	948	843	-	-	-	-	-	-	-
Stage 2	953	836	-	863	779	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	9.65	0	1.64
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1526	-	-	-	796	1536	-	-
HCM Lane V/C Ratio	-	-	-	-	0.027	0.016	-	-
HCM Control Delay (s/veh)	0	-	-	0	9.6	7.4	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	22	0	0	37	19	0	1	0	22	0	30
Future Vol, veh/h	43	22	0	0	37	19	0	1	0	22	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	87	87	87	25	25	25	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	51	26	0	0	43	22	0	4	0	26	0	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	95	73	18	69	91	4	35	0	0	4	0	0
Stage 1	69	69	-	4	4	-	-	-	-	-	-	-
Stage 2	25	4	-	65	87	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	893	821	1067	929	803	1085	1589	-	-	1631	-	-
Stage 1	946	841	-	1024	897	-	-	-	-	-	-	-
Stage 2	998	897	-	951	827	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	816	808	1067	885	790	1085	1589	-	-	1631	-	-
Mov Cap-2 Maneuver	816	808	-	885	790	-	-	-	-	-	-	-
Stage 1	931	828	-	1024	897	-	-	-	-	-	-	-
Stage 2	931	897	-	907	814	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.89	9.47	0	3.06
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1589	-	-	813	870	1631	-	-
HCM Lane V/C Ratio	-	-	-	0.094	0.074	0.016	-	-
HCM Control Delay (s/veh)	0	-	-	9.9	9.5	7.2	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0	-	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1	20	0	0	0	0	44	22	11	38	0
Future Vol, veh/h	4	1	20	0	0	0	0	44	22	11	38	0
Peak Hour Factor	0.87	0.87	0.87	0.85	0.85	0.85	0.50	0.50	0.50	0.50	0.50	0.50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	1	23	0	0	0	0	88	44	22	76	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.4	8.3	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	67%	0%	5%	0%	100%
Vol Right, %	33%	0%	95%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	66	4	21	11	38
LT Vol	0	4	0	11	0
Through Vol	44	0	1	0	38
RT Vol	22	0	20	0	0
Lane Flow Rate	132	5	24	22	76
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.162	0.007	0.029	0.031	0.097
Departure Headway (Hd)	4.421	5.546	4.375	5.115	4.614
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	807	649	823	698	774
Service Time	2.475	3.246	2.075	2.863	2.362
HCM Lane V/C Ratio	0.164	0.008	0.029	0.032	0.098
HCM Control Delay, s/veh	8.3	8.3	7.2	8	7.9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.6	0	0.1	0.1	0.3

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	32	15	14	26	18
Future Vol, veh/h	20	32	15	14	26	18
Peak Hour Factor	0.71	0.71	0.81	0.81	0.67	0.67
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	45	19	17	39	27
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7.2	7.8	7.7
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	26	18	20	32	15	14
LT Vol	26	0	0	0	15	0
Through Vol	0	0	20	0	0	14
RT Vol	0	18	0	32	0	0
Lane Flow Rate	39	27	28	45	19	17
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.056	0.03	0.036	0.049	0.026	0.022
Departure Headway (Hd)	5.181	3.98	4.631	3.93	5.151	4.651
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	686	890	767	902	690	763
Service Time	2.949	1.748	2.396	1.695	2.919	2.418
HCM Lane V/C Ratio	0.057	0.03	0.037	0.05	0.028	0.022
HCM Control Delay, s/veh	8.3	6.9	7.6	6.9	8.1	7.5
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.1	0.2	0.1	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	232	118	234	284	3	145	33	178	24	40	32
Future Volume (veh/h)	25	232	118	234	284	3	145	33	178	24	40	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	27	252	128	266	323	3	163	37	200	28	46	37
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	52	450	221	331	1300	12	426	416	353	459	438	316
Arrive On Green	0.03	0.20	0.20	0.20	0.37	0.37	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1619	2221	1093	1619	3472	32	1195	1800	1525	1319	1896	1368
Grp Volume(v), veh/h	27	192	188	266	159	167	163	37	200	28	41	42
Grp Sat Flow(s),veh/h/ln	1619	1710	1603	1619	1710	1794	1195	1800	1525	1319	1710	1554
Q Serve(g_s), s	0.7	4.2	4.4	6.4	2.6	2.6	5.1	0.7	4.8	0.7	0.8	0.9
Cycle Q Clear(g_c), s	0.7	4.2	4.4	6.4	2.6	2.6	6.0	0.7	4.8	1.4	0.8	0.9
Prop In Lane	1.00		0.68	1.00		0.02	1.00		1.00	1.00		0.88
Lane Grp Cap(c), veh/h	52	346	325	331	640	672	426	416	353	459	395	359
V/C Ratio(X)	0.52	0.56	0.58	0.80	0.25	0.25	0.38	0.09	0.57	0.06	0.10	0.12
Avail Cap(c_a), veh/h	413	1630	1528	571	1796	1885	1353	1812	1535	1482	1721	1564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	14.7	14.8	15.6	8.9	8.9	14.9	12.4	14.0	12.9	12.5	12.5
Incr Delay (d2), s/veh	7.7	1.4	1.6	4.6	0.2	0.2	0.6	0.1	1.4	0.1	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.2	1.2	2.2	0.7	0.7	1.2	0.2	1.5	0.2	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.3	16.1	16.4	20.2	9.1	9.1	15.4	12.5	15.4	13.0	12.6	12.6
LnGrp LOS	C	B	B	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		407			592			400			111	
Approach Delay, s/veh		17.0			14.1			15.2			12.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.9	14.1		14.1	5.8	21.2		14.1				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	14.5	39.2		41.4	10.5	43.2		41.4				
Max Q Clear Time (g_c+I1), s	8.4	6.4		8.0	2.7	4.6		3.4				
Green Ext Time (p_c), s	0.4	2.0		1.5	0.0	1.7		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	420	55	97	492	10	49	1	87	11	3	10
Future Volume (veh/h)	8	420	55	97	492	10	49	1	87	11	3	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	9	483	63	108	547	11	66	1	118	18	5	17
Peak Hour Factor	0.87	0.87	0.87	0.90	0.90	0.90	0.74	0.74	0.74	0.60	0.60	0.60
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	502	1302	169	505	1467	29	426	264	224	444	53	179
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	774	3044	395	782	3429	69	1263	1800	1525	1287	359	1221
Grp Volume(v), veh/h	9	270	276	108	273	285	66	1	118	18	0	22
Grp Sat Flow(s),veh/h/ln	774	1710	1729	782	1710	1788	1263	1800	1525	1287	0	1580
Q Serve(g_s), s	0.2	3.0	3.1	3.1	3.1	3.1	1.3	0.0	2.0	0.3	0.0	0.3
Cycle Q Clear(g_c), s	3.3	3.0	3.1	6.1	3.1	3.1	1.7	0.0	2.0	0.4	0.0	0.3
Prop In Lane	1.00		0.23	1.00		0.04	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	502	731	740	505	731	765	426	264	224	444	0	232
V/C Ratio(X)	0.02	0.37	0.37	0.21	0.37	0.37	0.16	0.00	0.53	0.04	0.00	0.09
Avail Cap(c_a), veh/h	1164	2194	2219	1174	2194	2294	1888	2348	1990	2007	0	2151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.6	5.5	5.5	7.6	5.5	5.5	11.1	10.3	11.1	10.4	0.0	10.4
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.2	0.3	0.3	0.2	0.0	1.9	0.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.3	0.4	0.4	0.3	0.0	0.6	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.6	5.8	5.8	7.8	5.8	5.8	11.3	10.3	13.0	10.5	0.0	10.6
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		555			666			185			40	
Approach Delay, s/veh		5.8			6.1			12.4			10.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.9	10.3	17.9	10.3
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	36.2	36.8	36.2	* 38
Max Q Clear Time (g_c+I1), s	5.3	4.0	8.1	2.4
Green Ext Time (p_c), s	3.2	0.6	3.9	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	519	75	34	554	5	83	0	34	6	2	5
Future Volume (veh/h)	2	519	75	34	554	5	83	0	34	6	2	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	2	583	84	38	616	6	134	0	55	13	4	11
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.62	0.62	0.62	0.46	0.46	0.46
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	520	1319	190	500	1525	15	509	0	245	421	93	245
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.16	0.00	0.16	0.16	0.16	0.16
Sat Flow, veh/h	729	3001	431	699	3470	34	1377	0	1525	1037	579	1525
Grp Volume(v), veh/h	2	332	335	38	303	319	134	0	55	17	0	11
Grp Sat Flow(s),veh/h/ln	729	1710	1722	699	1710	1794	1377	0	1525	1616	0	1525
Q Serve(g_s), s	0.0	3.4	3.4	1.0	3.0	3.0	2.0	0.0	0.8	0.0	0.0	0.2
Cycle Q Clear(g_c), s	3.1	3.4	3.4	4.4	3.0	3.0	2.2	0.0	0.8	0.2	0.0	0.2
Prop In Lane	1.00		0.25	1.00		0.02	1.00		1.00	0.76		1.00
Lane Grp Cap(c), veh/h	520	752	757	500	752	789	509	0	245	514	0	245
V/C Ratio(X)	0.00	0.44	0.44	0.08	0.40	0.40	0.26	0.00	0.22	0.03	0.00	0.04
Avail Cap(c_a), veh/h	916	1681	1693	880	1681	1764	2214	0	2158	2328	0	2158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	4.9	4.9	6.4	4.8	4.8	9.7	0.0	9.1	8.9	0.0	8.9
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.1	0.3	0.3	0.3	0.0	0.5	0.0	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.1	0.4	0.5	0.5	0.0	0.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.8	5.3	5.3	6.5	5.1	5.1	10.0	0.0	9.6	8.9	0.0	8.9
LnGrp LOS	A	A	A	A	A	A	B		A	A		A
Approach Vol, veh/h		669			660			189			28	
Approach Delay, s/veh		5.3			5.2			9.9			8.9	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.4	8.6	16.4	8.6
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	24.6	35.4	24.6	35.4
Max Q Clear Time (g_c+I1), s	5.4	4.2	6.4	2.2
Green Ext Time (p_c), s	3.6	0.9	3.9	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	5.9
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	430	24	17	406	122	30	24	16	178	30	173
Future Volume (veh/h)	103	430	24	17	406	122	30	24	16	178	30	173
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	110	457	26	20	467	140	51	41	27	214	36	208
Peak Hour Factor	0.94	0.94	0.94	0.87	0.87	0.87	0.59	0.59	0.59	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	271	704	40	219	698	208	142	84	55	368	52	301
Arrive On Green	0.08	0.21	0.21	0.12	0.27	0.27	0.08	0.08	0.08	0.21	0.21	0.21
Sat Flow, veh/h	1714	3290	187	1810	2598	773	1810	1069	704	1714	243	1404
Grp Volume(v), veh/h	110	237	246	20	306	301	51	0	68	214	0	244
Grp Sat Flow(s),veh/h/ln	1714	1710	1766	1810	1710	1661	1810	0	1773	1714	0	1647
Q Serve(g_s), s	3.0	6.6	6.6	0.5	8.3	8.4	1.4	0.0	1.9	5.8	0.0	7.1
Cycle Q Clear(g_c), s	3.0	6.6	6.6	0.5	8.3	8.4	1.4	0.0	1.9	5.8	0.0	7.1
Prop In Lane	1.00		0.11	1.00		0.47	1.00		0.40	1.00		0.85
Lane Grp Cap(c), veh/h	271	366	378	219	460	446	142	0	140	368	0	353
V/C Ratio(X)	0.41	0.65	0.65	0.09	0.67	0.67	0.36	0.00	0.49	0.58	0.00	0.69
Avail Cap(c_a), veh/h	483	783	809	503	931	904	361	0	353	917	0	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.6	18.7	18.7	20.4	17.0	17.0	22.8	0.0	23.0	18.4	0.0	18.9
Incr Delay (d2), s/veh	1.0	1.9	1.9	0.2	1.7	1.8	1.5	0.0	2.6	1.5	0.0	2.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.5	2.6	0.2	3.1	3.1	0.6	0.0	0.8	2.2	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.6	20.6	20.6	20.6	18.7	18.8	24.3	0.0	25.6	19.9	0.0	21.3
LnGrp LOS	C	C	C	C	B	B	C		C	B		C
Approach Vol, veh/h		593			627			119			458	
Approach Delay, s/veh		20.6			18.8			25.1			20.6	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	16.3		8.7	8.6	18.6		16.3				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	14.5	* 24		10.4	10.5	28.4		27.9				
Max Q Clear Time (g_c+I1), s	12.5	8.6		3.9	5.0	10.4		9.1				
Green Ext Time (p_c), s	0.0	2.5		0.2	0.1	3.6		2.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	20.3
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	430	181	97	376	174	75
Future Volume (veh/h)	430	181	97	376	174	75
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	448	189	109	422	196	84
Peak Hour Factor	0.96	0.96	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	775	324	154	1912	293	277
Arrive On Green	0.33	0.33	0.10	0.56	0.18	0.18
Sat Flow, veh/h	2440	983	1619	3510	1619	1525
Grp Volume(v), veh/h	325	312	109	422	196	84
Grp Sat Flow(s),veh/h/ln	1710	1623	1619	1710	1619	1525
Q Serve(g_s), s	5.3	5.3	2.2	2.1	3.8	1.6
Cycle Q Clear(g_c), s	5.3	5.3	2.2	2.1	3.8	1.6
Prop In Lane		0.61	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	564	535	154	1912	293	277
V/C Ratio(X)	0.58	0.58	0.71	0.22	0.67	0.30
Avail Cap(c_a), veh/h	1219	1157	507	3919	1300	1224
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	9.3	14.7	3.7	12.8	11.9
Incr Delay (d2), s/veh	0.9	1.0	5.9	0.1	2.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.4	0.9	0.3	1.2	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.2	10.3	20.6	3.8	15.4	12.5
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	637			531	280	
Approach Delay, s/veh	10.3			7.2	14.5	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.7	15.7		10.2		23.3
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	10.5	* 24		26.9		38.4
Max Q Clear Time (g_c+I1), s	4.2	7.3		5.8		4.1
Green Ext Time (p_c), s	0.1	3.7		0.8		3.1

Intersection Summary	
HCM 7th Control Delay, s/veh	10.0
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	62	68	231	43	84	38	386	239	97	483	4
Future Volume (veh/h)	9	62	68	231	43	84	38	386	239	97	483	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	13	90	99	272	51	99	40	406	0	113	562	5
Peak Hour Factor	0.69	0.69	0.69	0.85	0.85	0.85	0.95	0.95	0.95	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	482	285	314	452	199	386	69	497		139	1108	10
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.04	0.28	0.00	0.09	0.32	0.32
Sat Flow, veh/h	1125	783	862	1086	547	1062	1619	1800	1525	1619	3474	31
Grp Volume(v), veh/h	13	0	189	272	0	150	40	406	0	113	277	290
Grp Sat Flow(s),veh/h/ln	1125	0	1645	1086	0	1609	1619	1800	1525	1619	1710	1794
Q Serve(g_s), s	0.4	0.0	4.1	11.8	0.0	3.2	1.2	10.4	0.0	3.4	6.5	6.5
Cycle Q Clear(g_c), s	3.6	0.0	4.1	15.9	0.0	3.2	1.2	10.4	0.0	3.4	6.5	6.5
Prop In Lane	1.00		0.52	1.00		0.66	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	482	0	599	452	0	586	69	497		139	545	572
V/C Ratio(X)	0.03	0.00	0.32	0.60	0.00	0.26	0.58	0.82		0.81	0.51	0.51
Avail Cap(c_a), veh/h	484	0	602	454	0	588	164	673		168	643	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	0.0	11.2	17.0	0.0	11.0	23.1	16.7	0.0	22.1	13.6	13.6
Incr Delay (d2), s/veh	0.0	0.0	0.3	2.2	0.0	0.2	7.4	5.7	0.0	21.7	0.7	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.3	2.8	0.0	1.0	0.6	4.4	0.0	2.0	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.3	0.0	11.5	19.2	0.0	11.2	30.5	22.4	0.0	43.9	14.3	14.3
LnGrp LOS	B		B	B		B	C	C		D	B	B
Approach Vol, veh/h		202			422			446			680	
Approach Delay, s/veh		11.6			16.3			23.1			19.2	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	20.2		22.4	8.7	18.1		22.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	3.2	8.5		17.9	5.4	12.4		6.1				
Green Ext Time (p_c), s	0.0	2.3		0.0	0.0	1.2		0.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.7
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	159	0	129	251	636	0	0	546	346
Future Volume (veh/h)	0	0	0	159	0	129	251	636	0	0	546	346
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				192	0	155	261	662	0	0	658	0
Peak Hour Factor				0.83	0.83	0.83	0.96	0.96	0.96	0.83	0.83	0.83
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				239	0	213	615	2396	0	0	824	
Arrive On Green				0.14	0.00	0.14	0.38	0.70	0.00	0.00	0.24	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				192	0	155	261	662	0	0	658	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				8.1	0.0	7.3	8.9	5.4	0.0	0.0	13.6	0.0
Cycle Q Clear(g_c), s				8.1	0.0	7.3	8.9	5.4	0.0	0.0	13.6	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				239	0	213	615	2396	0	0	824	
V/C Ratio(X)				0.80	0.00	0.73	0.42	0.28	0.00	0.00	0.80	
Avail Cap(c_a), veh/h				274	0	244	615	2396	0	0	1049	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.91	0.91	0.00	0.00	0.84	0.00
Uniform Delay (d), s/veh				31.3	0.0	30.9	17.2	4.2	0.0	0.0	26.7	0.0
Incr Delay (d2), s/veh				14.1	0.0	9.1	0.2	0.3	0.0	0.0	6.8	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.2	0.0	3.1	3.1	1.4	0.0	0.0	6.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				45.4	0.0	40.0	17.4	4.4	0.0	0.0	33.5	0.0
LnGrp LOS				D		D	B	A			C	
Approach Vol, veh/h					347			923			658	
Approach Delay, s/veh					43.0			8.1			33.5	
Approach LOS					D			A			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	14.5	24.1		16.4		58.6
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0
Max Green Setting (Gmax), s	21.0	* 23		12.0		51.0
Max Q Clear Time (g_c+I1), s	10.9	15.6		10.1		7.4
Green Ext Time (p_c), s	0.3	2.5		0.3		5.0

Intersection Summary	
HCM 7th Control Delay, s/veh	23.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	202	258	57	704	654	84
Future Volume (veh/h)	202	258	57	704	654	84
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	210	269	59	733	872	112
Peak Hour Factor	0.96	0.96	0.96	0.96	0.75	0.75
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	334	315	169	2029	1252	161
Arrive On Green	0.21	0.21	0.10	0.59	0.41	0.41
Sat Flow, veh/h	1619	1525	1619	3510	3138	391
Grp Volume(v), veh/h	210	269	59	733	489	495
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1730
Q Serve(g_s), s	7.1	10.2	2.0	6.7	14.2	14.2
Cycle Q Clear(g_c), s	7.1	10.2	2.0	6.7	14.2	14.2
Prop In Lane	1.00	1.00	1.00			0.23
Lane Grp Cap(c), veh/h	334	315	169	2029	702	710
V/C Ratio(X)	0.63	0.85	0.35	0.36	0.70	0.70
Avail Cap(c_a), veh/h	378	356	273	2029	702	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.80	0.80	0.86	0.86
Uniform Delay (d), s/veh	21.7	22.9	25.0	6.3	14.6	14.6
Incr Delay (d2), s/veh	1.6	14.9	0.4	0.4	4.9	4.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.7	0.7	1.8	5.5	5.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.3	37.9	25.3	6.7	19.5	19.4
LnGrp LOS	C	D	C	A	B	B
Approach Vol, veh/h	479			792	984	
Approach Delay, s/veh	31.5			8.1	19.4	
Approach LOS	C			A	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.0	30.6			41.6	18.4
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	10.3	19.2			34.0	14.0
Max Q Clear Time (g_c+I1), s	4.0	16.2			8.7	12.2
Green Ext Time (p_c), s	0.0	1.7			5.2	0.2

Intersection Summary		
HCM 7th Control Delay, s/veh	18.0	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	19	25	74	19	265	18	371	60	272	566	36
Future Volume (veh/h)	78	19	25	74	19	265	18	371	60	272	566	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	91	22	29	81	21	291	20	422	68	332	690	44
Peak Hour Factor	0.86	0.86	0.86	0.91	0.91	0.91	0.88	0.88	0.88	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	265	507	453	486	507	453	39	607	97	387	1373	87
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.02	0.21	0.21	0.24	0.42	0.42
Sat Flow, veh/h	970	1710	1525	1230	1710	1525	1619	2952	473	1619	3265	208
Grp Volume(v), veh/h	91	22	29	81	21	291	20	243	247	332	361	373
Grp Sat Flow(s),veh/h/ln	970	1710	1525	1230	1710	1525	1619	1710	1715	1619	1710	1763
Q Serve(g_s), s	4.7	0.5	0.7	2.6	0.5	8.7	0.6	6.9	7.0	10.2	8.1	8.1
Cycle Q Clear(g_c), s	13.3	0.5	0.7	3.3	0.5	8.7	0.6	6.9	7.0	10.2	8.1	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.12
Lane Grp Cap(c), veh/h	265	507	453	486	507	453	39	352	353	387	719	741
V/C Ratio(X)	0.34	0.04	0.06	0.17	0.04	0.64	0.51	0.69	0.70	0.86	0.50	0.50
Avail Cap(c_a), veh/h	312	590	526	546	590	526	155	590	591	481	934	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	13.1	13.2	14.4	13.1	16.0	25.2	19.2	19.2	19.0	11.1	11.1
Incr Delay (d2), s/veh	0.8	0.0	0.1	0.2	0.0	2.1	10.0	2.4	2.5	12.1	0.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.2	0.2	0.7	0.2	2.9	0.3	2.5	2.5	4.6	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.5	13.1	13.2	14.5	13.1	18.1	35.2	21.6	21.8	31.1	11.7	11.6
LnGrp LOS	C	B	B	B	B	B	D	C	C	C	B	B
Approach Vol, veh/h		142			393			510			1066	
Approach Delay, s/veh		19.2			17.1			22.2			17.7	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	26.4		20.0	17.0	15.2		20.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.3	28.5		18.0	15.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	2.6	10.1		10.7	12.2	9.0		15.3				
Green Ext Time (p_c), s	0.0	4.2		1.3	0.3	1.8		0.1				

Intersection Summary		
HCM 7th Control Delay, s/veh		18.8
HCM 7th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	207	22	43	185	80	28	175	31	156	159	180
Future Volume (veh/h)	114	207	22	43	185	80	28	175	31	156	159	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	125	227	24	46	199	86	31	192	34	197	201	228
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.91	0.91	0.91	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	503	971	102	523	560	474	480	1059	184	594	622	555
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1076	3124	327	1026	1800	1525	871	2912	507	1050	1710	1525
Grp Volume(v), veh/h	125	123	128	46	199	86	31	111	115	197	201	228
Grp Sat Flow(s),veh/h/ln	1076	1710	1741	1026	1800	1525	871	1710	1709	1050	1710	1525
Q Serve(g_s), s	2.8	1.5	1.5	1.0	2.4	1.1	0.8	1.2	1.3	4.4	2.3	3.1
Cycle Q Clear(g_c), s	5.2	1.5	1.5	2.5	2.4	1.1	3.9	1.2	1.3	5.6	2.3	3.1
Prop In Lane	1.00		0.19	1.00		1.00	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	503	532	541	523	560	474	480	622	621	594	622	555
V/C Ratio(X)	0.25	0.23	0.24	0.09	0.36	0.18	0.06	0.18	0.18	0.33	0.32	0.41
Avail Cap(c_a), veh/h	869	1114	1134	873	1172	993	730	1114	1113	896	1114	993
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	7.1	7.1	8.0	7.4	7.0	8.0	6.0	6.0	7.9	6.3	6.6
Incr Delay (d2), s/veh	0.3	0.2	0.2	0.1	0.4	0.2	0.1	0.1	0.1	0.3	0.3	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.4	0.4	0.1	0.6	0.2	0.1	0.2	0.2	0.5	0.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.6	7.3	7.3	8.1	7.8	7.1	8.1	6.1	6.1	8.2	6.6	7.1
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		376			331			257			626	
Approach Delay, s/veh		8.1			7.6			6.4			7.3	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	14.5	13.1	14.5	13.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	5.9	7.2	7.6	4.5
Green Ext Time (p_c), s	1.0	1.4	2.4	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	7.4
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	368	0	13	482	1	18
Future Vol, veh/h	368	0	13	482	1	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	95	95	59	59
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	423	0	14	507	2	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	423	0	704	211
Stage 1	-	-	-	-	423	-
Stage 2	-	-	-	-	281	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1147	-	376	800
Stage 1	-	-	-	-	635	-
Stage 2	-	-	-	-	747	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1147	-	371	800
Mov Cap-2 Maneuver	-	-	-	-	479	-
Stage 1	-	-	-	-	635	-
Stage 2	-	-	-	-	739	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.21	9.86
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	773	-	-	1147	-
HCM Lane V/C Ratio	0.042	-	-	0.012	-
HCM Control Delay (s/veh)	9.9	-	-	8.2	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

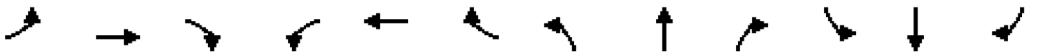
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	183	0	2	131	0	6
Future Vol, veh/h	183	0	2	131	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	193	0	2	138	0	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	193	0	335	193
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	142	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1393	-	665	854
Stage 1	-	-	-	-	845	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1393	-	663	854
Mov Cap-2 Maneuver	-	-	-	-	663	-
Stage 1	-	-	-	-	845	-
Stage 2	-	-	-	-	888	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.11	9.25
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	854	-	-	27	-
HCM Lane V/C Ratio	0.007	-	-	0.002	-
HCM Control Delay (s/veh)	9.2	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	148	30	40	122	213	30	200	40	149	141	16
Future Volume (veh/h)	31	148	30	40	122	213	30	200	40	149	141	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	33	156	0	42	128	0	32	211	42	157	148	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	48	722		58	742		47	600	117	196	544	461
Arrive On Green	0.03	0.21	0.00	0.04	0.22	0.00	0.03	0.21	0.21	0.12	0.30	0.30
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	2852	557	1619	1800	1525
Grp Volume(v), veh/h	33	156	0	42	128	0	32	125	128	157	148	17
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1700	1619	1800	1525
Q Serve(g_s), s	1.0	1.8	0.0	1.2	1.4	0.0	0.9	2.9	3.0	4.5	3.0	0.4
Cycle Q Clear(g_c), s	1.0	1.8	0.0	1.2	1.4	0.0	0.9	2.9	3.0	4.5	3.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	48	722		58	742		47	360	358	196	544	461
V/C Ratio(X)	0.69	0.22		0.72	0.17		0.68	0.35	0.36	0.80	0.27	0.04
Avail Cap(c_a), veh/h	376	2425		376	2425		444	1223	1216	581	1420	1204
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	15.5	0.0	22.6	15.1	0.0	22.8	15.9	16.0	20.3	12.6	11.7
Incr Delay (d2), s/veh	6.2	0.1	0.0	6.2	0.1	0.0	6.3	0.6	0.6	2.9	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.6	0.0	0.5	0.5	0.0	0.4	0.9	1.0	1.5	0.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.0	15.6	0.0	28.8	15.2	0.0	29.1	16.5	16.6	23.2	12.8	11.7
LnGrp LOS	C	B		C	B		C	B	B	C	B	B
Approach Vol, veh/h		189			170			285			322	
Approach Delay, s/veh		17.9			18.6			18.0			17.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	15.4	5.4	20.9	5.4	15.7	9.7	16.6
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	11.0	33.6	13.0	37.4	11.0	33.6	17.0	* 34
Max Q Clear Time (g_c+I1), s	3.2	3.8	2.9	5.0	3.0	3.4	6.5	5.0
Green Ext Time (p_c), s	0.0	0.9	0.0	0.7	0.0	0.7	0.1	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	18.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	0	0	259	189	1
Future Vol, veh/h	3	0	0	259	189	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	0	0	273	199	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	472	199	200	0	-	0
Stage 1	199	-	-	-	-	-
Stage 2	273	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	554	847	1384	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	554	847	1384	-	-	-
Mov Cap-2 Maneuver	554	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.53	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1384	-	554	-	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s/veh)	0	-	11.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	290	0	2	290	0	2	0	5	2	0	0
Future Vol, veh/h	3	290	0	2	290	0	2	0	5	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	305	0	2	305	0	2	0	5	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	305	0	0	468	621	153	468	621	153
Stage 1	-	-	-	-	-	-	312	312	-	309	309	-
Stage 2	-	-	-	-	-	-	157	309	-	159	312	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1267	-	-	1267	-	-	483	406	873	483	406	873
Stage 1	-	-	-	-	-	-	679	661	-	681	663	-
Stage 2	-	-	-	-	-	-	835	663	-	833	661	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1267	-	-	480	404	873	477	404	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	480	404	-	477	404	-
Stage 1	-	-	-	-	-	-	677	660	-	680	662	-
Stage 2	-	-	-	-	-	-	834	662	-	826	660	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.07	10.14	12.57
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	707	37	-	-	25	-	-	477
HCM Lane V/C Ratio	0.01	0.002	-	-	0.002	-	-	0.004
HCM Control Delay (s/veh)	10.1	7.8	0	-	7.8	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	294	2	2	290	0	2	0	0	2	0	0
Future Vol, veh/h	3	294	2	2	290	0	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	309	2	2	305	0	2	0	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	312	0	0	474	626	156	471	627	153
Stage 1	-	-	-	-	-	-	317	317	-	309	309	-
Stage 2	-	-	-	-	-	-	157	309	-	161	318	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1267	-	-	1260	-	-	478	403	868	481	403	873
Stage 1	-	-	-	-	-	-	674	658	-	681	663	-
Stage 2	-	-	-	-	-	-	835	663	-	831	657	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1260	-	-	476	401	868	479	401	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	476	401	-	479	401	-
Stage 1	-	-	-	-	-	-	673	656	-	680	662	-
Stage 2	-	-	-	-	-	-	834	662	-	829	656	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.07	12.59	12.55
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	476	36	-	-	25	-	-	479
HCM Lane V/C Ratio	0.004	0.002	-	-	0.002	-	-	0.004
HCM Control Delay (s/veh)	12.6	7.8	0	-	7.9	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	291	3	3	287	2	2	0	0	2	0	0
Future Vol, veh/h	2	291	3	3	287	2	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	306	3	3	302	2	2	0	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	304	0	0	309	0	0	469	623	155	467	623	152
Stage 1	-	-	-	-	-	-	312	312	-	309	309	-
Stage 2	-	-	-	-	-	-	157	311	-	157	314	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1268	-	-	1262	-	-	482	405	870	484	405	873
Stage 1	-	-	-	-	-	-	679	661	-	681	663	-
Stage 2	-	-	-	-	-	-	835	662	-	835	660	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1268	-	-	1262	-	-	480	403	870	482	403	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	480	403	-	482	403	-
Stage 1	-	-	-	-	-	-	678	660	-	679	661	-
Stage 2	-	-	-	-	-	-	833	660	-	833	659	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.07	0.1	12.54	12.51
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	480	24	-	-	37	-	-	482
HCM Lane V/C Ratio	0.004	0.002	-	-	0.003	-	-	0.004
HCM Control Delay (s/veh)	12.5	7.8	0	-	7.9	0	-	12.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	306	0	3	280	0	2	0	0	2	0	0
Future Vol, veh/h	3	306	0	3	280	0	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	322	0	3	295	0	2	0	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	295	0	0	322	0	0	482	629	161	468	629	147
Stage 1	-	-	-	-	-	-	328	328	-	301	301	-
Stage 2	-	-	-	-	-	-	154	301	-	167	328	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1278	-	-	1249	-	-	472	402	862	483	402	879
Stage 1	-	-	-	-	-	-	664	650	-	689	669	-
Stage 2	-	-	-	-	-	-	839	669	-	824	650	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1278	-	-	1249	-	-	469	399	862	480	399	879
Mov Cap-2 Maneuver	-	-	-	-	-	-	469	399	-	480	399	-
Stage 1	-	-	-	-	-	-	662	649	-	687	667	-
Stage 2	-	-	-	-	-	-	837	667	-	822	649	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.1	12.71	12.53
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	469	35	-	-	38	-	-	480
HCM Lane V/C Ratio	0.004	0.002	-	-	0.003	-	-	0.004
HCM Control Delay (s/veh)	12.7	7.8	0	-	7.9	0	-	12.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	289	6	5	276	0	12	0	12	2	0	0
Future Vol, veh/h	3	289	6	5	276	0	12	0	12	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	304	6	5	291	0	13	0	13	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	291	0	0	311	0	0	469	615	155	459	618	145
Stage 1	-	-	-	-	-	-	314	314	-	301	301	-
Stage 2	-	-	-	-	-	-	156	301	-	158	317	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1283	-	-	1261	-	-	482	409	869	490	408	882
Stage 1	-	-	-	-	-	-	677	660	-	689	669	-
Stage 2	-	-	-	-	-	-	837	669	-	834	658	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1283	-	-	1261	-	-	478	406	869	479	405	882
Mov Cap-2 Maneuver	-	-	-	-	-	-	478	406	-	479	405	-
Stage 1	-	-	-	-	-	-	676	658	-	686	665	-
Stage 2	-	-	-	-	-	-	833	665	-	819	656	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.17	11.08	12.55
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	617	35	-	-	64	-	-	479
HCM Lane V/C Ratio	0.041	0.002	-	-	0.004	-	-	0.004
HCM Control Delay (s/veh)	11.1	7.8	0	-	7.9	0	-	12.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	300	9	16	269	10	16
Future Vol, veh/h	300	9	16	269	10	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	316	9	17	283	11	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	325	0	496	163
Stage 1	-	-	-	-	321	-
Stage 2	-	-	-	-	175	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1246	-	508	860
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	843	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1246	-	501	860
Mov Cap-2 Maneuver	-	-	-	-	501	-
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	831	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.54	10.57
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	674	-	-	202	-
HCM Lane V/C Ratio	0.041	-	-	0.014	-
HCM Control Delay (s/veh)	10.6	-	-	7.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	286	32	17	269	14	14
Future Vol, veh/h	286	32	17	269	14	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	301	34	18	283	15	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	335	0	495	167
Stage 1	-	-	-	-	318	-
Stage 2	-	-	-	-	177	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1236	-	509	854
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1236	-	501	854
Mov Cap-2 Maneuver	-	-	-	-	501	-
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	828	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.58	10.98
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	631	-	-	214	-
HCM Lane V/C Ratio	0.047	-	-	0.014	-
HCM Control Delay (s/veh)	11	-	-	8	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	292	8	11	298	7	33
Future Vol, veh/h	292	8	11	298	7	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	307	8	12	314	7	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	316	0	492	158
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	180	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1256	-	511	866
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	839	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1256	-	506	866
Mov Cap-2 Maneuver	-	-	-	-	506	-
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	830	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.35	9.95
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	770	-	-	128	-
HCM Lane V/C Ratio	0.055	-	-	0.009	-
HCM Control Delay (s/veh)	9.9	-	-	7.9	0.1
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	303	8	9	327	3	25
Future Vol, veh/h	303	8	9	327	3	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	319	8	9	344	3	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	327	0	514	164
Stage 1	-	-	-	-	323	-
Stage 2	-	-	-	-	191	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1244	-	495	858
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1244	-	491	858
Mov Cap-2 Maneuver	-	-	-	-	491	-
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	821	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.27	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	795	-	-	96	-
HCM Lane V/C Ratio	0.037	-	-	0.008	-
HCM Control Delay (s/veh)	9.7	-	-	7.9	0.1
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

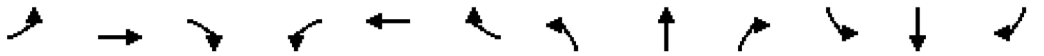
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	333	314	43	96	21
Future Vol, veh/h	19	333	314	43	96	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	20	351	331	45	101	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	376	0	-	0	568	188
Stage 1	-	-	-	-	353	-
Stage 2	-	-	-	-	215	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1194	-	-	-	458	828
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	806	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1194	-	-	-	450	828
Mov Cap-2 Maneuver	-	-	-	-	537	-
Stage 1	-	-	-	-	676	-
Stage 2	-	-	-	-	806	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.44	0	12.99
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1194	-	-	-	573
HCM Lane V/C Ratio	0.017	-	-	-	0.215
HCM Control Delay (s/veh)	8.1	-	-	-	13
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	244	195	56	342	0	0	0	0	23	3	14
Future Volume (veh/h)	0	244	195	56	342	0	0	0	0	23	3	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	257	205	59	360	0				21	7	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	832	640	84	2047	0				67	21	45
Arrive On Green	0.00	0.50	0.50	0.06	0.66	0.00				0.05	0.05	0.05
Sat Flow, veh/h	0	1737	1273	1457	3159	0				1457	459	984
Grp Volume(v), veh/h	0	238	224	59	360	0				21	0	22
Grp Sat Flow(s),veh/h/ln	0	1539	1391	1457	1539	0				1457	0	1443
Q Serve(g_s), s	0.0	4.1	4.3	1.8	2.0	0.0				0.6	0.0	0.7
Cycle Q Clear(g_c), s	0.0	4.1	4.3	1.8	2.0	0.0				0.6	0.0	0.7
Prop In Lane	0.00		0.92	1.00		0.00				1.00		0.68
Lane Grp Cap(c), veh/h	0	773	699	84	2047	0				67	0	67
V/C Ratio(X)	0.00	0.31	0.32	0.70	0.18	0.00				0.31	0.00	0.33
Avail Cap(c_a), veh/h	0	773	699	172	2047	0				162	0	160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.6	6.6	20.8	2.9	0.0				20.8	0.0	20.8
Incr Delay (d2), s/veh	0.0	1.0	1.2	3.9	0.2	0.0				1.0	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.8	0.6	0.1	0.0				0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	7.6	7.8	24.7	3.0	0.0				21.7	0.0	21.8
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		462			419						43	
Approach Delay, s/veh		7.7			6.1						21.8	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	7.3	28.6		9.1		35.9						
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0						
Max Green Setting (Gmax), s	5.3	17.0		5.0		27.0						
Max Q Clear Time (g_c+I1), s	3.8	6.3		2.7		4.0						
Green Ext Time (p_c), s	0.0	1.1		0.0		1.2						

Intersection Summary												
HCM 7th Control Delay, s/veh			7.6									
HCM 7th LOS			A									

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	255	0	0	223	28	172	0	50	0	0	0
Future Volume (veh/h)	21	255	0	0	223	28	172	0	50	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	22	268	0	0	235	29	181	0	53			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	194	1807	0	0	994	443	252	0	224			
Arrive On Green	0.12	0.53	0.00	0.00	0.29	0.29	0.15	0.00	0.15			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	22	268	0	0	235	29	181	0	53			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.5	1.6	0.0	0.0	2.1	0.5	4.0	0.0	1.2			
Cycle Q Clear(g_c), s	0.5	1.6	0.0	0.0	2.1	0.5	4.0	0.0	1.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	194	1807	0	0	994	443	252	0	224			
V/C Ratio(X)	0.11	0.15	0.00	0.00	0.24	0.07	0.72	0.00	0.24			
Avail Cap(c_a), veh/h	202	1807	0	0	994	443	386	0	343			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.99	0.99	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.7	4.8	0.0	0.0	10.8	10.3	16.3	0.0	15.1			
Incr Delay (d2), s/veh	0.3	0.2	0.0	0.0	0.6	0.3	3.8	0.0	0.5			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.1	0.2	0.0	0.0	0.6	0.1	1.6	0.0	0.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.0	5.0	0.0	0.0	11.4	10.5	20.1	0.0	15.6			
LnGrp LOS	B	A			B	B	C		B			
Approach Vol, veh/h		290			264			234				
Approach Delay, s/veh		5.8			11.3			19.1				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		27.1			9.5	17.6		12.9				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		18.0			5.0	8.3		9.0				
Max Q Clear Time (g_c+I1), s		3.6			2.5	4.1		6.0				
Green Ext Time (p_c), s		1.1			0.0	0.5		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			11.6									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	14	23	1	0	0	26	255	11	5	165	23
Future Vol, veh/h	12	14	23	1	0	0	26	255	11	5	165	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	15	24	1	0	0	27	268	12	5	174	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	519	531	99	428	532	268	198	0	0	280	0	0
Stage 1	196	196	-	323	323	-	-	-	-	-	-	-
Stage 2	323	335	-	105	208	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	457	457	944	528	456	775	1387	-	-	1294	-	-
Stage 1	793	742	-	693	654	-	-	-	-	-	-	-
Stage 2	693	646	-	895	733	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	446	446	944	486	446	775	1387	-	-	1294	-	-
Mov Cap-2 Maneuver	446	446	-	486	446	-	-	-	-	-	-	-
Stage 1	789	739	-	680	641	-	-	-	-	-	-	-
Stage 2	680	634	-	852	730	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.65	12.42	0.68	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1387	-	-	593	486	1294	-	-
HCM Lane V/C Ratio	0.02	-	-	0.087	0.002	0.004	-	-
HCM Control Delay (s/veh)	7.6	-	-	11.7	12.4	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0	0	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	173	0	0	0	77	294	0	0	188	6
Future Vol, veh/h	3	0	173	0	0	0	77	294	0	0	188	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	0	182	0	0	0	81	309	0	0	198	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	518	673	102	571	676	155	204	0	0	309	0	0
Stage 1	201	201	-	472	472	-	-	-	-	-	-	-
Stage 2	317	472	-	99	204	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	445	379	940	408	378	870	1379	-	-	1262	-	-
Stage 1	788	739	-	547	563	-	-	-	-	-	-	-
Stage 2	674	563	-	902	736	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	419	357	940	310	356	870	1379	-	-	1262	-	-
Mov Cap-2 Maneuver	419	357	-	310	356	-	-	-	-	-	-	-
Stage 1	788	739	-	515	530	-	-	-	-	-	-	-
Stage 2	635	530	-	727	736	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.82	0	1.61	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1379	-	-	419	940	-	1262	-	-
HCM Lane V/C Ratio	0.059	-	-	0.008	0.194	-	-	-	-
HCM Control Delay (s/veh)	7.8	-	-	13.7	9.7	0	0	-	-
HCM Lane LOS	A	-	-	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0	0.7	-	0	-	-

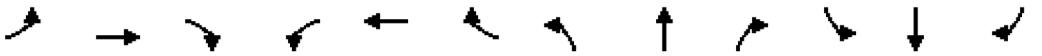
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	248	15	53	321	19	9	0	85	12	0	9
Future Vol, veh/h	3	248	15	53	321	19	9	0	85	12	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	261	16	56	338	20	9	0	89	13	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	358	0	0	277	0	0	556	745	138	596	743	179
Stage 1	-	-	-	-	-	-	275	275	-	459	459	-
Stage 2	-	-	-	-	-	-	281	469	-	137	283	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1212	-	-	1298	-	-	418	345	891	391	346	839
Stage 1	-	-	-	-	-	-	713	686	-	556	570	-
Stage 2	-	-	-	-	-	-	708	564	-	858	681	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1212	-	-	1298	-	-	395	329	891	336	330	839
Mov Cap-2 Maneuver	-	-	-	-	-	-	395	329	-	336	330	-
Stage 1	-	-	-	-	-	-	711	684	-	532	545	-
Stage 2	-	-	-	-	-	-	670	540	-	770	679	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	1.07	10.17	13.37
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	795	1212	-	-	1298	-	-	452
HCM Lane V/C Ratio	0.124	0.003	-	-	0.043	-	-	0.049
HCM Control Delay (s/veh)	10.2	8	-	-	7.9	-	-	13.4
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.2



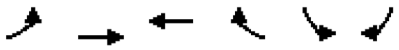
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	316	16	48	373	90	8	3	47	119	9	20
Future Volume (veh/h)	21	316	16	48	373	90	8	3	47	119	9	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	22	333	17	51	393	95	8	3	49	131	0	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	36	1290	66	93	1691	395	118	132	112	1062	0	481
Arrive On Green	0.02	0.39	0.39	0.06	0.42	0.42	0.07	0.07	0.07	0.32	0.00	0.32
Sat Flow, veh/h	1619	3311	168	1619	3979	929	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	22	171	179	51	321	167	8	3	49	131	0	21
Grp Sat Flow(s),veh/h/ln	1619	1710	1770	1619	1638	1633	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	1.5	7.4	7.5	3.4	6.8	7.2	0.5	0.2	3.4	3.0	0.0	1.0
Cycle Q Clear(g_c), s	1.5	7.4	7.5	3.4	6.8	7.2	0.5	0.2	3.4	3.0	0.0	1.0
Prop In Lane	1.00		0.10	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	36	666	689	93	1392	694	118	132	112	1062	0	481
V/C Ratio(X)	0.61	0.26	0.26	0.55	0.23	0.24	0.07	0.02	0.44	0.12	0.00	0.04
Avail Cap(c_a), veh/h	111	680	703	155	1392	694	274	304	258	1062	0	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.0	22.7	22.7	50.2	20.1	20.2	47.2	47.1	48.6	26.7	0.0	26.0
Incr Delay (d2), s/veh	15.5	0.2	0.2	4.9	0.4	0.8	0.2	0.1	2.7	0.2	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.9	3.1	1.5	2.6	2.8	0.2	0.1	1.4	1.3	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.5	22.9	22.9	55.1	20.5	21.0	47.5	47.2	51.3	26.9	0.0	26.2
LnGrp LOS	E	C	C	E	C	C	D	D	D	C		C
Approach Vol, veh/h		372			539			60			152	
Approach Delay, s/veh		25.6			23.9			50.6			26.8	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	47.1		39.0	6.9	51.0		12.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	43.5		34.5	7.5	46.5		18.5				
Max Q Clear Time (g_c+I1), s	5.4	9.5		5.0	3.5	9.2		5.4				
Green Ext Time (p_c), s	0.0	2.0		0.5	0.0	3.3		0.1				

Intersection Summary		
HCM 7th Control Delay, s/veh	26.3	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	219	334	0	182	234
Future Volume (veh/h)	0	219	334	0	182	234
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	231	352	0	192	246
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1737	1737	0	909	488
Arrive On Green	0.00	0.51	0.51	0.00	0.31	0.31
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	231	352	0	192	246
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	2.3	3.7	0.0	3.1	8.3
Cycle Q Clear(g_c), s	0.0	2.3	3.7	0.0	3.1	8.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1737	1737	0	909	488
V/C Ratio(X)	0.00	0.13	0.20	0.00	0.21	0.50
Avail Cap(c_a), veh/h	0	1737	1737	0	955	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.4	8.8	0.0	16.7	18.4
Incr Delay (d2), s/veh	0.0	0.2	0.3	0.0	0.1	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	1.2	0.0	1.0	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.6	9.0	0.0	16.8	19.4
LnGrp LOS		A	A		B	B
Approach Vol, veh/h		231	352		438	
Approach Delay, s/veh		8.6	9.0		18.3	
Approach LOS		A	A		B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	39.0	26.0	39.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	32.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	4.3	10.3	5.7
Green Ext Time (p_c), s	1.2	1.5	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	12.9
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	174	0	0	316	33	269	79	188	6	0	180
Future Volume (veh/h)	67	174	0	0	316	33	269	79	188	6	0	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	71	183	0	0	333	35	183	223	198	6	0	189
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	373	2137	0	0	781	81	386	429	726	0	0	0
Arrive On Green	0.13	0.43	0.00	0.00	0.17	0.17	0.24	0.24	0.24	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4687	467	1619	1800	3051		0	
Grp Volume(v), veh/h	71	183	0	0	239	129	183	223	198		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1716	1619	1800	1525			
Q Serve(g_s), s	0.8	0.8	0.0	0.0	2.4	2.5	3.6	4.0	1.9			
Cycle Q Clear(g_c), s	0.8	0.8	0.0	0.0	2.4	2.5	3.6	4.0	1.9			
Prop In Lane	1.00		0.00	0.00		0.27	1.00		1.00			
Lane Grp Cap(c), veh/h	373	2137	0	0	565	296	386	429	726			
V/C Ratio(X)	0.19	0.09	0.00	0.00	0.42	0.43	0.47	0.52	0.27			
Avail Cap(c_a), veh/h	403	5893	0	0	3036	1590	1015	1128	1912			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	14.4	6.1	0.0	0.0	13.6	13.6	12.0	12.2	11.4			
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.4	0.7	1.1	1.2	0.2			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.0	0.0	0.7	0.8	1.0	1.2	0.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.5	6.1	0.0	0.0	13.9	14.3	13.1	13.3	11.6			
LnGrp LOS	B	A			B	B	B	B	B			
Approach Vol, veh/h		254			368			604				
Approach Delay, s/veh		8.5			14.1			12.7				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		22.0			9.6	12.3		14.7				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		23.0				
Max Q Clear Time (g_c+I1), s		2.8			2.8	4.5		6.0				
Green Ext Time (p_c), s		1.0			0.0	1.9		2.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.2
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2	3	28	0	52	6	397	11	16	232	0
Future Vol, veh/h	0	2	3	28	0	52	6	397	11	16	232	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	0	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2	3	29	0	55	6	418	12	17	244	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	708	720	244	709	708	418	244	0	0	429	0	0
Stage 1	278	278	-	431	431	-	-	-	-	-	-	-
Stage 2	431	442	-	279	278	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	352	356	800	351	362	639	1334	-	-	1141	-	-
Stage 1	733	684	-	607	587	-	-	-	-	-	-	-
Stage 2	607	580	-	732	684	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	316	349	800	341	355	639	1334	-	-	1141	-	-
Mov Cap-2 Maneuver	316	349	-	341	355	-	-	-	-	-	-	-
Stage 1	722	674	-	604	584	-	-	-	-	-	-	-
Stage 2	552	577	-	716	674	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.89	13.87	0.11	0.53
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1334	-	-	528	490	1141	-	-
HCM Lane V/C Ratio	0.005	-	-	0.01	0.172	0.015	-	-
HCM Control Delay (s/veh)	7.7	-	-	11.9	13.9	8.2	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.6	0	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	4	385	15	5	215
Future Vol, veh/h	20	4	385	15	5	215
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	21	4	405	16	5	226

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	642	405	0	0	421	0
Stage 1	405	-	-	-	-	-
Stage 2	237	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	442	650	-	-	1149	-
Stage 1	678	-	-	-	-	-
Stage 2	807	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	439	650	-	-	1149	-
Mov Cap-2 Maneuver	439	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	803	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.2	0	0.19
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	464	41	-
HCM Lane V/C Ratio	-	-	0.054	0.005	-
HCM Control Delay (s/veh)	-	-	13.2	8.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	18	0	0	1	23	37	0	49	0
Future Vol, veh/h	0	0	2	18	0	0	1	23	37	0	49	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	2	19	0	0	1	24	39	0	52	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	78	117	52	97	97	44	52	0	0	63	0	0
Stage 1	52	52	-	46	46	-	-	-	-	-	-	-
Stage 2	26	65	-	52	52	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	916	777	1022	890	796	1032	1567	-	-	1552	-	-
Stage 1	966	856	-	973	861	-	-	-	-	-	-	-
Stage 2	996	844	-	966	856	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	915	777	1022	887	796	1032	1567	-	-	1552	-	-
Mov Cap-2 Maneuver	915	777	-	887	796	-	-	-	-	-	-	-
Stage 1	966	856	-	972	860	-	-	-	-	-	-	-
Stage 2	996	844	-	964	856	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.53	9.15	0.12	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	26	-	-	1022	887	1552	-	-
HCM Lane V/C Ratio	0.001	-	-	0.002	0.021	-	-	-
HCM Control Delay (s/veh)	7.3	0	-	8.5	9.1	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	20	1	11	19	16	0	18	6	20	30	17
Future Vol, veh/h	18	20	1	11	19	16	0	18	6	20	30	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	21	1	12	20	17	0	19	6	21	32	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	112	108	41	106	114	22	49	0	0	25	0	0
Stage 1	83	83	-	22	22	-	-	-	-	-	-	-
Stage 2	29	25	-	84	92	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	871	786	1036	878	780	1061	1570	-	-	1602	-	-
Stage 1	931	830	-	1001	881	-	-	-	-	-	-	-
Stage 2	993	878	-	929	823	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	824	776	1036	842	770	1061	1570	-	-	1602	-	-
Mov Cap-2 Maneuver	824	776	-	842	770	-	-	-	-	-	-	-
Stage 1	918	819	-	1001	881	-	-	-	-	-	-	-
Stage 2	955	878	-	892	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.73	9.38	0	2.17
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1570	-	-	803	871	1602	-	-
HCM Lane V/C Ratio	-	-	-	0.051	0.056	0.013	-	-
HCM Control Delay (s/veh)	0	-	-	9.7	9.4	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	51	0	0	0	0	38	18	20	17	0
Future Vol, veh/h	6	0	51	0	0	0	0	38	18	20	17	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	0	54	0	0	0	0	40	19	21	18	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.1	7.8	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	68%	0%	0%	0%	100%
Vol Right, %	32%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	56	6	51	20	17
LT Vol	0	6	0	20	0
Through Vol	38	0	0	0	17
RT Vol	18	0	51	0	0
Lane Flow Rate	59	6	54	21	18
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.073	0.009	0.059	0.03	0.023
Departure Headway (Hd)	4.442	5.167	3.966	5.136	4.635
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	803	687	892	696	770
Service Time	2.485	2.941	1.739	2.876	2.375
HCM Lane V/C Ratio	0.073	0.009	0.061	0.03	0.023
HCM Control Delay, s/veh	7.8	8	7	8	7.5
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.2	0	0.2	0.1	0.1

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	21	8	12	18	30
Future Vol, veh/h	6	21	8	12	18	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	22	8	13	19	32
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	6.9	7.6	7.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	30	6	21	8	12
LT Vol	18	0	0	0	8	0
Through Vol	0	0	6	0	0	12
RT Vol	0	30	0	21	0	0
Lane Flow Rate	19	32	6	22	8	13
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.027	0.034	0.008	0.024	0.012	0.016
Departure Headway (Hd)	5.083	3.883	4.598	3.898	5.103	4.603
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	704	921	777	915	701	777
Service Time	2.814	1.613	2.335	1.634	2.838	2.337
HCM Lane V/C Ratio	0.027	0.035	0.008	0.024	0.011	0.017
HCM Control Delay, s/veh	8	6.8	7.4	6.7	7.9	7.4
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0	0.1	0	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	266	115	147	166	4	85	20	181	18	36	12
Future Volume (veh/h)	14	266	115	147	166	4	85	20	181	18	36	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	15	280	121	155	175	4	89	21	191	19	38	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	31	556	234	194	1153	26	444	360	305	469	507	165
Arrive On Green	0.02	0.24	0.24	0.12	0.34	0.34	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1619	2344	988	1619	3418	78	1230	1800	1525	1339	2537	825
Grp Volume(v), veh/h	15	202	199	155	87	92	89	21	191	19	25	26
Grp Sat Flow(s),veh/h/ln	1619	1710	1622	1619	1710	1786	1230	1800	1525	1339	1710	1652
Q Serve(g_s), s	0.3	3.4	3.6	3.1	1.2	1.2	2.1	0.3	3.8	0.4	0.4	0.4
Cycle Q Clear(g_c), s	0.3	3.4	3.6	3.1	1.2	1.2	2.6	0.3	3.8	0.7	0.4	0.4
Prop In Lane	1.00		0.61	1.00		0.04	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	31	406	385	194	577	603	444	360	305	469	342	330
V/C Ratio(X)	0.48	0.50	0.52	0.80	0.15	0.15	0.20	0.06	0.63	0.04	0.07	0.08
Avail Cap(c_a), veh/h	241	1883	1786	438	2091	2184	1626	2089	1770	1755	1985	1917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	11.1	11.1	14.4	7.8	7.8	12.0	10.9	12.3	11.2	10.9	10.9
Incr Delay (d2), s/veh	10.8	1.0	1.1	7.4	0.1	0.1	0.2	0.1	2.1	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.8	0.8	1.2	0.3	0.3	0.5	0.1	1.2	0.1	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.1	12.0	12.2	21.8	7.9	7.9	12.2	11.0	14.4	11.2	11.0	11.0
LnGrp LOS	C	B	B	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		416			334			301			70	
Approach Delay, s/veh		12.7			14.4			13.5			11.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	13.8		11.3	5.2	17.1		11.3				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	4.1	37.0		39.0	5.0	41.1		39.0				
Max Q Clear Time (g_c+I1), s	5.1	5.6		5.8	2.3	3.2		2.7				
Green Ext Time (p_c), s	0.1	2.1		1.1	0.0	0.9		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	421	35	54	301	18	56	4	99	28	3	13
Future Volume (veh/h)	19	421	35	54	301	18	56	4	99	28	3	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	20	443	37	57	317	19	59	4	104	29	3	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	604	1367	114	535	1402	84	428	260	220	440	40	186
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	949	3196	266	831	3279	196	1269	1800	1525	1284	277	1291
Grp Volume(v), veh/h	20	236	244	57	165	171	59	4	104	29	0	17
Grp Sat Flow(s),veh/h/ln	949	1710	1752	831	1710	1765	1269	1800	1525	1284	0	1568
Q Serve(g_s), s	0.4	2.6	2.6	1.4	1.7	1.7	1.2	0.1	1.8	0.6	0.0	0.3
Cycle Q Clear(g_c), s	2.1	2.6	2.6	4.0	1.7	1.7	1.4	0.1	1.8	0.6	0.0	0.3
Prop In Lane	1.00		0.15	1.00		0.11	1.00		1.00	1.00		0.82
Lane Grp Cap(c), veh/h	604	731	749	535	731	755	428	260	220	440	0	226
V/C Ratio(X)	0.03	0.32	0.33	0.11	0.23	0.23	0.14	0.02	0.47	0.07	0.00	0.08
Avail Cap(c_a), veh/h	1349	2074	2125	1188	2074	2140	1784	2183	1850	1884	0	1991
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	5.3	5.3	6.7	5.1	5.1	11.0	10.3	11.0	10.5	0.0	10.4
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.2	0.2	0.1	0.0	1.6	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.1	0.2	0.2	0.3	0.0	0.5	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.8	5.6	5.6	6.7	5.2	5.2	11.1	10.3	12.6	10.6	0.0	10.5
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		500			393			167			46	
Approach Delay, s/veh		5.6			5.5			12.0			10.6	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.8	10.2	17.8	10.2
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	34.0	34.0	34.0	* 36
Max Q Clear Time (g_c+I1), s	4.6	3.8	6.0	2.6
Green Ext Time (p_c), s	2.7	0.5	2.1	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.7
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	470	94	23	440	10	62	4	24	5	0	1
Future Volume (veh/h)	9	470	94	23	440	10	62	4	24	5	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	9	495	99	24	463	11	65	4	25	5	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	631	1336	266	576	1605	38	433	8	156	463	0	156
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.10	0.10	0.10	0.10	0.00	0.10
Sat Flow, veh/h	836	2843	566	748	3414	81	1312	81	1525	1521	0	1525
Grp Volume(v), veh/h	9	297	297	24	232	242	69	0	25	5	0	1
Grp Sat Flow(s),veh/h/ln	836	1710	1698	748	1710	1785	1392	0	1525	1521	0	1525
Q Serve(g_s), s	0.2	2.6	2.6	0.5	1.9	1.9	1.0	0.0	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.1	2.6	2.6	3.1	1.9	1.9	1.1	0.0	0.3	0.1	0.0	0.0
Prop In Lane	1.00		0.33	1.00		0.05	0.94		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	631	804	798	576	804	839	441	0	156	463	0	156
V/C Ratio(X)	0.01	0.37	0.37	0.04	0.29	0.29	0.16	0.00	0.16	0.01	0.00	0.01
Avail Cap(c_a), veh/h	1061	1682	1671	960	1682	1756	2194	0	2088	2185	0	2088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.4	4.0	4.0	5.0	3.8	3.8	9.9	0.0	9.6	9.5	0.0	9.4
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.2	0.2	0.2	0.0	0.5	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.2	0.2	0.2	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.5	4.3	4.3	5.0	4.0	4.0	10.1	0.0	10.1	9.5	0.0	9.4
LnGrp LOS	A	A	A	A	A	A	B		B	A		A
Approach Vol, veh/h		603			498			94			6	
Approach Delay, s/veh		4.3			4.0			10.1			9.5	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.4	7.0	16.4	7.0
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	23.0	32.0	23.0	32.0
Max Q Clear Time (g_c+I1), s	4.6	3.1	5.1	2.1
Green Ext Time (p_c), s	3.1	0.4	2.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	4.7
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	341	25	24	289	109	39	30	24	158	49	159
Future Volume (veh/h)	128	341	25	24	289	109	39	30	24	158	49	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	135	359	26	25	304	115	41	32	25	166	52	167
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	319	705	51	148	532	197	141	77	60	342	79	254
Arrive On Green	0.09	0.22	0.22	0.08	0.22	0.22	0.08	0.08	0.08	0.20	0.20	0.20
Sat Flow, veh/h	1714	3235	233	1810	2442	905	1810	989	772	1714	397	1274
Grp Volume(v), veh/h	135	189	196	25	211	208	41	0	57	166	0	219
Grp Sat Flow(s),veh/h/ln	1714	1710	1758	1810	1710	1637	1810	0	1761	1714	0	1671
Q Serve(g_s), s	3.3	4.5	4.5	0.6	5.0	5.2	1.0	0.0	1.4	3.9	0.0	5.5
Cycle Q Clear(g_c), s	3.3	4.5	4.5	0.6	5.0	5.2	1.0	0.0	1.4	3.9	0.0	5.5
Prop In Lane	1.00		0.13	1.00		0.55	1.00		0.44	1.00		0.76
Lane Grp Cap(c), veh/h	319	373	383	148	373	357	141	0	137	342	0	334
V/C Ratio(X)	0.42	0.51	0.51	0.17	0.57	0.58	0.29	0.00	0.42	0.48	0.00	0.66
Avail Cap(c_a), veh/h	363	947	974	209	958	917	197	0	192	934	0	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.5	15.8	15.8	19.6	16.0	16.1	20.0	0.0	20.2	16.3	0.0	16.9
Incr Delay (d2), s/veh	0.9	1.1	1.1	0.5	1.4	1.5	1.1	0.0	2.0	1.1	0.0	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.6	1.7	0.2	1.8	1.8	0.4	0.0	0.6	1.4	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.4	16.8	16.8	20.2	17.3	17.6	21.1	0.0	22.2	17.3	0.0	19.1
LnGrp LOS	B	B	B	C	B	B	C		C	B		B
Approach Vol, veh/h		520			444			98			385	
Approach Delay, s/veh		17.2			17.6			21.7			18.3	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	15.1		8.2	8.8	14.6		14.3				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.3	* 25		5.0	5.5	25.7		25.0				
Max Q Clear Time (g_c+I1), s	2.6	6.5		3.4	5.3	7.2		7.5				
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	2.4		1.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	346	131	49	280	130	59
Future Volume (veh/h)	346	131	49	280	130	59
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	364	138	52	295	137	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	894	334	95	1970	216	203
Arrive On Green	0.37	0.37	0.06	0.58	0.13	0.13
Sat Flow, veh/h	2526	910	1619	3510	1619	1525
Grp Volume(v), veh/h	254	248	52	295	137	62
Grp Sat Flow(s),veh/h/ln	1710	1636	1619	1710	1619	1525
Q Serve(g_s), s	3.3	3.4	0.9	1.2	2.4	1.1
Cycle Q Clear(g_c), s	3.3	3.4	0.9	1.2	2.4	1.1
Prop In Lane		0.56	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	628	601	95	1970	216	203
V/C Ratio(X)	0.40	0.41	0.55	0.15	0.64	0.31
Avail Cap(c_a), veh/h	1400	1340	368	4034	1407	1325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.0	7.1	13.7	2.9	12.3	11.7
Incr Delay (d2), s/veh	0.4	0.5	4.8	0.0	3.1	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	0.4	0.1	0.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.5	7.5	18.5	3.0	15.4	12.6
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h	502			347	199	
Approach Delay, s/veh	7.5			5.3	14.5	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.3	15.6		8.1		21.8
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	6.8	* 25		26.0		35.3
Max Q Clear Time (g_c+I1), s	2.9	5.4		4.4		3.2
Green Ext Time (p_c), s	0.0	3.0		0.5		2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	8.1
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	39	37	136	36	57	23	435	167	63	269	8
Future Volume (veh/h)	1	39	37	136	36	57	23	435	167	63	269	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	41	39	143	38	60	24	458	0	66	283	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	397	185	176	413	137	216	48	615		108	1288	36
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.03	0.34	0.00	0.07	0.38	0.38
Sat Flow, veh/h	1179	848	807	1198	629	993	1619	1800	1525	1619	3397	96
Grp Volume(v), veh/h	1	0	80	143	0	98	24	458	0	66	142	149
Grp Sat Flow(s),veh/h/ln	1179	0	1655	1198	0	1621	1619	1800	1525	1619	1710	1783
Q Serve(g_s), s	0.0	0.0	1.4	4.0	0.0	1.8	0.5	8.1	0.0	1.4	2.0	2.0
Cycle Q Clear(g_c), s	1.8	0.0	1.4	5.5	0.0	1.8	0.5	8.1	0.0	1.4	2.0	2.0
Prop In Lane	1.00		0.49	1.00		0.61	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	397	0	361	413	0	353	48	615		108	649	676
V/C Ratio(X)	0.00	0.00	0.22	0.35	0.00	0.28	0.50	0.74		0.61	0.22	0.22
Avail Cap(c_a), veh/h	726	0	823	748	0	807	224	1144		246	1111	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	0.0	11.6	13.9	0.0	11.8	17.3	10.5	0.0	16.4	7.6	7.6
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.5	0.0	0.4	7.9	1.8	0.0	5.4	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.4	0.9	0.0	0.6	0.3	2.5	0.0	0.6	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.5	0.0	11.9	14.4	0.0	12.2	25.1	12.3	0.0	21.8	7.8	7.8
LnGrp LOS	B		B	B		B	C	B		C	A	A
Approach Vol, veh/h		81			241			482			357	
Approach Delay, s/veh		11.9			13.5			13.0			10.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	18.2		12.4	6.9	16.9		12.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.6	23.5		18.0	5.5	23.0		18.0				
Max Q Clear Time (g_c+I1), s	2.5	4.0		7.5	3.4	10.1		3.8				
Green Ext Time (p_c), s	0.0	1.5		0.7	0.0	2.2		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.2
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	63	0	83	187	626	0	0	353	174
Future Volume (veh/h)	0	0	0	63	0	83	187	626	0	0	353	174
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				66	0	87	197	659	0	0	372	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				302	0	269	427	1997	0	0	684	
Arrive On Green				0.18	0.00	0.18	0.26	0.58	0.00	0.00	0.20	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				66	0	87	197	659	0	0	372	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				1.6	0.0	2.5	5.1	5.0	0.0	0.0	4.9	0.0
Cycle Q Clear(g_c), s				1.6	0.0	2.5	5.1	5.0	0.0	0.0	4.9	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				302	0	269	427	1997	0	0	684	
V/C Ratio(X)				0.22	0.00	0.32	0.46	0.33	0.00	0.00	0.54	
Avail Cap(c_a), veh/h				343	0	305	431	1997	0	0	684	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.88	0.88	0.00	0.00	0.98	0.00
Uniform Delay (d), s/veh				17.6	0.0	18.0	15.4	5.4	0.0	0.0	18.0	0.0
Incr Delay (d2), s/veh				0.4	0.0	0.7	0.3	0.4	0.0	0.0	3.0	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	0.0	0.8	1.6	1.2	0.0	0.0	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				18.0	0.0	18.7	15.7	5.8	0.0	0.0	21.0	0.0
LnGrp LOS				B		B	B	A			C	
Approach Vol, veh/h					153			856			372	
Approach Delay, s/veh					18.4			8.0			21.0	
Approach LOS					B			A			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	9.2	16.0		14.8		35.2						
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0						
Max Green Setting (Gmax), s	13.3	* 10		10.0		28.0						
Max Q Clear Time (g_c+I1), s	7.1	6.9		4.5		7.0						
Green Ext Time (p_c), s	0.1	0.7		0.2		4.4						

Intersection Summary	
HCM 7th Control Delay, s/veh	12.7
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	276	224	106	604	301	66
Future Volume (veh/h)	276	224	106	604	301	66
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	291	236	112	636	317	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	353	333	241	1928	922	198
Arrive On Green	0.22	0.22	0.15	0.56	0.33	0.33
Sat Flow, veh/h	1619	1525	1619	3510	2890	601
Grp Volume(v), veh/h	291	236	112	636	192	194
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1692
Q Serve(g_s), s	9.4	7.9	3.5	5.5	4.7	4.8
Cycle Q Clear(g_c), s	9.4	7.9	3.5	5.5	4.7	4.8
Prop In Lane	1.00	1.00	1.00			0.36
Lane Grp Cap(c), veh/h	353	333	241	1928	563	557
V/C Ratio(X)	0.82	0.71	0.46	0.33	0.34	0.35
Avail Cap(c_a), veh/h	530	499	294	1928	563	557
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.96	0.96	0.97	0.97
Uniform Delay (d), s/veh	20.5	19.9	21.4	6.4	13.9	14.0
Incr Delay (d2), s/veh	3.9	1.0	0.5	0.4	1.6	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	2.6	1.2	1.5	1.8	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.4	20.9	21.9	6.9	15.5	15.6
LnGrp LOS	C	C	C	A	B	B
Approach Vol, veh/h	527			748	386	
Approach Delay, s/veh	22.8			9.1	15.6	
Approach LOS	C			A	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.9	24.1			37.0	18.0
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	10.3	10.3			25.0	18.0
Max Q Clear Time (g_c+I1), s	5.5	6.8			7.5	11.4
Green Ext Time (p_c), s	0.0	0.7			3.9	0.6

Intersection Summary		
HCM 7th Control Delay, s/veh	15.0	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	11	19	35	13	205	10	411	32	162	404	14
Future Volume (veh/h)	53	11	19	35	13	205	10	411	32	162	404	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	56	12	20	37	14	216	11	433	34	171	425	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	324	399	356	492	399	356	23	756	59	216	1193	42
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.01	0.24	0.24	0.13	0.35	0.35
Sat Flow, veh/h	1046	1710	1525	1252	1710	1525	1619	3213	251	1619	3370	119
Grp Volume(v), veh/h	56	12	20	37	14	216	11	230	237	171	215	225
Grp Sat Flow(s),veh/h/ln	1046	1710	1525	1252	1710	1525	1619	1710	1755	1619	1710	1779
Q Serve(g_s), s	1.7	0.2	0.3	0.8	0.2	4.3	0.2	4.0	4.1	3.5	3.2	3.2
Cycle Q Clear(g_c), s	6.0	0.2	0.3	1.1	0.2	4.3	0.2	4.0	4.1	3.5	3.2	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.07
Lane Grp Cap(c), veh/h	324	399	356	492	399	356	23	402	413	216	606	630
V/C Ratio(X)	0.17	0.03	0.06	0.08	0.04	0.61	0.47	0.57	0.57	0.79	0.36	0.36
Avail Cap(c_a), veh/h	635	907	809	864	907	809	501	907	931	501	907	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	10.0	10.1	10.5	10.1	11.6	16.6	11.5	11.5	14.2	8.1	8.1
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	1.7	13.8	1.3	1.3	6.4	0.4	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.1	0.2	0.1	1.3	0.2	1.1	1.1	1.3	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.5	10.1	10.2	10.6	10.1	13.3	30.4	12.7	12.7	20.6	8.4	8.4
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	A	A
Approach Vol, veh/h		88			267			478			611	
Approach Delay, s/veh		12.9			12.7			13.1			11.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.0	16.5		12.4	9.0	12.5		12.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	18.0		18.0	10.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	2.2	5.2		6.3	5.5	6.1		8.0				
Green Ext Time (p_c), s	0.0	2.0		1.2	0.2	1.9		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.5
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	111	31	43	172	125	15	114	16	150	149	87
Future Volume (veh/h)	110	111	31	43	172	125	15	114	16	150	149	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	116	117	33	45	181	132	16	120	17	158	157	92
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	559	791	216	616	536	454	570	914	127	631	643	357
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1093	2656	724	1125	1800	1525	1028	3015	420	1138	2121	1177
Grp Volume(v), veh/h	116	74	76	45	181	132	16	67	70	158	125	124
Grp Sat Flow(s),veh/h/ln	1093	1710	1670	1125	1800	1525	1028	1710	1724	1138	1710	1588
Q Serve(g_s), s	2.1	0.7	0.8	0.7	1.8	1.5	0.3	0.6	0.7	2.6	1.2	1.3
Cycle Q Clear(g_c), s	3.9	0.7	0.8	1.4	1.8	1.5	1.6	0.6	0.7	3.3	1.2	1.3
Prop In Lane	1.00		0.43	1.00		1.00	1.00		0.24	1.00		0.74
Lane Grp Cap(c), veh/h	559	509	497	616	536	454	570	518	523	631	518	481
V/C Ratio(X)	0.21	0.15	0.15	0.07	0.34	0.29	0.03	0.13	0.13	0.25	0.24	0.26
Avail Cap(c_a), veh/h	1106	1365	1333	1179	1437	1218	1079	1365	1377	1194	1365	1268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.7	5.8	5.8	6.4	6.2	6.1	6.5	5.7	5.7	6.9	5.9	5.9
Incr Delay (d2), s/veh	0.2	0.1	0.1	0.0	0.4	0.4	0.0	0.1	0.1	0.2	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.1	0.1	0.4	0.3	0.0	0.1	0.1	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.9	5.9	6.0	6.4	6.6	6.4	6.6	5.8	5.8	7.1	6.1	6.2
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		266			358			153			407	
Approach Delay, s/veh		6.8			6.5			5.9			6.5	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	11.3	11.2	11.3	11.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	3.6	5.9	5.3	3.8
Green Ext Time (p_c), s	0.5	1.0	1.5	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	6.5
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	290	2	4	221	2	3
Future Vol, veh/h	290	2	4	221	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	305	2	4	233	2	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	307	0	431	154
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	125	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1265	-	558	871
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	893	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1265	-	556	871
Mov Cap-2 Maneuver	-	-	-	-	610	-
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.14	9.87
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	744	-	-	1265	-
HCM Lane V/C Ratio	0.007	-	-	0.003	-
HCM Control Delay (s/veh)	9.9	-	-	7.9	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	136	13	22	446	0	10
Future Vol, veh/h	136	13	22	446	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	143	14	23	469	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	157	0	666	150
Stage 1	-	-	-	-	150	-
Stage 2	-	-	-	-	516	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1435	-	428	902
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	603	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1435	-	418	902
Mov Cap-2 Maneuver	-	-	-	-	418	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	590	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.35	9.04
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	902	-	-	85	-
HCM Lane V/C Ratio	0.012	-	-	0.016	-
HCM Control Delay (s/veh)	9	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	120	40	60	269	216	40	175	80	195	202	40
Future Volume (veh/h)	18	120	40	60	269	216	40	175	80	195	202	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	19	126	0	63	283	0	42	184	84	205	213	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	30	683		75	779		57	462	202	251	575	487
Arrive On Green	0.02	0.20	0.00	0.05	0.23	0.00	0.04	0.20	0.20	0.15	0.32	0.32
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	2313	1014	1619	1800	1525
Grp Volume(v), veh/h	19	126	0	63	283	0	42	134	134	205	213	42
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1617	1619	1800	1525
Q Serve(g_s), s	0.6	1.5	0.0	1.9	3.5	0.0	1.3	3.4	3.6	6.1	4.6	1.0
Cycle Q Clear(g_c), s	0.6	1.5	0.0	1.9	3.5	0.0	1.3	3.4	3.6	6.1	4.6	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.63	1.00		1.00
Lane Grp Cap(c), veh/h	30	683		75	779		57	341	323	251	575	487
V/C Ratio(X)	0.63	0.18		0.83	0.36		0.73	0.39	0.41	0.82	0.37	0.09
Avail Cap(c_a), veh/h	356	2294		356	2294		420	1157	1095	549	1344	1139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	16.7	0.0	23.7	16.3	0.0	23.9	17.4	17.5	20.5	13.2	11.9
Incr Delay (d2), s/veh	7.9	0.1	0.0	8.6	0.3	0.0	6.6	0.7	0.9	2.5	0.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.5	0.0	0.8	1.1	0.0	0.5	1.1	1.1	2.0	1.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.3	16.8	0.0	32.3	16.6	0.0	30.5	18.1	18.3	23.0	13.6	12.0
LnGrp LOS	C	B		C	B		C	B	B	C	B	B
Approach Vol, veh/h		145			346			310			460	
Approach Delay, s/veh		18.8			19.4			19.9			17.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	15.4	5.8	22.6	4.9	16.8	11.8	16.6
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	11.0	33.6	13.0	37.4	11.0	33.6	17.0	* 34
Max Q Clear Time (g_c+I1), s	3.9	3.5	3.3	6.6	2.6	5.5	8.1	5.6
Green Ext Time (p_c), s	0.0	0.7	0.0	1.2	0.0	1.6	0.1	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	18.8
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	2	317	268	0
Future Vol, veh/h	0	2	2	317	268	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	2	334	282	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	620	282	282	0	-	0
Stage 1	282	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	455	762	1292	-	-	-
Stage 1	770	-	-	-	-	-
Stage 2	727	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	454	762	1292	-	-	-
Mov Cap-2 Maneuver	454	-	-	-	-	-
Stage 1	769	-	-	-	-	-
Stage 2	727	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.74	0.05	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	11	-	762	-	-
HCM Lane V/C Ratio	0.002	-	0.003	-	-
HCM Control Delay (s/veh)	7.8	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	351	3	3	468	0	2	0	4	3	0	3
Future Vol, veh/h	2	351	3	3	468	0	2	0	4	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	369	3	3	493	0	2	0	4	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	493	0	0	373	0	0	628	874	186	688	876	246
Stage 1	-	-	-	-	-	-	375	375	-	499	499	-
Stage 2	-	-	-	-	-	-	253	499	-	189	377	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1081	-	-	1197	-	-	372	290	830	337	290	760
Stage 1	-	-	-	-	-	-	623	620	-	527	547	-
Stage 2	-	-	-	-	-	-	735	547	-	800	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1081	-	-	1197	-	-	368	289	830	333	288	760
Mov Cap-2 Maneuver	-	-	-	-	-	-	368	289	-	333	288	-
Stage 1	-	-	-	-	-	-	622	619	-	526	545	-
Stage 2	-	-	-	-	-	-	730	545	-	795	618	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.08	11.22	12.88
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	585	20	-	-	23	-	-	463
HCM Lane V/C Ratio	0.011	0.002	-	-	0.003	-	-	0.014
HCM Control Delay (s/veh)	11.2	8.3	0	-	8	0	-	12.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	354	0	3	470	0	2	0	0	2	0	0
Future Vol, veh/h	3	354	0	3	470	0	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	373	0	3	495	0	2	0	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	495	0	0	373	0	0	633	880	186	694	880	247
Stage 1	-	-	-	-	-	-	379	379	-	501	501	-
Stage 2	-	-	-	-	-	-	254	501	-	193	379	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1079	-	-	1197	-	-	369	288	830	333	288	759
Stage 1	-	-	-	-	-	-	620	618	-	526	546	-
Stage 2	-	-	-	-	-	-	734	546	-	797	618	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1079	-	-	1197	-	-	366	286	830	331	286	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	366	286	-	331	286	-
Stage 1	-	-	-	-	-	-	618	616	-	524	544	-
Stage 2	-	-	-	-	-	-	732	544	-	794	616	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.07	14.89	15.94
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	366	30	-	-	23	-	-	331
HCM Lane V/C Ratio	0.006	0.003	-	-	0.003	-	-	0.006
HCM Control Delay (s/veh)	14.9	8.3	0	-	8	0	-	15.9
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	353	2	2	466	0	2	0	0	2	0	5
Future Vol, veh/h	2	353	2	2	466	0	2	0	0	2	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	372	2	2	491	0	2	0	0	2	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	491	0	0	374	0	0	626	872	187	685	873	245
Stage 1	-	-	-	-	-	-	377	377	-	495	495	-
Stage 2	-	-	-	-	-	-	249	495	-	190	378	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1083	-	-	1196	-	-	372	291	830	338	291	761
Stage 1	-	-	-	-	-	-	622	619	-	530	549	-
Stage 2	-	-	-	-	-	-	738	549	-	799	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1083	-	-	1196	-	-	368	290	830	337	290	761
Mov Cap-2 Maneuver	-	-	-	-	-	-	368	290	-	337	290	-
Stage 1	-	-	-	-	-	-	621	618	-	529	548	-
Stage 2	-	-	-	-	-	-	732	548	-	798	617	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.05	14.83	11.52
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	368	20	-	-	15	-	-	560
HCM Lane V/C Ratio	0.006	0.002	-	-	0.002	-	-	0.013
HCM Control Delay (s/veh)	14.8	8.3	0	-	8	0	-	11.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	353	2	2	468	2	3	0	0	3	0	0
Future Vol, veh/h	2	353	2	2	468	2	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	372	2	2	493	2	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	495	0	0	374	0	0	627	876	187	688	876	247
Stage 1	-	-	-	-	-	-	377	377	-	498	498	-
Stage 2	-	-	-	-	-	-	251	499	-	190	378	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1079	-	-	1196	-	-	372	290	830	337	290	759
Stage 1	-	-	-	-	-	-	622	619	-	528	548	-
Stage 2	-	-	-	-	-	-	737	547	-	799	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1079	-	-	1196	-	-	370	288	830	335	288	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	370	288	-	335	288	-
Stage 1	-	-	-	-	-	-	621	618	-	527	547	-
Stage 2	-	-	-	-	-	-	736	546	-	798	617	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.05	14.81	15.85
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	370	20	-	-	15	-	-	335
HCM Lane V/C Ratio	0.009	0.002	-	-	0.002	-	-	0.009
HCM Control Delay (s/veh)	14.8	8.3	0	-	8	0	-	15.8
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	341	18	20	448	0	23	0	15	2	2	0
Future Vol, veh/h	3	341	18	20	448	0	23	0	15	2	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	359	19	21	472	0	24	0	16	2	2	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	472	0	0	378	0	0	654	888	189	699	898	236
Stage 1	-	-	-	-	-	-	375	375	-	514	514	-
Stage 2	-	-	-	-	-	-	279	514	-	186	384	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1101	-	-	1192	-	-	356	285	827	330	281	772
Stage 1	-	-	-	-	-	-	624	621	-	517	539	-
Stage 2	-	-	-	-	-	-	710	539	-	804	615	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1101	-	-	1192	-	-	345	278	827	316	275	772
Mov Cap-2 Maneuver	-	-	-	-	-	-	345	278	-	316	275	-
Stage 1	-	-	-	-	-	-	622	619	-	506	528	-
Stage 2	-	-	-	-	-	-	692	528	-	786	613	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.49	13.82	17.43
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	448	28	-	-	154	-	-	294
HCM Lane V/C Ratio	0.089	0.003	-	-	0.018	-	-	0.014
HCM Control Delay (s/veh)	13.8	8.3	0	-	8.1	0.2	-	17.4
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	350	13	16	465	3	8
Future Vol, veh/h	350	13	16	465	3	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	368	14	17	489	3	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	382	0	654	191
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	278	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1187	-	404	825
Stage 1	-	-	-	-	671	-
Stage 2	-	-	-	-	750	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1187	-	398	825
Mov Cap-2 Maneuver	-	-	-	-	398	-
Stage 1	-	-	-	-	671	-
Stage 2	-	-	-	-	737	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.39	10.75
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	638	-	-	120	-
HCM Lane V/C Ratio	0.018	-	-	0.014	-
HCM Control Delay (s/veh)	10.7	-	-	8.1	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	331	23	24	448	25	22
Future Vol, veh/h	331	23	24	448	25	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	348	24	25	472	26	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	373	0	647	186
Stage 1	-	-	-	-	361	-
Stage 2	-	-	-	-	286	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1197	-	408	830
Stage 1	-	-	-	-	682	-
Stage 2	-	-	-	-	743	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1197	-	398	830
Mov Cap-2 Maneuver	-	-	-	-	398	-
Stage 1	-	-	-	-	682	-
Stage 2	-	-	-	-	725	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.58	12.54
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	527	-	-	183	-
HCM Lane V/C Ratio	0.094	-	-	0.021	-
HCM Control Delay (s/veh)	12.5	-	-	8.1	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	351	20	57	464	14	27
Future Vol, veh/h	351	20	57	464	14	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	369	21	60	488	15	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	391	0	744	195
Stage 1	-	-	-	-	380	-
Stage 2	-	-	-	-	364	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1179	-	354	819
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	679	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1179	-	333	819
Mov Cap-2 Maneuver	-	-	-	-	333	-
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	639	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.24	12.14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	547	-	-	394	-
HCM Lane V/C Ratio	0.079	-	-	0.051	-
HCM Control Delay (s/veh)	12.1	-	-	8.2	0.4
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	376	11	25	533	7	18
Future Vol, veh/h	376	11	25	533	7	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	396	12	26	561	7	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	407	0	735	204
Stage 1	-	-	-	-	402	-
Stage 2	-	-	-	-	333	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1162	-	359	809
Stage 1	-	-	-	-	651	-
Stage 2	-	-	-	-	704	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1162	-	350	809
Mov Cap-2 Maneuver	-	-	-	-	350	-
Stage 1	-	-	-	-	651	-
Stage 2	-	-	-	-	685	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.56	11.37
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	592	-	-	161	-
HCM Lane V/C Ratio	0.044	-	-	0.023	-
HCM Control Delay (s/veh)	11.4	-	-	8.2	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

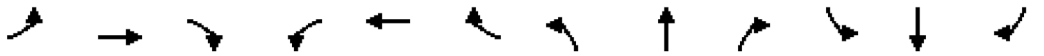
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	38	384	548	116	83	31
Future Vol, veh/h	38	384	548	116	83	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	40	404	577	122	87	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	699	0	-	0	920	349
Stage 1	-	-	-	-	638	-
Stage 2	-	-	-	-	282	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	907	-	-	-	274	653
Stage 1	-	-	-	-	494	-
Stage 2	-	-	-	-	747	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	907	-	-	-	262	653
Mov Cap-2 Maneuver	-	-	-	-	373	-
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	747	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.82	0	16.89
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	907	-	-	-	422
HCM Lane V/C Ratio	0.044	-	-	-	0.284
HCM Control Delay (s/veh)	9.2	-	-	-	16.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	281	191	44	647	0	0	0	0	31	10	20
Future Volume (veh/h)	0	281	191	44	647	0	0	0	0	31	10	20
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	296	201	46	681	0				33	12	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	880	581	71	1997	0				91	33	58
Arrive On Green	0.00	0.50	0.50	0.10	1.00	0.00				0.06	0.06	0.06
Sat Flow, veh/h	0	1856	1173	1457	3159	0				1457	529	925
Grp Volume(v), veh/h	0	256	241	46	681	0				33	0	33
Grp Sat Flow(s),veh/h/ln	0	1539	1409	1457	1539	0				1457	0	1454
Q Serve(g_s), s	0.0	4.5	4.7	1.4	0.0	0.0				1.0	0.0	1.0
Cycle Q Clear(g_c), s	0.0	4.5	4.7	1.4	0.0	0.0				1.0	0.0	1.0
Prop In Lane	0.00		0.83	1.00		0.00				1.00		0.64
Lane Grp Cap(c), veh/h	0	763	698	71	1997	0				91	0	91
V/C Ratio(X)	0.00	0.33	0.35	0.65	0.34	0.00				0.36	0.00	0.36
Avail Cap(c_a), veh/h	0	763	698	165	1997	0				162	0	162
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.97	0.97	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.9	6.9	19.9	0.0	0.0				20.2	0.0	20.2
Incr Delay (d2), s/veh	0.0	1.2	1.4	3.6	0.5	0.0				0.9	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.9	0.4	0.1	0.0				0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	8.0	8.3	23.5	0.5	0.0				21.1	0.0	21.1
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		497			727						66	
Approach Delay, s/veh		8.2			1.9						21.1	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	6.9	28.3		9.8		35.2						
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0						
Max Green Setting (Gmax), s	5.1	17.2		5.0		27.0						
Max Q Clear Time (g_c+I1), s	3.4	6.7		3.0		2.0						
Green Ext Time (p_c), s	0.0	1.2		0.0		2.5						

Intersection Summary			
HCM 7th Control Delay, s/veh		5.3	
HCM 7th LOS		A	

Notes
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	297	0	0	427	42	254	0	76	0	0	0
Future Volume (veh/h)	21	297	0	0	427	42	254	0	76	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	22	313	0	0	449	44	267	0	80			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	177	1762	0	0	1031	460	336	0	299			
Arrive On Green	0.22	1.00	0.00	0.00	0.30	0.30	0.20	0.00	0.20			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	22	313	0	0	449	44	267	0	80			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.5	0.0	0.0	0.0	4.8	0.9	6.7	0.0	2.0			
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.0	4.8	0.9	6.7	0.0	2.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	177	1762	0	0	1031	460	336	0	299			
V/C Ratio(X)	0.12	0.18	0.00	0.00	0.44	0.10	0.80	0.00	0.27			
Avail Cap(c_a), veh/h	180	1762	0	0	1031	460	381	0	339			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.8	0.0	0.0	0.0	12.6	11.3	17.2	0.0	15.4			
Incr Delay (d2), s/veh	0.3	0.2	0.0	0.0	1.3	0.4	10.0	0.0	0.5			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.0	0.0	1.4	0.3	3.2	0.0	0.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.1	0.2	0.0	0.0	14.0	11.7	27.2	0.0	15.8			
LnGrp LOS	B	A			B	B	C		B			
Approach Vol, veh/h		335			493			347				
Approach Delay, s/veh		1.3			13.8			24.6				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		29.2			9.6	19.6		15.8				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		22.0			5.0	12.3		10.0				
Max Q Clear Time (g_c+I1), s		2.0			2.5	6.8		8.7				
Green Ext Time (p_c), s		1.6			0.0	1.3		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.4
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	0	18	13	0	3	28	299	8	1	253	23
Future Vol, veh/h	24	0	18	13	0	3	28	299	8	1	253	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	25	0	19	14	0	3	29	315	8	1	266	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	654	663	145	509	666	315	291	0	0	323	0	0
Stage 1	281	281	-	374	374	-	-	-	-	-	-	-
Stage 2	374	382	-	135	293	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	369	384	882	465	383	730	1283	-	-	1248	-	-
Stage 1	708	682	-	651	621	-	-	-	-	-	-	-
Stage 2	651	616	-	860	674	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	359	375	882	444	373	730	1283	-	-	1248	-	-
Mov Cap-2 Maneuver	359	375	-	444	373	-	-	-	-	-	-	-
Stage 1	708	682	-	636	607	-	-	-	-	-	-	-
Stage 2	634	602	-	841	674	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.24	12.79	0.66	0.03
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1283	-	-	481	479	1248	-	-
HCM Lane V/C Ratio	0.023	-	-	0.092	0.035	0.001	-	-
HCM Control Delay (s/veh)	7.9	-	-	13.2	12.8	7.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	183	0	0	0	90	300	0	0	287	4
Future Vol, veh/h	1	0	183	0	0	0	90	300	0	0	287	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	0	193	0	0	0	95	316	0	0	302	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	652	809	153	656	812	158	306	0	0	316	0	0
Stage 1	304	304	-	505	505	-	-	-	-	-	-	-
Stage 2	347	505	-	151	306	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	357	316	872	355	316	866	1266	-	-	1256	-	-
Stage 1	686	666	-	523	544	-	-	-	-	-	-	-
Stage 2	647	544	-	842	665	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	331	293	872	256	292	866	1266	-	-	1256	-	-
Mov Cap-2 Maneuver	331	293	-	256	292	-	-	-	-	-	-	-
Stage 1	686	666	-	484	503	-	-	-	-	-	-	-
Stage 2	599	503	-	656	665	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.33	0	1.86	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1266	-	-	331	872	-	1256	-	-
HCM Lane V/C Ratio	0.075	-	-	0.003	0.221	-	-	-	-
HCM Control Delay (s/veh)	8.1	-	-	15.9	10.3	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0	0.8	-	0	-	-

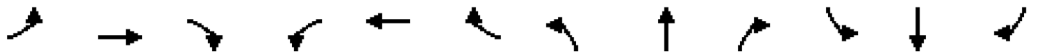
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	339	19	98	397	20	8	0	52	5	0	7
Future Vol, veh/h	10	339	19	98	397	20	8	0	52	5	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	357	20	103	418	21	8	0	55	5	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	439	0	0	377	0	0	803	1033	188	834	1033	219
Stage 1	-	-	-	-	-	-	388	388	-	635	635	-
Stage 2	-	-	-	-	-	-	415	645	-	199	398	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1132	-	-	1193	-	-	278	234	828	264	234	791
Stage 1	-	-	-	-	-	-	613	612	-	438	476	-
Stage 2	-	-	-	-	-	-	591	470	-	789	606	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1132	-	-	1193	-	-	249	212	828	223	212	791
Mov Cap-2 Maneuver	-	-	-	-	-	-	249	212	-	223	212	-
Stage 1	-	-	-	-	-	-	607	607	-	400	434	-
Stage 2	-	-	-	-	-	-	535	430	-	730	601	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.22	1.58	11.33	14.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	632	1132	-	-	1193	-	-	384
HCM Lane V/C Ratio	0.1	0.009	-	-	0.086	-	-	0.033
HCM Control Delay (s/veh)	11.3	8.2	-	-	8.3	-	-	14.7
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.3	-	-	0.1



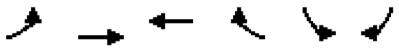
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	389	20	58	429	108	18	3	74	143	6	18
Future Volume (veh/h)	19	389	20	58	429	108	18	3	74	143	6	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	20	409	21	61	452	114	19	3	78	155	0	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	34	1273	65	100	1676	410	119	132	112	1063	0	482
Arrive On Green	0.02	0.38	0.38	0.06	0.43	0.43	0.07	0.07	0.07	0.32	0.00	0.32
Sat Flow, veh/h	1619	3310	169	1619	3939	964	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	20	211	219	61	374	192	19	3	78	155	0	19
Grp Sat Flow(s),veh/h/ln	1619	1710	1769	1619	1638	1627	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	1.3	9.5	9.5	4.0	8.1	8.4	1.2	0.2	5.5	3.6	0.0	0.9
Cycle Q Clear(g_c), s	1.3	9.5	9.5	4.0	8.1	8.4	1.2	0.2	5.5	3.6	0.0	0.9
Prop In Lane	1.00		0.10	1.00		0.59	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	658	681	100	1394	692	119	132	112	1063	0	482
V/C Ratio(X)	0.59	0.32	0.32	0.61	0.27	0.28	0.16	0.02	0.70	0.15	0.00	0.04
Avail Cap(c_a), veh/h	111	681	704	156	1394	692	274	305	258	1063	0	482
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.0	23.6	23.6	50.0	20.4	20.5	47.5	47.0	49.5	26.8	0.0	25.9
Incr Delay (d2), s/veh	15.5	0.3	0.3	5.9	0.5	1.0	0.6	0.1	7.6	0.3	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.7	3.9	1.8	3.1	3.3	0.5	0.1	2.3	1.5	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.6	23.9	23.9	55.9	20.8	21.4	48.1	47.1	57.1	27.1	0.0	26.1
LnGrp LOS	E	C	C	E	C	C	D	D	E	C		C
Approach Vol, veh/h		450			627			100			174	
Approach Delay, s/veh		25.9			24.4			55.1			27.0	
Approach LOS		C			C			E			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.2	46.5		39.0	6.8	51.0		12.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	43.5		34.5	7.5	46.5		18.5				
Max Q Clear Time (g_c+I1), s	6.0	11.5		5.6	3.3	10.4		7.5				
Green Ext Time (p_c), s	0.0	2.4		0.6	0.0	3.9		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh		27.5
HCM 7th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰↰	↱
Traffic Volume (veh/h)	0	285	355	0	372	314
Future Volume (veh/h)	0	285	355	0	372	314
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	300	374	0	392	331
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1736	1736		910	488
Arrive On Green	0.00	0.51	0.51	0.00	0.31	0.31
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	300	374	0	392	331
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	3.1	3.9	0.0	6.9	11.9
Cycle Q Clear(g_c), s	0.0	3.1	3.9	0.0	6.9	11.9
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1736	1736		910	488
V/C Ratio(X)	0.00	0.17	0.22		0.43	0.68
Avail Cap(c_a), veh/h	0	1736	1736		955	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.6	8.8	0.0	18.0	19.7
Incr Delay (d2), s/veh	0.0	0.2	0.3	0.0	0.4	3.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	1.3	0.0	2.3	4.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.9	9.1	0.0	18.3	23.3
LnGrp LOS		A	A		B	C
Approach Vol, veh/h		300	374		723	
Approach Delay, s/veh		8.9	9.1		20.6	
Approach LOS		A	A		C	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	39.0		26.0		39.0
Change Period (Y+Rc), s	6.0		6.0		6.0
Max Green Setting (Gmax), s	32.0		21.0		32.0
Max Q Clear Time (g_c+I1), s	5.1		13.9		5.9
Green Ext Time (p_c), s	1.5		2.1		2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	15.0
HCM 7th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	366	0	0	553	108	252	112	191	41	0	263
Future Volume (veh/h)	162	366	0	0	553	108	252	112	191	41	0	263
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	171	385	0	0	582	114	192	221	201	43	0	277
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	347	2436	0	0	1077	207	359	399	677	0	0	0
Arrive On Green	0.12	0.50	0.00	0.00	0.26	0.26	0.22	0.22	0.22	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4298	796	1619	1800	3051		0	
Grp Volume(v), veh/h	171	385	0	0	459	237	192	221	201		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1657	1619	1800	1525			
Q Serve(g_s), s	2.3	1.8	0.0	0.0	5.1	5.2	4.4	4.6	2.3			
Cycle Q Clear(g_c), s	2.3	1.8	0.0	0.0	5.1	5.2	4.4	4.6	2.3			
Prop In Lane	1.00		0.00	0.00		0.48	1.00		1.00			
Lane Grp Cap(c), veh/h	347	2436	0	0	853	432	359	399	677			
V/C Ratio(X)	0.49	0.16	0.00	0.00	0.54	0.55	0.53	0.55	0.30			
Avail Cap(c_a), veh/h	348	5090	0	0	2622	1326	877	975	1652			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	17.6	5.9	0.0	0.0	13.5	13.6	14.6	14.7	13.8			
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.4	0.8	1.5	1.4	0.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	0.4	0.0	0.0	1.6	1.7	1.4	1.6	0.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.4	5.9	0.0	0.0	13.9	14.4	16.1	16.1	14.1			
LnGrp LOS	B	A			B	B	B	B	B			
Approach Vol, veh/h		556			696			614				
Approach Delay, s/veh		9.7			14.1			15.4				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		27.1			10.0	17.1		15.4				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		23.0				
Max Q Clear Time (g_c+I1), s		3.8			4.3	7.2		6.6				
Green Ext Time (p_c), s		2.2			0.0	3.8		2.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.2
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	5	27	0	54	2	330	26	31	368	0
Future Vol, veh/h	11	0	5	27	0	54	2	330	26	31	368	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	0	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	0	5	28	0	57	2	347	27	33	387	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	804	832	387	804	804	347	387	0	0	375	0	0
Stage 1	453	453	-	352	352	-	-	-	-	-	-	-
Stage 2	352	379	-	453	453	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	304	307	665	304	319	700	1182	-	-	1195	-	-
Stage 1	590	574	-	669	635	-	-	-	-	-	-	-
Stage 2	669	618	-	590	574	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	271	298	665	292	309	700	1182	-	-	1195	-	-
Mov Cap-2 Maneuver	271	298	-	292	309	-	-	-	-	-	-	-
Stage 1	574	558	-	668	634	-	-	-	-	-	-	-
Stage 2	614	617	-	570	558	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.41	14.16	0.04	0.63
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1182	-	-	332	478	1195	-	-
HCM Lane V/C Ratio	0.002	-	-	0.051	0.178	0.027	-	-
HCM Control Delay (s/veh)	8.1	-	-	16.4	14.2	8.1	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.6	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	4	305	29	6	353
Future Vol, veh/h	17	4	305	29	6	353
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	4	321	31	6	372

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	705	321	0	0	352	0
Stage 1	321	-	-	-	-	-
Stage 2	384	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	406	724	-	-	1218	-
Stage 1	740	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	403	724	-	-	1218	-
Mov Cap-2 Maneuver	403	-	-	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	688	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.61	0	0.13
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	440	30	-
HCM Lane V/C Ratio	-	-	0.05	0.005	-
HCM Control Delay (s/veh)	-	-	13.6	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	23	0	4	0	91	29	12	73	0
Future Vol, veh/h	0	0	0	23	0	4	0	91	29	12	73	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	24	0	4	0	96	31	13	77	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	198	228	77	213	213	111	77	0	0	126	0	0
Stage 1	102	102	-	111	111	-	-	-	-	-	-	-
Stage 2	96	126	-	102	102	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	765	675	990	748	688	948	1535	-	-	1473	-	-
Stage 1	909	815	-	899	807	-	-	-	-	-	-	-
Stage 2	916	795	-	909	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	755	669	990	742	682	948	1535	-	-	1473	-	-
Mov Cap-2 Maneuver	755	669	-	742	682	-	-	-	-	-	-	-
Stage 1	901	808	-	899	807	-	-	-	-	-	-	-
Stage 2	912	795	-	901	808	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	9.88	0	1.05
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1535	-	-	-	766	1473	-	-
HCM Lane V/C Ratio	-	-	-	-	0.037	0.009	-	-
HCM Control Delay (s/veh)	0	-	-	0	9.9	7.5	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	34	0	8	50	19	0	29	10	22	23	30
Future Vol, veh/h	43	34	0	8	50	19	0	29	10	22	23	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	36	0	8	53	20	0	31	11	23	24	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	143	127	40	124	138	36	56	0	0	41	0	0
Stage 1	86	86	-	36	36	-	-	-	-	-	-	-
Stage 2	57	41	-	88	102	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	831	767	1037	855	757	1043	1562	-	-	1581	-	-
Stage 1	926	827	-	985	869	-	-	-	-	-	-	-
Stage 2	960	865	-	924	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	747	756	1037	803	746	1043	1562	-	-	1581	-	-
Mov Cap-2 Maneuver	747	756	-	803	746	-	-	-	-	-	-	-
Stage 1	913	815	-	985	869	-	-	-	-	-	-	-
Stage 2	885	865	-	871	803	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.37	9.95	0	2.14
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1562	-	-	751	808	1581	-	-
HCM Lane V/C Ratio	-	-	-	0.108	0.1	0.015	-	-
HCM Control Delay (s/veh)	0	-	-	10.4	9.9	7.3	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.3	0	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	2	44	0	0	0	0	71	22	15	38	0
Future Vol, veh/h	6	2	44	0	0	0	0	71	22	15	38	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	2	46	0	0	0	0	75	23	16	40	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.3	8.2	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	76%	0%	4%	0%	100%
Vol Right, %	24%	0%	96%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	93	6	46	15	38
LT Vol	0	6	0	15	0
Through Vol	71	0	2	0	38
RT Vol	22	0	44	0	0
Lane Flow Rate	98	6	48	16	40
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.122	0.009	0.057	0.023	0.052
Departure Headway (Hd)	4.496	5.375	4.203	5.146	4.645
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	793	670	857	692	766
Service Time	2.55	3.075	1.903	2.901	2.4
HCM Lane V/C Ratio	0.124	0.009	0.056	0.023	0.052
HCM Control Delay, s/veh	8.2	8.1	7.2	8	7.7
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0	0.2	0.1	0.2

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	32	15	22	26	45
Future Vol, veh/h	30	32	15	22	26	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	32	34	16	23	27	47
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7.2	7.8	7.4
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	26	45	30	32	15	22
LT Vol	26	0	0	0	15	0
Through Vol	0	0	30	0	0	22
RT Vol	0	45	0	32	0	0
Lane Flow Rate	27	47	32	34	16	23
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.039	0.052	0.041	0.037	0.023	0.03
Departure Headway (Hd)	5.175	3.974	4.649	3.948	5.163	4.662
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	687	891	765	899	689	762
Service Time	2.945	1.744	2.409	1.707	2.925	2.424
HCM Lane V/C Ratio	0.039	0.053	0.042	0.038	0.023	0.03
HCM Control Delay, s/veh	8.2	7	7.6	6.9	8	7.6
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.1	0.1	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	219	127	267	252	6	160	41	206	24	57	31
Future Volume (veh/h)	23	219	127	267	252	6	160	41	206	24	57	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	24	231	134	281	265	6	168	43	217	25	60	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	47	413	231	346	1298	29	426	430	364	459	523	267
Arrive On Green	0.03	0.20	0.20	0.21	0.38	0.38	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1619	2116	1182	1619	3419	77	1184	1800	1525	1312	2190	1119
Grp Volume(v), veh/h	24	185	180	281	132	139	168	43	217	25	46	47
Grp Sat Flow(s),veh/h/ln	1619	1710	1587	1619	1710	1786	1184	1800	1525	1312	1710	1599
Q Serve(g_s), s	0.6	4.1	4.4	7.0	2.2	2.2	5.5	0.8	5.3	0.6	0.9	1.0
Cycle Q Clear(g_c), s	0.6	4.1	4.4	7.0	2.2	2.2	6.5	0.8	5.3	1.4	0.9	1.0
Prop In Lane	1.00		0.74	1.00		0.04	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	47	334	310	346	649	678	426	430	364	459	408	382
V/C Ratio(X)	0.51	0.55	0.58	0.81	0.20	0.20	0.39	0.10	0.60	0.05	0.11	0.12
Avail Cap(c_a), veh/h	257	1602	1487	555	1918	2003	1292	1746	1480	1419	1659	1551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	15.3	15.4	15.8	8.8	8.8	15.1	12.5	14.3	13.1	12.6	12.6
Incr Delay (d2), s/veh	8.3	1.4	1.7	4.8	0.2	0.1	0.6	0.1	1.6	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.3	1.3	2.4	0.6	0.6	1.3	0.3	1.7	0.2	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	16.8	17.2	20.6	9.0	9.0	15.7	12.6	15.8	13.1	12.7	12.8
LnGrp LOS	C	B	B	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		389			552			428			118	
Approach Delay, s/veh		17.7			14.9			15.5			12.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.5	14.0		14.7	5.7	21.8		14.7				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	14.5	39.6		41.0	6.7	47.4		41.0				
Max Q Clear Time (g_c+I1), s	9.0	6.4		8.5	2.6	4.2		3.4				
Green Ext Time (p_c), s	0.4	1.9		1.7	0.0	1.4		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.6
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	420	67	106	479	8	58	3	97	12	5	12
Future Volume (veh/h)	10	420	67	106	479	8	58	3	97	12	5	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	11	442	71	112	504	8	61	3	102	13	5	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	526	1270	203	523	1481	23	423	252	214	436	62	161
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	807	2954	472	807	3446	55	1268	1800	1525	1285	442	1150
Grp Volume(v), veh/h	11	255	258	112	250	262	61	3	102	13	0	18
Grp Sat Flow(s),veh/h/ln	807	1710	1715	807	1710	1790	1268	1800	1525	1285	0	1593
Q Serve(g_s), s	0.3	2.8	2.8	3.0	2.7	2.7	1.2	0.0	1.7	0.2	0.0	0.3
Cycle Q Clear(g_c), s	3.0	2.8	2.8	5.8	2.7	2.7	1.5	0.0	1.7	0.3	0.0	0.3
Prop In Lane	1.00		0.27	1.00		0.03	1.00		1.00	1.00		0.72
Lane Grp Cap(c), veh/h	526	735	737	523	735	770	423	252	214	436	0	223
V/C Ratio(X)	0.02	0.35	0.35	0.21	0.34	0.34	0.14	0.01	0.48	0.03	0.00	0.08
Avail Cap(c_a), veh/h	1249	2267	2273	1246	2267	2373	1880	2322	1967	1987	0	2146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.3	5.3	5.3	7.3	5.3	5.3	11.1	10.3	11.1	10.5	0.0	10.4
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.2	0.3	0.3	0.2	0.0	1.6	0.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.2	0.3	0.3	0.3	0.0	0.5	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.3	5.6	5.6	7.5	5.6	5.6	11.2	10.4	12.7	10.5	0.0	10.6
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		524			624			166			31	
Approach Delay, s/veh		5.6			5.9			12.1			10.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.8	10.1	17.8	10.1
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	37.0	36.0	37.0	* 38
Max Q Clear Time (g_c+I1), s	5.0	3.7	7.8	2.3
Green Ext Time (p_c), s	3.0	0.5	3.6	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.7
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	567	82	49	594	6	91	0	48	7	2	6
Future Volume (veh/h)	2	567	82	49	594	6	91	0	48	7	2	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	2	597	86	52	625	6	96	0	51	7	2	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	536	1357	195	514	1569	15	484	0	209	402	78	209
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.14	0.00	0.14	0.14	0.14	0.14
Sat Flow, veh/h	723	3001	431	689	3471	33	1373	0	1525	1015	574	1525
Grp Volume(v), veh/h	2	340	343	52	308	323	96	0	51	9	0	6
Grp Sat Flow(s),veh/h/ln	723	1710	1722	689	1710	1794	1373	0	1525	1589	0	1525
Q Serve(g_s), s	0.0	3.3	3.3	1.4	2.9	2.9	1.5	0.0	0.7	0.0	0.0	0.1
Cycle Q Clear(g_c), s	3.0	3.3	3.3	4.7	2.9	2.9	1.6	0.0	0.7	0.1	0.0	0.1
Prop In Lane	1.00		0.25	1.00		0.02	1.00		1.00	0.78		1.00
Lane Grp Cap(c), veh/h	536	773	779	514	773	811	484	0	209	480	0	209
V/C Ratio(X)	0.00	0.44	0.44	0.10	0.40	0.40	0.20	0.00	0.24	0.02	0.00	0.03
Avail Cap(c_a), veh/h	982	1828	1841	938	1828	1917	2201	0	2132	2298	0	2132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.4	4.6	4.6	6.2	4.5	4.5	9.7	0.0	9.4	9.1	0.0	9.1
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.1	0.3	0.3	0.2	0.0	0.6	0.0	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.1	0.4	0.4	0.3	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.4	4.9	5.0	6.2	4.8	4.8	9.9	0.0	10.0	9.1	0.0	9.2
LnGrp LOS	A	A	A	A	A	A	A		A	A		A
Approach Vol, veh/h		685			683			147			15	
Approach Delay, s/veh		5.0			4.9			9.9			9.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.4	7.9	16.4	7.9
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	26.0	34.0	26.0	34.0
Max Q Clear Time (g_c+I1), s	5.3	3.6	6.7	2.1
Green Ext Time (p_c), s	3.8	0.7	4.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.4
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	463	30	18	433	140	35	32	17	199	41	204
Future Volume (veh/h)	129	463	30	18	433	140	35	32	17	199	41	204
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	136	487	32	19	456	147	37	34	18	209	43	215
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	296	748	49	213	674	216	124	80	42	378	61	304
Arrive On Green	0.09	0.23	0.23	0.12	0.26	0.26	0.07	0.07	0.07	0.22	0.22	0.22
Sat Flow, veh/h	1714	3258	214	1810	2548	815	1810	1169	619	1714	275	1377
Grp Volume(v), veh/h	136	255	264	19	305	298	37	0	52	209	0	258
Grp Sat Flow(s),veh/h/ln	1714	1710	1762	1810	1710	1653	1810	0	1789	1714	0	1652
Q Serve(g_s), s	3.8	7.2	7.2	0.5	8.5	8.6	1.0	0.0	1.5	5.8	0.0	7.7
Cycle Q Clear(g_c), s	3.8	7.2	7.2	0.5	8.5	8.6	1.0	0.0	1.5	5.8	0.0	7.7
Prop In Lane	1.00		0.12	1.00		0.49	1.00		0.35	1.00		0.83
Lane Grp Cap(c), veh/h	296	393	405	213	452	437	124	0	123	378	0	365
V/C Ratio(X)	0.46	0.65	0.65	0.09	0.67	0.68	0.30	0.00	0.42	0.55	0.00	0.71
Avail Cap(c_a), veh/h	350	919	947	213	881	852	169	0	167	867	0	836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.6	18.6	18.6	21.0	17.6	17.6	23.6	0.0	23.9	18.5	0.0	19.2
Incr Delay (d2), s/veh	1.1	1.8	1.8	0.2	1.8	1.9	1.3	0.0	2.3	1.3	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.8	2.9	0.2	3.2	3.1	0.5	0.0	0.7	2.2	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.7	20.4	20.4	21.2	19.3	19.5	25.0	0.0	26.2	19.7	0.0	21.7
LnGrp LOS	C	C	C	C	B	B	C		C	B		C
Approach Vol, veh/h		655			622			89			467	
Approach Delay, s/veh		20.5			19.5			25.7			20.8	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	17.4		8.3	9.5	18.7		16.9				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.6	* 29		5.0	6.7	27.5		27.0				
Max Q Clear Time (g_c+I1), s	12.5	9.2		3.5	5.8	10.6		9.7				
Green Ext Time (p_c), s	0.0	3.0		0.0	0.0	3.5		2.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	20.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	452	192	104	394	185	80
Future Volume (veh/h)	452	192	104	394	185	80
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	476	202	109	415	195	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	800	337	152	1938	291	274
Arrive On Green	0.34	0.34	0.09	0.57	0.18	0.18
Sat Flow, veh/h	2434	988	1619	3510	1619	1525
Grp Volume(v), veh/h	346	332	109	415	195	84
Grp Sat Flow(s),veh/h/ln	1710	1622	1619	1710	1619	1525
Q Serve(g_s), s	5.7	5.8	2.2	2.1	3.9	1.6
Cycle Q Clear(g_c), s	5.7	5.8	2.2	2.1	3.9	1.6
Prop In Lane		0.61	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	584	554	152	1938	291	274
V/C Ratio(X)	0.59	0.60	0.71	0.21	0.67	0.31
Avail Cap(c_a), veh/h	1177	1116	364	3520	1227	1156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	9.3	15.1	3.7	13.1	12.2
Incr Delay (d2), s/veh	1.0	1.0	6.1	0.1	2.7	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.6	0.9	0.3	1.3	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.3	10.4	21.2	3.7	15.8	12.8
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	678			524	279	
Approach Delay, s/veh	10.3			7.4	14.9	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.7	16.3		10.3		24.0
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	7.5	* 24		26.0		35.3
Max Q Clear Time (g_c+I1), s	4.2	7.8		5.9		4.1
Green Ext Time (p_c), s	0.1	3.9		0.8		3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.1
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	64	70	238	43	87	40	396	245	100	495	5
Future Volume (veh/h)	9	64	70	238	43	87	40	396	245	100	495	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	9	67	74	251	45	92	42	417	0	105	521	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	467	261	288	466	176	360	73	521		131	1127	11
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.05	0.29	0.00	0.08	0.32	0.32
Sat Flow, veh/h	1138	781	863	1134	527	1078	1619	1800	1525	1619	3471	33
Grp Volume(v), veh/h	9	0	141	251	0	137	42	417	0	105	257	269
Grp Sat Flow(s),veh/h/ln	1138	0	1645	1134	0	1606	1619	1800	1525	1619	1710	1794
Q Serve(g_s), s	0.3	0.0	2.8	9.4	0.0	2.8	1.2	9.8	0.0	2.9	5.4	5.4
Cycle Q Clear(g_c), s	3.1	0.0	2.8	12.3	0.0	2.8	1.2	9.8	0.0	2.9	5.4	5.4
Prop In Lane	1.00		0.52	1.00		0.67	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	467	0	549	466	0	536	73	521		131	555	583
V/C Ratio(X)	0.02	0.00	0.26	0.54	0.00	0.26	0.57	0.80		0.80	0.46	0.46
Avail Cap(c_a), veh/h	589	0	725	587	0	708	217	754		259	762	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	0.0	11.1	15.5	0.0	11.1	21.3	15.0	0.0	20.6	12.2	12.2
Incr Delay (d2), s/veh	0.0	0.0	0.2	1.0	0.0	0.2	6.9	4.0	0.0	10.9	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.9	2.2	0.0	0.9	0.5	3.8	0.0	1.4	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.2	0.0	11.3	16.5	0.0	11.3	28.2	18.9	0.0	31.5	12.8	12.8
LnGrp LOS	B		B	B		B	C	B		C	B	B
Approach Vol, veh/h		150			388			459			631	
Approach Delay, s/veh		11.4			14.7			19.8			15.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	19.3		19.7	8.2	17.7		19.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.1	20.3		20.1	7.3	19.1		20.1				
Max Q Clear Time (g_c+I1), s	3.2	7.4		14.3	4.9	11.8		5.1				
Green Ext Time (p_c), s	0.0	2.5		0.9	0.0	1.4		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	16.3
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	187	0	129	321	666	0	0	587	346
Future Volume (veh/h)	0	0	0	187	0	129	321	666	0	0	587	346
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				197	0	136	338	701	0	0	618	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				285	0	253	510	2168	0	0	750	
Arrive On Green				0.17	0.00	0.17	0.63	1.00	0.00	0.00	0.22	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				197	0	136	338	701	0	0	618	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				6.5	0.0	4.9	8.0	0.0	0.0	0.0	10.3	0.0
Cycle Q Clear(g_c), s				6.5	0.0	4.9	8.0	0.0	0.0	0.0	10.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				285	0	253	510	2168	0	0	750	
V/C Ratio(X)				0.69	0.00	0.54	0.66	0.32	0.00	0.00	0.82	
Avail Cap(c_a), veh/h				286	0	254	510	2168	0	0	821	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.88	0.88	0.00	0.00	0.88	0.00
Uniform Delay (d), s/veh				23.6	0.0	22.9	9.1	0.0	0.0	0.0	22.3	0.0
Incr Delay (d2), s/veh				6.9	0.0	2.2	2.3	0.3	0.0	0.0	8.9	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.0	0.0	1.8	2.0	0.1	0.0	0.0	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				30.5	0.0	25.1	11.4	0.3	0.0	0.0	31.2	0.0
LnGrp LOS				C		C	B	A			C	
Approach Vol, veh/h					333			1039			618	
Approach Delay, s/veh					28.3			3.9			31.2	
Approach LOS					C			A			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	24.9	19.2		16.0		44.0						
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0						
Max Green Setting (Gmax), s	18.9	* 14		10.0		38.0						
Max Q Clear Time (g_c+I1), s	10.3	12.3		8.5		2.0						
Green Ext Time (p_c), s	0.4	0.8		0.2		5.3						

Intersection Summary	
HCM 7th Control Delay, s/veh	16.5
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	202	283	81	809	730	84
Future Volume (veh/h)	202	283	81	809	730	84
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	213	298	85	852	768	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	362	341	204	1972	1150	132
Arrive On Green	0.22	0.22	0.13	0.58	0.74	0.74
Sat Flow, veh/h	1619	1525	1619	3510	3182	354
Grp Volume(v), veh/h	213	298	85	852	425	431
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1736
Q Serve(g_s), s	7.1	11.3	2.9	8.4	7.6	7.6
Cycle Q Clear(g_c), s	7.1	11.3	2.9	8.4	7.6	7.6
Prop In Lane	1.00	1.00	1.00			0.20
Lane Grp Cap(c), veh/h	362	341	204	1972	636	646
V/C Ratio(X)	0.59	0.87	0.42	0.43	0.67	0.67
Avail Cap(c_a), veh/h	378	356	273	1972	636	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.75	0.75	0.73	0.73
Uniform Delay (d), s/veh	20.8	22.5	24.2	7.2	5.8	5.8
Incr Delay (d2), s/veh	1.4	19.2	0.4	0.5	4.0	4.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	5.5	1.0	2.4	2.1	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.2	41.7	24.5	7.7	9.8	9.8
LnGrp LOS	C	D	C	A	A	A
Approach Vol, veh/h	511			937	856	
Approach Delay, s/veh	33.6			9.2	9.8	
Approach LOS	C			A	A	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.3	28.3			40.6	19.4
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	10.1	19.2			34.0	14.0
Max Q Clear Time (g_c+I1), s	14.9	9.6			10.4	13.3
Green Ext Time (p_c), s	0.0	3.7			6.1	0.1

Intersection Summary		
HCM 7th Control Delay, s/veh	14.8	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	21	29	84	21	311	21	452	69	316	683	42
Future Volume (veh/h)	91	21	29	84	21	311	21	452	69	316	683	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	96	22	31	88	22	327	22	476	73	333	719	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	244	536	478	493	536	478	42	642	98	382	1394	85
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.03	0.22	0.22	0.24	0.43	0.43
Sat Flow, veh/h	938	1710	1525	1228	1710	1525	1619	2974	454	1619	3274	200
Grp Volume(v), veh/h	96	22	31	88	22	327	22	273	276	333	375	388
Grp Sat Flow(s),veh/h/ln	938	1710	1525	1228	1710	1525	1619	1710	1718	1619	1710	1764
Q Serve(g_s), s	5.7	0.5	0.8	3.1	0.5	10.8	0.8	8.5	8.6	11.4	9.3	9.3
Cycle Q Clear(g_c), s	16.5	0.5	0.8	3.9	0.5	10.8	0.8	8.5	8.6	11.4	9.3	9.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		0.11
Lane Grp Cap(c), veh/h	244	536	478	493	536	478	42	369	371	382	728	751
V/C Ratio(X)	0.39	0.04	0.06	0.18	0.04	0.68	0.53	0.74	0.75	0.87	0.52	0.52
Avail Cap(c_a), veh/h	244	536	478	493	536	478	296	536	539	437	728	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	13.7	13.8	15.2	13.7	17.2	27.6	21.0	21.0	21.1	12.1	12.1
Incr Delay (d2), s/veh	1.0	0.0	0.1	0.2	0.0	4.0	9.9	3.1	3.3	15.9	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.2	0.3	0.8	0.2	3.9	0.4	3.2	3.3	5.5	3.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.5	13.7	13.9	15.4	13.7	21.2	37.6	24.1	24.3	37.0	12.8	12.8
LnGrp LOS	C	B	B	B	B	C	D	C	C	D	B	B
Approach Vol, veh/h		149			437			571			1096	
Approach Delay, s/veh		21.3			19.7			24.7			20.1	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	29.0		22.5	18.0	16.9		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	23.0		18.0	15.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	12.8	11.3		12.8	13.4	10.6		18.5				
Green Ext Time (p_c), s	0.0	3.6		1.2	0.2	1.8		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	21.3
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	231	26	48	208	100	32	209	36	189	193	213
Future Volume (veh/h)	137	231	26	48	208	100	32	209	36	189	193	213
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	144	243	27	51	219	105	34	220	38	199	203	224
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	495	1029	113	519	596	505	466	1068	182	562	625	557
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1056	3107	342	1008	1800	1525	873	2923	497	1019	1710	1525
Grp Volume(v), veh/h	144	133	137	51	219	105	34	127	131	199	203	224
Grp Sat Flow(s),veh/h/ln	1056	1710	1738	1008	1800	1525	873	1710	1711	1019	1710	1525
Q Serve(g_s), s	3.6	1.7	1.7	1.1	2.7	1.5	0.9	1.5	1.6	4.9	2.5	3.2
Cycle Q Clear(g_c), s	6.3	1.7	1.7	2.8	2.7	1.5	4.1	1.5	1.6	6.5	2.5	3.2
Prop In Lane	1.00		0.20	1.00		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	495	566	576	519	596	505	466	625	625	562	625	557
V/C Ratio(X)	0.29	0.23	0.24	0.10	0.37	0.21	0.07	0.20	0.21	0.35	0.32	0.40
Avail Cap(c_a), veh/h	786	1038	1055	797	1092	926	677	1038	1038	808	1038	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	7.2	7.2	8.2	7.6	7.1	8.5	6.5	6.5	8.7	6.8	7.0
Incr Delay (d2), s/veh	0.3	0.2	0.2	0.1	0.4	0.2	0.1	0.2	0.2	0.4	0.3	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.4	0.4	0.2	0.7	0.3	0.1	0.3	0.3	0.6	0.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.3	7.4	7.4	8.3	7.9	7.3	8.6	6.6	6.6	9.1	7.1	7.5
LnGrp LOS	B	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		414			375			292			626	
Approach Delay, s/veh		8.4			7.8			6.9			7.9	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.3	14.3	15.3	14.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	6.1	8.3	8.5	4.8
Green Ext Time (p_c), s	1.1	1.5	2.3	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	7.8
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	368	0	13	482	1	18
Future Vol, veh/h	368	0	13	482	1	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	387	0	14	507	1	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	387	0	668	194
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	281	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1182	-	396	821
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	747	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1182	-	391	821
Mov Cap-2 Maneuver	-	-	-	-	496	-
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	739	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.21	9.65
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	794	-	-	1182	-
HCM Lane V/C Ratio	0.025	-	-	0.012	-
HCM Control Delay (s/veh)	9.7	-	-	8.1	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

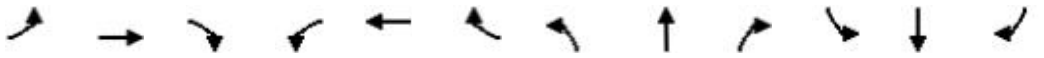
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	240	0	2	184	0	7
Future Vol, veh/h	240	0	2	184	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	253	0	2	194	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	253	0	451	253
Stage 1	-	-	-	-	253	-
Stage 2	-	-	-	-	198	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1324	-	570	791
Stage 1	-	-	-	-	794	-
Stage 2	-	-	-	-	840	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1324	-	569	791
Mov Cap-2 Maneuver	-	-	-	-	569	-
Stage 1	-	-	-	-	794	-
Stage 2	-	-	-	-	839	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.08	9.59
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	791	-	-	19	-
HCM Lane V/C Ratio	0.009	-	-	0.002	-
HCM Control Delay (s/veh)	9.6	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	156	106	40	92	213	90	200	50	149	141	16
Future Volume (veh/h)	31	156	106	40	92	213	90	200	50	149	141	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	33	164	0	42	97	0	95	211	53	157	148	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	48	721		58	742		117	573	141	196	467	396
Arrive On Green	0.03	0.21	0.00	0.04	0.22	0.00	0.07	0.21	0.21	0.12	0.26	0.26
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	2721	668	1619	1800	1525
Grp Volume(v), veh/h	33	164	0	42	97	0	95	131	133	157	148	17
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1680	1619	1800	1525
Q Serve(g_s), s	1.0	1.9	0.0	1.2	1.1	0.0	2.7	3.1	3.2	4.5	3.1	0.4
Cycle Q Clear(g_c), s	1.0	1.9	0.0	1.2	1.1	0.0	2.7	3.1	3.2	4.5	3.1	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	48	721		58	742		117	360	354	196	467	396
V/C Ratio(X)	0.69	0.23		0.72	0.13		0.82	0.36	0.38	0.80	0.32	0.04
Avail Cap(c_a), veh/h	376	2423		376	2423		444	1222	1201	580	1420	1203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	15.5	0.0	22.6	15.0	0.0	21.7	16.0	16.0	20.3	14.2	13.1
Incr Delay (d2), s/veh	6.2	0.2	0.0	6.2	0.1	0.0	5.1	0.6	0.7	2.9	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.6	0.0	0.5	0.3	0.0	1.1	1.1	1.1	1.6	1.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.0	15.7	0.0	28.8	15.0	0.0	26.8	16.6	16.7	23.2	14.5	13.2
LnGrp LOS	C	B		C	B		C	B	B	C	B	B
Approach Vol, veh/h		197			139			359			322	
Approach Delay, s/veh		17.9			19.2			19.4			18.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	15.4	7.4	18.9	5.4	15.7	9.7	16.6
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	11.0	33.6	13.0	37.4	11.0	33.6	17.0	* 34
Max Q Clear Time (g_c+I1), s	3.2	3.9	4.7	5.1	3.0	3.1	6.5	5.2
Green Ext Time (p_c), s	0.0	0.9	0.0	0.8	0.0	0.5	0.1	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	18.8
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	259	189	2
Future Vol, veh/h	4	0	0	259	189	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	0	0	273	199	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	473	200	201	0	-	0
Stage 1	200	-	-	-	-	-
Stage 2	273	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	554	846	1383	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	554	846	1383	-	-	-
Mov Cap-2 Maneuver	554	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.55	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1383	-	554	-	-
HCM Lane V/C Ratio	-	-	0.008	-	-
HCM Control Delay (s/veh)	0	-	11.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	291	0	2	290	0	3	0	5	3	0	0
Future Vol, veh/h	3	291	0	2	290	0	3	0	5	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	306	0	2	305	0	3	0	5	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	306	0	0	469	622	153	469	622	153
Stage 1	-	-	-	-	-	-	313	313	-	309	309	-
Stage 2	-	-	-	-	-	-	157	309	-	159	313	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1267	-	-	1266	-	-	482	405	872	482	405	873
Stage 1	-	-	-	-	-	-	678	661	-	681	663	-
Stage 2	-	-	-	-	-	-	835	663	-	833	661	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1266	-	-	480	404	872	477	404	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	480	404	-	477	404	-
Stage 1	-	-	-	-	-	-	676	659	-	680	662	-
Stage 2	-	-	-	-	-	-	834	662	-	825	659	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.07	10.46	12.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	667	37	-	-	25	-	-	477
HCM Lane V/C Ratio	0.013	0.002	-	-	0.002	-	-	0.007
HCM Control Delay (s/veh)	10.5	7.8	0	-	7.8	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	294	1	2	290	0	3	0	0	4	0	0
Future Vol, veh/h	2	294	1	2	290	0	3	0	0	4	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	309	1	2	305	0	3	0	0	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	311	0	0	471	624	155	468	624	153
Stage 1	-	-	-	-	-	-	314	314	-	309	309	-
Stage 2	-	-	-	-	-	-	157	309	-	159	315	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1267	-	-	1261	-	-	480	405	869	483	404	873
Stage 1	-	-	-	-	-	-	677	660	-	681	663	-
Stage 2	-	-	-	-	-	-	835	663	-	833	659	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1261	-	-	479	403	869	481	403	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	479	403	-	481	403	-
Stage 1	-	-	-	-	-	-	676	659	-	680	662	-
Stage 2	-	-	-	-	-	-	834	662	-	832	658	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.07	0.07	12.57	12.55
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	479	24	-	-	25	-	-	481
HCM Lane V/C Ratio	0.007	0.002	-	-	0.002	-	-	0.009
HCM Control Delay (s/veh)	12.6	7.8	0	-	7.9	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	291	3	3	287	2	3	0	0	4	0	0
Future Vol, veh/h	3	291	3	3	287	2	3	0	0	4	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	306	3	3	302	2	3	0	0	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	304	0	0	309	0	0	472	625	155	469	625	152
Stage 1	-	-	-	-	-	-	314	314	-	309	309	-
Stage 2	-	-	-	-	-	-	157	311	-	159	316	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1268	-	-	1262	-	-	480	404	870	482	404	873
Stage 1	-	-	-	-	-	-	677	660	-	681	663	-
Stage 2	-	-	-	-	-	-	835	662	-	833	659	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1268	-	-	1262	-	-	477	402	870	480	402	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	477	402	-	480	402	-
Stage 1	-	-	-	-	-	-	675	658	-	679	661	-
Stage 2	-	-	-	-	-	-	833	660	-	830	657	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.1	12.59	12.57
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	477	36	-	-	37	-	-	480
HCM Lane V/C Ratio	0.007	0.002	-	-	0.003	-	-	0.009
HCM Control Delay (s/veh)	12.6	7.8	0	-	7.9	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	306	0	2	280	0	3	0	0	3	0	0
Future Vol, veh/h	3	306	0	2	280	0	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	322	0	2	295	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	295	0	0	322	0	0	480	627	161	466	627	147
Stage 1	-	-	-	-	-	-	328	328	-	299	299	-
Stage 2	-	-	-	-	-	-	152	299	-	167	328	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1278	-	-	1249	-	-	474	403	862	484	403	879
Stage 1	-	-	-	-	-	-	664	650	-	691	670	-
Stage 2	-	-	-	-	-	-	841	670	-	824	650	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1278	-	-	1249	-	-	471	401	862	482	401	879
Mov Cap-2 Maneuver	-	-	-	-	-	-	471	401	-	482	401	-
Stage 1	-	-	-	-	-	-	662	649	-	690	669	-
Stage 2	-	-	-	-	-	-	840	669	-	822	649	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.07	12.69	12.52
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	471	35	-	-	26	-	-	482
HCM Lane V/C Ratio	0.007	0.002	-	-	0.002	-	-	0.007
HCM Control Delay (s/veh)	12.7	7.8	0	-	7.9	0	-	12.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	291	7	5	277	0	12	0	13	3	0	0
Future Vol, veh/h	3	291	7	5	277	0	12	0	13	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	306	7	5	292	0	13	0	14	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	292	0	0	314	0	0	473	618	157	462	622	146
Stage 1	-	-	-	-	-	-	316	316	-	302	302	-
Stage 2	-	-	-	-	-	-	156	302	-	159	320	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1282	-	-	1258	-	-	479	407	867	488	405	881
Stage 1	-	-	-	-	-	-	675	658	-	688	668	-
Stage 2	-	-	-	-	-	-	836	668	-	833	656	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1282	-	-	1258	-	-	476	404	867	477	402	881
Mov Cap-2 Maneuver	-	-	-	-	-	-	476	404	-	477	402	-
Stage 1	-	-	-	-	-	-	673	657	-	685	665	-
Stage 2	-	-	-	-	-	-	832	665	-	817	654	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.17	11.05	12.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	622	35	-	-	64	-	-	477
HCM Lane V/C Ratio	0.042	0.002	-	-	0.004	-	-	0.007
HCM Control Delay (s/veh)	11	7.8	0	-	7.9	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	304	11	16	270	11	18
Future Vol, veh/h	304	11	16	270	11	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	320	12	17	284	12	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	332	0	502	166
Stage 1	-	-	-	-	326	-
Stage 2	-	-	-	-	176	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1239	-	504	856
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	843	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1239	-	496	856
Mov Cap-2 Maneuver	-	-	-	-	496	-
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	831	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.54	10.62
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	671	-	-	201	-
HCM Lane V/C Ratio	0.045	-	-	0.014	-
HCM Control Delay (s/veh)	10.6	-	-	7.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	289	34	20	270	16	15
Future Vol, veh/h	289	34	20	270	16	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	304	36	21	284	17	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	340	0	506	170
Stage 1	-	-	-	-	322	-
Stage 2	-	-	-	-	184	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1230	-	500	851
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	835	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1230	-	491	851
Mov Cap-2 Maneuver	-	-	-	-	491	-
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	819	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.67	11.16
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	617	-	-	248	-
HCM Lane V/C Ratio	0.053	-	-	0.017	-
HCM Control Delay (s/veh)	11.2	-	-	8	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	295	9	11	301	9	35
Future Vol, veh/h	295	9	11	301	9	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	311	9	12	317	9	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	320	0	497	160
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	182	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1251	-	507	863
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	837	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1251	-	502	863
Mov Cap-2 Maneuver	-	-	-	-	502	-
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	829	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.35	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	753	-	-	127	-
HCM Lane V/C Ratio	0.062	-	-	0.009	-
HCM Control Delay (s/veh)	10.1	-	-	7.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	307	9	9	327	5	25
Future Vol, veh/h	307	9	9	327	5	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	323	9	9	344	5	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	333	0	519	166
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	191	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1238	-	491	855
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1238	-	487	855
Mov Cap-2 Maneuver	-	-	-	-	487	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	821	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.27	9.95
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	760	-	-	96	-
HCM Lane V/C Ratio	0.042	-	-	0.008	-
HCM Control Delay (s/veh)	9.9	-	-	7.9	0.1
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

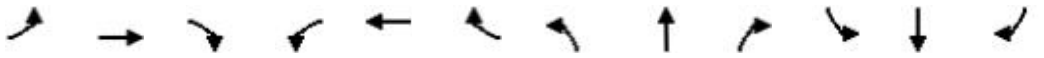
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	334	315	43	98	26
Future Vol, veh/h	24	334	315	43	98	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	352	332	45	103	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	377	0	-	0	581	188
Stage 1	-	-	-	-	354	-
Stage 2	-	-	-	-	226	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1193	-	-	-	450	828
Stage 1	-	-	-	-	687	-
Stage 2	-	-	-	-	796	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1193	-	-	-	440	828
Mov Cap-2 Maneuver	-	-	-	-	530	-
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	796	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.54	0	13.12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1193	-	-	-	573
HCM Lane V/C Ratio	0.021	-	-	-	0.228
HCM Control Delay (s/veh)	8.1	-	-	-	13.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	244	195	58	342	0	0	0	0	26	4	14
Future Volume (veh/h)	0	244	195	58	342	0	0	0	0	26	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	257	205	61	360	0				23	10	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	824	633	86	2034	0				73	29	44
Arrive On Green	0.00	0.50	0.50	0.06	0.66	0.00				0.05	0.05	0.05
Sat Flow, veh/h	0	1737	1273	1457	3159	0				1457	585	877
Grp Volume(v), veh/h	0	238	224	61	360	0				23	0	25
Grp Sat Flow(s),veh/h/ln	0	1539	1391	1457	1539	0				1457	0	1462
Q Serve(g_s), s	0.0	4.1	4.3	1.8	2.0	0.0				0.7	0.0	0.7
Cycle Q Clear(g_c), s	0.0	4.1	4.3	1.8	2.0	0.0				0.7	0.0	0.7
Prop In Lane	0.00		0.92	1.00		0.00				1.00		0.60
Lane Grp Cap(c), veh/h	0	765	692	86	2034	0				73	0	73
V/C Ratio(X)	0.00	0.31	0.32	0.71	0.18	0.00				0.31	0.00	0.34
Avail Cap(c_a), veh/h	0	765	692	172	2034	0				162	0	162
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.7	6.8	20.8	2.9	0.0				20.6	0.0	20.7
Incr Delay (d2), s/veh	0.0	1.1	1.2	3.9	0.2	0.0				0.9	0.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.8	0.6	0.1	0.0				0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	7.8	8.0	24.7	3.1	0.0				21.5	0.0	21.7
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		462			421						48	
Approach Delay, s/veh		7.9			6.2						21.6	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.4	28.4		9.3		35.7
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0
Max Green Setting (Gmax), s	5.3	17.0		5.0		27.0
Max Q Clear Time (g_c+I1), s	3.8	6.3		2.7		4.0
Green Ext Time (p_c), s	0.0	1.1		0.0		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	7.9
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	255	0	0	223	33	172	0	61	0	0	0
Future Volume (veh/h)	21	255	0	0	223	33	172	0	61	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	22	268	0	0	235	35	181	0	64			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	194	1801	0	0	989	441	254	0	226			
Arrive On Green	0.12	0.53	0.00	0.00	0.29	0.29	0.15	0.00	0.15			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	22	268	0	0	235	35	181	0	64			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.5	1.6	0.0	0.0	2.1	0.7	4.0	0.0	1.5			
Cycle Q Clear(g_c), s	0.5	1.6	0.0	0.0	2.1	0.7	4.0	0.0	1.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	194	1801	0	0	989	441	254	0	226			
V/C Ratio(X)	0.11	0.15	0.00	0.00	0.24	0.08	0.71	0.00	0.28			
Avail Cap(c_a), veh/h	202	1801	0	0	989	441	386	0	343			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.99	0.99	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.7	4.9	0.0	0.0	10.9	10.3	16.2	0.0	15.1			
Incr Delay (d2), s/veh	0.3	0.2	0.0	0.0	0.6	0.4	3.7	0.0	0.7			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.1	0.2	0.0	0.0	0.6	0.2	1.6	0.0	0.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.0	5.0	0.0	0.0	11.4	10.7	19.9	0.0	15.8			
LnGrp LOS	B	A			B	B	B		B			
Approach Vol, veh/h		290			270			245				
Approach Delay, s/veh		5.9			11.3			18.8				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		27.1			9.5	17.6		12.9				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		18.0			5.0	8.3		9.0				
Max Q Clear Time (g_c+I1), s		3.6			2.5	4.1		6.0				
Green Ext Time (p_c), s		1.1			0.0	0.5		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			11.6									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	3	28	1	0	0	30	255	11	7	165	30
Future Vol, veh/h	15	3	28	1	0	0	30	255	11	7	165	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	16	3	29	1	0	0	32	268	12	7	174	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	536	547	103	435	552	268	205	0	0	280	0	0
Stage 1	204	204	-	332	332	-	-	-	-	-	-	-
Stage 2	332	343	-	103	220	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	445	447	939	522	445	775	1378	-	-	1294	-	-
Stage 1	784	736	-	686	648	-	-	-	-	-	-	-
Stage 2	686	641	-	897	725	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	433	434	939	488	432	775	1378	-	-	1294	-	-
Mov Cap-2 Maneuver	433	434	-	488	432	-	-	-	-	-	-	-
Stage 1	780	732	-	670	633	-	-	-	-	-	-	-
Stage 2	670	626	-	860	721	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.04	12.39	0.78	0.27
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1378	-	-	644	488	1294	-	-
HCM Lane V/C Ratio	0.023	-	-	0.075	0.002	0.006	-	-
HCM Control Delay (s/veh)	7.7	-	-	11	12.4	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	134	0	0	0	81	294	0	0	204	6
Future Vol, veh/h	3	0	134	0	0	0	81	294	0	0	204	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	0	141	0	0	0	85	309	0	0	215	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	543	698	111	587	701	155	221	0	0	309	0	0
Stage 1	218	218	-	480	480	-	-	-	-	-	-	-
Stage 2	325	480	-	107	221	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	427	367	928	397	365	870	1360	-	-	1262	-	-
Stage 1	770	726	-	541	558	-	-	-	-	-	-	-
Stage 2	667	558	-	892	724	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	400	344	928	316	342	870	1360	-	-	1262	-	-
Mov Cap-2 Maneuver	400	344	-	316	342	-	-	-	-	-	-	-
Stage 1	770	726	-	507	523	-	-	-	-	-	-	-
Stage 2	625	523	-	757	724	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.67	0	1.69	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1360	-	-	400	928	-	1262	-	-
HCM Lane V/C Ratio	0.063	-	-	0.008	0.152	-	-	-	-
HCM Control Delay (s/veh)	7.8	-	-	14.1	9.6	0	0	-	-
HCM Lane LOS	A	-	-	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0	0.5	-	0	-	-

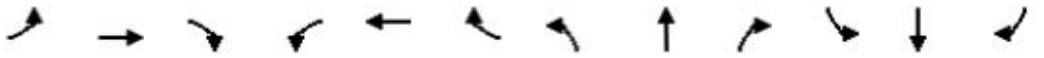
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	312	14	61	373	24	8	0	98	15	0	10
Future Vol, veh/h	1	312	14	61	373	24	8	0	98	15	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	328	15	64	393	25	8	0	103	16	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	418	0	0	343	0	0	663	884	172	700	879	209
Stage 1	-	-	-	-	-	-	338	338	-	534	534	-
Stage 2	-	-	-	-	-	-	325	546	-	166	345	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1152	-	-	1227	-	-	351	286	849	330	288	803
Stage 1	-	-	-	-	-	-	656	644	-	503	528	-
Stage 2	-	-	-	-	-	-	667	521	-	825	639	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1152	-	-	1227	-	-	328	271	849	274	273	803
Mov Cap-2 Maneuver	-	-	-	-	-	-	328	271	-	274	273	-
Stage 1	-	-	-	-	-	-	655	644	-	477	500	-
Stage 2	-	-	-	-	-	-	624	494	-	724	639	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.02	1.08	10.57	15.4
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	758	1152	-	-	1227	-	-	372
HCM Lane V/C Ratio	0.147	0.001	-	-	0.052	-	-	0.071
HCM Control Delay (s/veh)	10.6	8.1	-	-	8.1	-	-	15.4
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.5	0	-	-	0.2	-	-	0.2



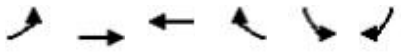
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	406	14	59	447	107	8	3	54	142	6	20
Future Volume (veh/h)	18	406	14	59	447	107	8	3	54	142	6	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	19	427	15	62	471	113	8	3	57	153	0	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	32	1294	45	101	1695	395	119	132	112	1064	0	482
Arrive On Green	0.02	0.38	0.38	0.06	0.43	0.43	0.07	0.07	0.07	0.32	0.00	0.32
Sat Flow, veh/h	1619	3371	118	1619	3980	929	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	19	216	226	62	385	199	8	3	57	153	0	21
Grp Sat Flow(s),veh/h/ln	1619	1710	1779	1619	1638	1633	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	1.3	9.7	9.8	4.1	8.4	8.7	0.5	0.2	3.9	3.6	0.0	1.0
Cycle Q Clear(g_c), s	1.3	9.7	9.8	4.1	8.4	8.7	0.5	0.2	3.9	3.6	0.0	1.0
Prop In Lane	1.00		0.07	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	32	656	683	101	1395	695	119	132	112	1064	0	482
V/C Ratio(X)	0.59	0.33	0.33	0.62	0.28	0.29	0.07	0.02	0.51	0.14	0.00	0.04
Avail Cap(c_a), veh/h	111	681	709	156	1395	695	274	305	258	1064	0	482
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.0	23.7	23.7	49.9	20.4	20.5	47.1	47.0	48.7	26.8	0.0	25.9
Incr Delay (d2), s/veh	15.6	0.3	0.3	6.0	0.5	1.0	0.2	0.1	3.6	0.3	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.9	4.1	1.8	3.2	3.4	0.2	0.1	1.6	1.5	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.6	24.0	24.0	56.0	20.9	21.5	47.4	47.0	52.3	27.0	0.0	26.1
LnGrp LOS	E	C	C	E	C	C	D	D	D	C		C
Approach Vol, veh/h		461			646			68			174	
Approach Delay, s/veh		25.9			24.4			51.5			26.9	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	46.4		39.0	6.7	51.0		12.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	43.5		34.5	7.5	46.5		18.5				
Max Q Clear Time (g_c+I1), s	6.1	11.8		5.6	3.3	10.7		5.9				
Green Ext Time (p_c), s	0.0	2.6		0.6	0.0	4.0		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	26.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	296	377	0	197	278
Future Volume (veh/h)	0	296	377	0	197	278
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	312	397	0	207	293
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1736	1736	0	909	488
Arrive On Green	0.00	0.51	0.51	0.00	0.31	0.31
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	312	397	0	207	293
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	3.2	4.2	0.0	3.4	10.2
Cycle Q Clear(g_c), s	0.0	3.2	4.2	0.0	3.4	10.2
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1736	1736	0	909	488
V/C Ratio(X)	0.00	0.18	0.23	0.00	0.23	0.60
Avail Cap(c_a), veh/h	0	1736	1736	0	955	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.7	8.9	0.0	16.8	19.1
Incr Delay (d2), s/veh	0.0	0.2	0.3	0.0	0.2	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	1.4	0.0	1.1	3.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.9	9.2	0.0	16.9	21.1
LnGrp LOS		A	A		B	C
Approach Vol, veh/h		312	397		500	
Approach Delay, s/veh		8.9	9.2		19.4	
Approach LOS		A	A		B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	39.0	26.0	39.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	32.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	5.2	12.2	6.2
Green Ext Time (p_c), s	1.6	1.6	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	13.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	215	0	0	389	38	290	78	217	7	0	206
Future Volume (veh/h)	79	215	0	0	389	38	290	78	217	7	0	206
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	83	226	0	0	409	40	194	238	228	7	0	217
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	367	2189	0	0	876	84	397	441	748	0	0	0
Arrive On Green	0.12	0.45	0.00	0.00	0.19	0.19	0.25	0.25	0.25	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4720	439	1619	1800	3051		0	
Grp Volume(v), veh/h	83	226	0	0	292	157	194	238	228		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1721	1619	1800	1525			
Q Serve(g_s), s	1.0	1.0	0.0	0.0	3.1	3.1	4.0	4.5	2.4			
Cycle Q Clear(g_c), s	1.0	1.0	0.0	0.0	3.1	3.1	4.0	4.5	2.4			
Prop In Lane	1.00		0.00	0.00		0.26	1.00		1.00			
Lane Grp Cap(c), veh/h	367	2189	0	0	630	331	397	441	748			
V/C Ratio(X)	0.23	0.10	0.00	0.00	0.46	0.47	0.49	0.54	0.30			
Avail Cap(c_a), veh/h	381	5573	0	0	2871	1508	960	1067	1809			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	15.3	6.3	0.0	0.0	13.9	13.9	12.6	12.7	11.9			
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.4	0.8	1.1	1.2	0.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.0	0.0	0.9	1.0	1.1	1.4	0.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.5	6.3	0.0	0.0	14.3	14.7	13.7	14.0	12.2			
LnGrp LOS	B	A			B	B	B	B	B			
Approach Vol, veh/h		309			449			660				
Approach Delay, s/veh		8.8			14.4			13.3				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		23.3			9.8	13.5		15.5				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		23.0				
Max Q Clear Time (g_c+I1), s		3.0			3.0	5.1		6.5				
Green Ext Time (p_c), s		1.3			0.0	2.3		3.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.7
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2	4	28	0	55	6	397	11	18	232	0
Future Vol, veh/h	0	2	4	28	0	55	6	397	11	18	232	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	0	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2	4	29	0	58	6	418	12	19	244	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	713	724	244	714	713	418	244	0	0	429	0	0
Stage 1	282	282	-	431	431	-	-	-	-	-	-	-
Stage 2	431	442	-	283	282	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	350	354	800	349	360	639	1334	-	-	1141	-	-
Stage 1	729	681	-	607	587	-	-	-	-	-	-	-
Stage 2	607	580	-	728	681	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	311	347	800	338	352	639	1334	-	-	1141	-	-
Mov Cap-2 Maneuver	311	347	-	338	352	-	-	-	-	-	-	-
Stage 1	717	670	-	604	584	-	-	-	-	-	-	-
Stage 2	549	577	-	710	670	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.54	13.9	0.11	0.59
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1334	-	-	557	491	1141	-	-
HCM Lane V/C Ratio	0.005	-	-	0.011	0.178	0.017	-	-
HCM Control Delay (s/veh)	7.7	-	-	11.5	13.9	8.2	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.6	0.1	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	6	385	16	5	215
Future Vol, veh/h	21	6	385	16	5	215
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	6	405	17	5	226

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	642	405	0	0	422	0
Stage 1	405	-	-	-	-	-
Stage 2	237	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	442	650	-	-	1148	-
Stage 1	678	-	-	-	-	-
Stage 2	807	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	439	650	-	-	1148	-
Mov Cap-2 Maneuver	439	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	803	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.09	0	0.19
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	473	41	-
HCM Lane V/C Ratio	-	-	0.06	0.005	-
HCM Control Delay (s/veh)	-	-	13.1	8.2	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	3	19	0	0	1	23	41	0	49	0
Future Vol, veh/h	0	0	3	19	0	0	1	23	41	0	49	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	3	20	0	0	1	24	43	0	52	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	78	121	52	99	99	46	52	0	0	67	0	0
Stage 1	52	52	-	48	48	-	-	-	-	-	-	-
Stage 2	26	69	-	52	52	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	916	773	1022	887	794	1029	1567	-	-	1547	-	-
Stage 1	966	856	-	971	859	-	-	-	-	-	-	-
Stage 2	996	841	-	966	856	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	915	772	1022	884	794	1029	1567	-	-	1547	-	-
Mov Cap-2 Maneuver	915	772	-	884	794	-	-	-	-	-	-	-
Stage 1	966	856	-	970	858	-	-	-	-	-	-	-
Stage 2	996	840	-	963	856	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.53	9.17	0.11	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	25	-	-	1022	884	1547	-	-
HCM Lane V/C Ratio	0.001	-	-	0.003	0.023	-	-	-
HCM Control Delay (s/veh)	7.3	0	-	8.5	9.2	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	26	1	11	25	16	0	18	6	20	30	17
Future Vol, veh/h	18	26	1	11	25	16	0	18	6	20	30	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	27	1	12	26	17	0	19	6	21	32	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	115	108	41	109	114	22	49	0	0	25	0	0
Stage 1	83	83	-	22	22	-	-	-	-	-	-	-
Stage 2	32	25	-	87	92	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	867	786	1036	874	780	1061	1570	-	-	1602	-	-
Stage 1	931	830	-	1001	881	-	-	-	-	-	-	-
Stage 2	989	878	-	925	823	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	813	776	1036	831	770	1061	1570	-	-	1602	-	-
Mov Cap-2 Maneuver	813	776	-	831	770	-	-	-	-	-	-	-
Stage 1	918	819	-	1001	881	-	-	-	-	-	-	-
Stage 2	945	878	-	882	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.82	9.5	0	2.17
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1570	-	-	795	856	1602	-	-
HCM Lane V/C Ratio	-	-	-	0.06	0.064	0.013	-	-
HCM Control Delay (s/veh)	0	-	-	9.8	9.5	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	52	0	0	0	0	38	20	22	17	0
Future Vol, veh/h	8	0	52	0	0	0	0	38	20	22	17	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	0	55	0	0	0	0	40	21	23	18	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.1	7.8	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	66%	0%	0%	0%	100%
Vol Right, %	34%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	8	52	22	17
LT Vol	0	8	0	22	0
Through Vol	38	0	0	0	17
RT Vol	20	0	52	0	0
Lane Flow Rate	61	8	55	23	18
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.075	0.012	0.06	0.033	0.023
Departure Headway (Hd)	4.434	5.175	3.974	5.141	4.64
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	804	686	890	695	769
Service Time	2.481	2.951	1.749	2.885	2.384
HCM Lane V/C Ratio	0.076	0.012	0.062	0.033	0.023
HCM Control Delay, s/veh	7.8	8	7	8.1	7.5
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.2	0	0.2	0.1	0.1

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	21	8	15	18	30
Future Vol, veh/h	10	21	8	15	18	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	22	8	16	19	32
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	6.9	7.6	7.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	30	10	21	8	15
LT Vol	18	0	0	0	8	0
Through Vol	0	0	10	0	0	15
RT Vol	0	30	0	21	0	0
Lane Flow Rate	19	32	11	22	8	16
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.027	0.034	0.013	0.024	0.012	0.02
Departure Headway (Hd)	5.095	3.894	4.6	3.899	5.105	4.604
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	702	916	777	915	700	776
Service Time	2.83	1.63	2.337	1.637	2.841	2.34
HCM Lane V/C Ratio	0.027	0.035	0.014	0.024	0.011	0.021
HCM Control Delay, s/veh	8	6.8	7.4	6.7	7.9	7.4
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0	0.1	0	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	254	128	158	158	5	96	25	196	17	43	11
Future Volume (veh/h)	13	254	128	158	158	5	96	25	196	17	43	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	14	267	135	166	166	5	101	26	206	18	45	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	29	511	251	208	1154	35	450	381	323	474	570	146
Arrive On Green	0.02	0.23	0.23	0.13	0.34	0.34	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1619	2222	1091	1619	3390	102	1224	1800	1525	1333	2695	691
Grp Volume(v), veh/h	14	204	198	166	83	88	101	26	206	18	28	29
Grp Sat Flow(s),veh/h/ln	1619	1710	1604	1619	1710	1782	1224	1800	1525	1333	1710	1676
Q Serve(g_s), s	0.3	3.6	3.8	3.5	1.2	1.2	2.5	0.4	4.3	0.4	0.5	0.5
Cycle Q Clear(g_c), s	0.3	3.6	3.8	3.5	1.2	1.2	3.0	0.4	4.3	0.8	0.5	0.5
Prop In Lane	1.00		0.68	1.00		0.06	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	29	393	369	208	582	606	450	381	323	474	362	355
V/C Ratio(X)	0.48	0.52	0.54	0.80	0.14	0.14	0.22	0.07	0.64	0.04	0.08	0.08
Avail Cap(c_a), veh/h	234	1826	1712	425	2028	2113	1568	2025	1717	1692	1924	1886
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	11.7	11.7	14.7	7.9	7.9	12.2	10.9	12.5	11.2	11.0	11.0
Incr Delay (d2), s/veh	11.4	1.1	1.2	6.9	0.1	0.1	0.3	0.1	2.1	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.9	0.9	1.3	0.3	0.3	0.6	0.1	1.3	0.1	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.3	12.7	12.9	21.5	8.0	8.0	12.4	11.0	14.6	11.3	11.0	11.1
LnGrp LOS	C	B	B	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		416			337			333			75	
Approach Delay, s/veh		13.3			14.7			13.6			11.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	13.8		11.9	5.1	17.6		11.9				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	9.1	37.0		39.0	5.0	41.1		39.0				
Max Q Clear Time (g_c+I1), s	5.5	5.8		6.3	2.3	3.2		2.8				
Green Ext Time (p_c), s	0.1	2.1		1.2	0.0	0.9		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.7
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	443	39	59	323	20	61	5	107	30	4	14
Future Volume (veh/h)	22	443	39	59	323	20	61	5	107	30	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	23	466	41	62	340	21	64	5	113	32	4	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	588	1353	119	520	1392	86	431	268	227	443	49	185
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	928	3181	279	811	3272	201	1267	1800	1525	1283	332	1244
Grp Volume(v), veh/h	23	250	257	62	177	184	64	5	113	32	0	19
Grp Sat Flow(s),veh/h/ln	928	1710	1750	811	1710	1764	1267	1800	1525	1283	0	1576
Q Serve(g_s), s	0.5	2.8	2.8	1.6	1.9	1.9	1.3	0.1	1.9	0.6	0.0	0.3
Cycle Q Clear(g_c), s	2.3	2.8	2.8	4.4	1.9	1.9	1.6	0.1	1.9	0.7	0.0	0.3
Prop In Lane	1.00		0.16	1.00		0.11	1.00		1.00	1.00		0.79
Lane Grp Cap(c), veh/h	588	728	745	520	728	750	431	268	227	443	0	234
V/C Ratio(X)	0.04	0.34	0.35	0.12	0.24	0.25	0.15	0.02	0.50	0.07	0.00	0.08
Avail Cap(c_a), veh/h	1312	2063	2111	1153	2063	2128	1770	2171	1840	1872	0	1991
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	5.4	5.5	6.9	5.2	5.2	11.0	10.2	11.0	10.5	0.0	10.3
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.2	0.2	0.2	0.0	1.7	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.1	0.2	0.2	0.3	0.0	0.6	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.0	5.7	5.7	7.0	5.4	5.4	11.2	10.3	12.7	10.6	0.0	10.5
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		530			423			182			51	
Approach Delay, s/veh		5.7			5.6			12.1			10.6	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.8	10.4	17.8	10.4
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	34.0	34.0	34.0	* 36
Max Q Clear Time (g_c+I1), s	4.8	3.9	6.4	2.7
Green Ext Time (p_c), s	2.9	0.6	2.3	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	474	102	25	443	12	64	6	30	4	0	1
Future Volume (veh/h)	9	474	102	25	443	12	64	6	30	4	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	9	499	107	26	466	13	67	6	32	4	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	623	1308	279	565	1586	44	433	13	166	471	0	166
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.11	0.11	0.11	0.11	0.00	0.11
Sat Flow, veh/h	832	2804	598	740	3398	95	1283	115	1525	1517	0	1525
Grp Volume(v), veh/h	9	303	303	26	234	245	73	0	32	4	0	1
Grp Sat Flow(s),veh/h/ln	832	1710	1692	740	1710	1783	1398	0	1525	1517	0	1525
Q Serve(g_s), s	0.2	2.7	2.7	0.6	2.0	2.0	1.1	0.0	0.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	2.7	2.7	3.3	2.0	2.0	1.1	0.0	0.4	0.0	0.0	0.0
Prop In Lane	1.00		0.35	1.00		0.05	0.92		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	623	798	790	565	798	832	445	0	166	471	0	166
V/C Ratio(X)	0.01	0.38	0.38	0.05	0.29	0.29	0.16	0.00	0.19	0.01	0.00	0.01
Avail Cap(c_a), veh/h	1047	1669	1652	942	1669	1741	2184	0	2072	2166	0	2072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.6	4.1	4.1	5.2	3.9	3.9	9.9	0.0	9.6	9.4	0.0	9.4
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.2	0.2	0.2	0.0	0.6	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.2	0.2	0.2	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.6	4.4	4.4	5.2	4.1	4.1	10.0	0.0	10.1	9.4	0.0	9.4
LnGrp LOS	A	A	A	A	A	A	B		B	A		A
Approach Vol, veh/h		615			505			105			5	
Approach Delay, s/veh		4.4			4.1			10.1			9.4	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.4	7.2	16.4	7.2
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	23.0	32.0	23.0	32.0
Max Q Clear Time (g_c+I1), s	4.7	3.1	5.3	2.0
Green Ext Time (p_c), s	3.2	0.5	2.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	4.8
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	341	27	25	289	119	41	37	25	173	55	171
Future Volume (veh/h)	138	341	27	25	289	119	41	37	25	173	55	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	145	359	28	26	304	125	43	39	26	182	58	180
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	327	676	52	164	503	203	145	85	57	362	86	267
Arrive On Green	0.10	0.21	0.21	0.09	0.21	0.21	0.08	0.08	0.08	0.21	0.21	0.21
Sat Flow, veh/h	1714	3215	250	1810	2380	958	1810	1063	709	1714	408	1265
Grp Volume(v), veh/h	145	190	197	26	217	212	43	0	65	182	0	238
Grp Sat Flow(s),veh/h/ln	1714	1710	1755	1810	1710	1628	1810	0	1772	1714	0	1672
Q Serve(g_s), s	3.7	4.7	4.7	0.6	5.4	5.6	1.1	0.0	1.7	4.5	0.0	6.2
Cycle Q Clear(g_c), s	3.7	4.7	4.7	0.6	5.4	5.6	1.1	0.0	1.7	4.5	0.0	6.2
Prop In Lane	1.00		0.14	1.00		0.59	1.00		0.40	1.00		0.76
Lane Grp Cap(c), veh/h	327	360	369	164	362	344	145	0	142	362	0	353
V/C Ratio(X)	0.44	0.53	0.53	0.16	0.60	0.62	0.30	0.00	0.46	0.50	0.00	0.67
Avail Cap(c_a), veh/h	350	914	938	202	924	880	190	0	186	901	0	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.5	16.7	16.7	19.9	16.9	17.0	20.6	0.0	20.9	16.6	0.0	17.3
Incr Delay (d2), s/veh	0.9	1.2	1.2	0.4	1.6	1.8	1.1	0.0	2.3	1.1	0.0	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.7	1.8	0.3	2.0	2.0	0.5	0.0	0.7	1.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.4	17.9	17.9	20.4	18.5	18.8	21.7	0.0	23.2	17.6	0.0	19.5
LnGrp LOS	B	B	B	C	B	B	C		C	B		B
Approach Vol, veh/h		532			455			108			420	
Approach Delay, s/veh		18.3			18.8			22.6			18.7	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	15.1		8.4	9.4	14.7		15.1				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.3	* 25		5.0	5.5	25.7		25.0				
Max Q Clear Time (g_c+I1), s	2.6	6.7		3.7	5.7	7.6		8.2				
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	2.4		1.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	347	137	54	283	135	65
Future Volume (veh/h)	347	137	54	283	135	65
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	365	144	57	298	142	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	873	339	102	1963	225	212
Arrive On Green	0.36	0.36	0.06	0.57	0.14	0.14
Sat Flow, veh/h	2497	935	1619	3510	1619	1525
Grp Volume(v), veh/h	258	251	57	298	142	68
Grp Sat Flow(s),veh/h/ln	1710	1632	1619	1710	1619	1525
Q Serve(g_s), s	3.4	3.5	1.0	1.2	2.5	1.2
Cycle Q Clear(g_c), s	3.4	3.5	1.0	1.2	2.5	1.2
Prop In Lane		0.57	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	620	592	102	1963	225	212
V/C Ratio(X)	0.42	0.42	0.56	0.15	0.63	0.32
Avail Cap(c_a), veh/h	1383	1319	363	3985	1389	1309
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.2	7.3	13.8	3.0	12.3	11.8
Incr Delay (d2), s/veh	0.4	0.5	4.7	0.0	2.9	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	0.4	0.1	0.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.7	7.8	18.5	3.0	15.2	12.6
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h	509			355	210	
Approach Delay, s/veh	7.7			5.5	14.4	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.4	15.6		8.3		22.0
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	5.8	* 25		26.0		35.3
Max Q Clear Time (g_c+I1), s	13.0	5.5		4.5		3.2
Green Ext Time (p_c), s	0.0	3.0		0.6		2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	8.3
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	42	39	143	37	61	24	460	177	66	287	8
Future Volume (veh/h)	1	42	39	143	37	61	24	460	177	66	287	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	44	41	151	39	64	25	484	0	69	302	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	393	194	181	409	139	228	49	633		110	1324	35
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.35	0.00	0.07	0.39	0.39
Sat Flow, veh/h	1174	857	799	1193	613	1006	1619	1800	1525	1619	3404	90
Grp Volume(v), veh/h	1	0	85	151	0	103	25	484	0	69	151	159
Grp Sat Flow(s),veh/h/ln	1174	0	1656	1193	0	1619	1619	1800	1525	1619	1710	1784
Q Serve(g_s), s	0.0	0.0	1.6	4.5	0.0	2.0	0.6	9.1	0.0	1.6	2.3	2.3
Cycle Q Clear(g_c), s	2.0	0.0	1.6	6.1	0.0	2.0	0.6	9.1	0.0	1.6	2.3	2.3
Prop In Lane	1.00		0.48	1.00		0.62	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	393	0	375	409	0	366	49	633		110	665	694
V/C Ratio(X)	0.00	0.00	0.23	0.37	0.00	0.28	0.51	0.76		0.63	0.23	0.23
Avail Cap(c_a), veh/h	682	0	782	702	0	765	212	1086		234	1054	1100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	0.0	12.0	14.5	0.0	12.2	18.2	11.0	0.0	17.3	7.8	7.8
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.6	0.0	0.4	7.8	2.0	0.0	5.7	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.5	1.1	0.0	0.6	0.3	2.8	0.0	0.7	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.0	0.0	12.3	15.1	0.0	12.6	26.0	12.9	0.0	23.0	8.0	8.0
LnGrp LOS	B		B	B		B	C	B		C	A	A
Approach Vol, veh/h		86			254			509			379	
Approach Delay, s/veh		12.3			14.1			13.6			10.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	19.3		13.1	7.1	17.9		13.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.5	23.0		18.0				
Max Q Clear Time (g_c+I1), s	2.0	4.3		8.1	3.6	11.1		4.0				
Green Ext Time (p_c), s	0.0	1.6		0.8	0.0	2.3		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.7
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	76	0	83	222	671	0	0	386	174
Future Volume (veh/h)	0	0	0	76	0	83	222	671	0	0	386	174
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				80	0	87	234	706	0	0	406	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				309	0	275	420	1982	0	0	684	
Arrive On Green				0.18	0.00	0.18	0.26	0.58	0.00	0.00	0.20	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				80	0	87	234	706	0	0	406	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				2.0	0.0	2.5	6.3	5.5	0.0	0.0	5.4	0.0
Cycle Q Clear(g_c), s				2.0	0.0	2.5	6.3	5.5	0.0	0.0	5.4	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				309	0	275	420	1982	0	0	684	
V/C Ratio(X)				0.26	0.00	0.32	0.56	0.36	0.00	0.00	0.59	
Avail Cap(c_a), veh/h				343	0	305	431	1982	0	0	684	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.86	0.86	0.00	0.00	0.97	0.00
Uniform Delay (d), s/veh				17.6	0.0	17.8	16.0	5.6	0.0	0.0	18.2	0.0
Incr Delay (d2), s/veh				0.4	0.0	0.7	0.7	0.4	0.0	0.0	3.7	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.7	0.0	0.8	2.0	1.3	0.0	0.0	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				18.1	0.0	18.5	16.8	6.0	0.0	0.0	21.8	0.0
LnGrp LOS				B		B	B	A			C	
Approach Vol, veh/h					167			940			406	
Approach Delay, s/veh					18.3			8.7			21.8	
Approach LOS					B			A			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.0	16.0		15.0		35.0
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0
Max Green Setting (Gmax), s	13.3	* 10		10.0		28.0
Max Q Clear Time (g_c+I1), s	8.3	7.4		4.5		7.5
Green Ext Time (p_c), s	0.2	0.6		0.3		4.7

Intersection Summary	
HCM 7th Control Delay, s/veh	13.3
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	281	239	125	694	339	66
Future Volume (veh/h)	281	239	125	694	339	66
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	296	252	132	731	357	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	359	338	255	1916	909	174
Arrive On Green	0.22	0.22	0.16	0.56	0.32	0.32
Sat Flow, veh/h	1619	1525	1619	3510	2954	548
Grp Volume(v), veh/h	296	252	132	731	212	214
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1701
Q Serve(g_s), s	9.6	8.5	4.1	6.6	5.3	5.4
Cycle Q Clear(g_c), s	9.6	8.5	4.1	6.6	5.3	5.4
Prop In Lane	1.00	1.00	1.00			0.32
Lane Grp Cap(c), veh/h	359	338	255	1916	543	540
V/C Ratio(X)	0.83	0.75	0.52	0.38	0.39	0.40
Avail Cap(c_a), veh/h	530	499	294	1916	543	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.89	0.89	0.92	0.92
Uniform Delay (d), s/veh	20.4	20.0	21.2	6.8	14.6	14.7
Incr Delay (d2), s/veh	4.2	1.4	0.5	0.5	1.9	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	2.8	1.4	1.8	2.1	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.6	21.3	21.8	7.3	16.6	16.7
LnGrp LOS	C	C	C	A	B	B
Approach Vol, veh/h	548			863	426	
Approach Delay, s/veh	23.1			9.5	16.6	
Approach LOS	C			A	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.4	23.5			36.8	18.2
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	10.6	10.3			25.0	18.0
Max Q Clear Time (g_c+I1), s	6.1	7.4			8.6	11.6
Green Ext Time (p_c), s	0.1	0.7			4.5	0.6

Intersection Summary		
HCM 7th Control Delay, s/veh	15.2	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	11	21	36	13	231	10	479	33	183	470	15
Future Volume (veh/h)	59	11	21	36	13	231	10	479	33	183	470	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	62	12	22	38	14	243	11	504	35	193	495	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	300	432	385	489	432	385	23	800	55	243	1292	42
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.01	0.25	0.25	0.15	0.38	0.38
Sat Flow, veh/h	1020	1710	1525	1249	1710	1525	1619	3245	225	1619	3381	109
Grp Volume(v), veh/h	62	12	22	38	14	243	11	265	274	193	250	261
Grp Sat Flow(s),veh/h/ln	1020	1710	1525	1249	1710	1525	1619	1710	1760	1619	1710	1780
Q Serve(g_s), s	2.2	0.2	0.4	0.9	0.2	5.4	0.3	5.3	5.3	4.4	4.1	4.1
Cycle Q Clear(g_c), s	7.7	0.2	0.4	1.3	0.2	5.4	0.3	5.3	5.3	4.4	4.1	4.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		0.06
Lane Grp Cap(c), veh/h	300	432	385	489	432	385	23	422	434	243	653	680
V/C Ratio(X)	0.21	0.03	0.06	0.08	0.03	0.63	0.47	0.63	0.63	0.79	0.38	0.38
Avail Cap(c_a), veh/h	520	800	714	758	800	714	442	800	823	442	800	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	10.8	10.9	11.4	10.8	12.8	18.8	12.9	12.9	15.8	8.6	8.6
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	1.7	14.0	1.5	1.5	5.8	0.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.1	0.2	0.1	1.7	0.2	1.6	1.6	1.7	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.5	10.8	11.0	11.5	10.9	14.5	32.8	14.5	14.5	21.6	9.0	9.0
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	A	A
Approach Vol, veh/h		96			295			550			704	
Approach Delay, s/veh		14.5			13.9			14.8			12.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	19.2		14.2	10.3	14.0		14.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	18.0		18.0	10.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	12.3	6.1		7.4	6.4	7.3		9.7				
Green Ext Time (p_c), s	0.0	2.3		1.2	0.2	2.1		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.6
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	116	32	44	184	146	16	127	17	172	170	103
Future Volume (veh/h)	130	116	32	44	184	146	16	127	17	172	170	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	137	122	34	46	194	154	17	134	18	181	179	108
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	543	839	226	606	567	481	543	974	129	615	671	385
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1081	2663	718	1119	1800	1525	993	3036	401	1123	2093	1201
Grp Volume(v), veh/h	137	77	79	46	194	154	17	75	77	181	145	142
Grp Sat Flow(s),veh/h/ln	1081	1710	1671	1119	1800	1525	993	1710	1728	1123	1710	1584
Q Serve(g_s), s	2.8	0.8	0.8	0.8	2.0	1.9	0.3	0.8	0.8	3.4	1.6	1.7
Cycle Q Clear(g_c), s	4.8	0.8	0.8	1.6	2.0	1.9	2.0	0.8	0.8	4.2	1.6	1.7
Prop In Lane	1.00		0.43	1.00		1.00	1.00		0.23	1.00		0.76
Lane Grp Cap(c), veh/h	543	539	527	606	567	481	543	548	554	615	548	508
V/C Ratio(X)	0.25	0.14	0.15	0.08	0.34	0.32	0.03	0.14	0.14	0.29	0.26	0.28
Avail Cap(c_a), veh/h	989	1245	1217	1068	1311	1111	948	1245	1258	1073	1245	1153
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.3	6.1	6.1	6.7	6.5	6.4	7.0	6.0	6.0	7.5	6.2	6.3
Incr Delay (d2), s/veh	0.2	0.1	0.1	0.1	0.4	0.4	0.0	0.1	0.1	0.3	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	0.2	0.1	0.4	0.4	0.0	0.1	0.1	0.3	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.6	6.2	6.2	6.7	6.9	6.8	7.0	6.1	6.1	7.7	6.5	6.6
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		293			394			169			468	
Approach Delay, s/veh		7.3			6.8			6.2			7.0	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	12.4	12.3	12.4	12.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	4.0	6.8	6.2	4.0
Green Ext Time (p_c), s	0.6	1.1	1.8	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	290	4	4	221	2	4
Future Vol, veh/h	290	4	4	221	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	305	4	4	233	2	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	309	0	432	155
Stage 1	-	-	-	-	307	-
Stage 2	-	-	-	-	125	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1262	-	557	870
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	893	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1262	-	555	870
Mov Cap-2 Maneuver	-	-	-	-	610	-
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.14	9.77
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	762	-	-	1262	-
HCM Lane V/C Ratio	0.008	-	-	0.003	-
HCM Control Delay (s/veh)	9.8	-	-	7.9	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

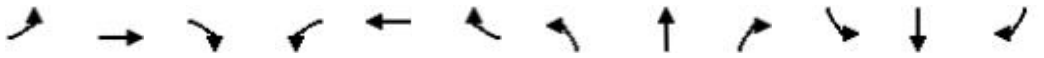
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	176	20	22	618	0	12
Future Vol, veh/h	176	20	22	618	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	185	21	23	651	0	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	206	0	893	196
Stage 1	-	-	-	-	196	-
Stage 2	-	-	-	-	697	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1377	-	315	851
Stage 1	-	-	-	-	842	-
Stage 2	-	-	-	-	498	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1377	-	306	851
Mov Cap-2 Maneuver	-	-	-	-	306	-
Stage 1	-	-	-	-	842	-
Stage 2	-	-	-	-	485	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.26	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	851	-	-	62	-
HCM Lane V/C Ratio	0.015	-	-	0.017	-
HCM Control Delay (s/veh)	9.3	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	113	114	50	196	196	150	165	70	205	222	50
Future Volume (veh/h)	18	113	114	50	196	196	150	165	70	205	222	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	19	119	0	53	206	0	158	174	74	216	234	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	30	680		67	759		196	471	193	263	433	367
Arrive On Green	0.02	0.20	0.00	0.04	0.22	0.00	0.12	0.20	0.20	0.16	0.24	0.24
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	2368	968	1619	1800	1525
Grp Volume(v), veh/h	19	119	0	53	206	0	158	124	124	216	234	53
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1626	1619	1800	1525
Q Serve(g_s), s	0.6	1.5	0.0	1.6	2.5	0.0	4.8	3.1	3.3	6.5	5.7	1.4
Cycle Q Clear(g_c), s	0.6	1.5	0.0	1.6	2.5	0.0	4.8	3.1	3.3	6.5	5.7	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	30	680		67	759		196	340	323	263	433	367
V/C Ratio(X)	0.63	0.17		0.79	0.27		0.81	0.36	0.38	0.82	0.54	0.14
Avail Cap(c_a), veh/h	354	2286		354	2286		419	1153	1097	548	1340	1135
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	16.7	0.0	23.9	16.2	0.0	21.5	17.4	17.5	20.3	16.7	15.0
Incr Delay (d2), s/veh	7.9	0.1	0.0	7.3	0.2	0.0	3.0	0.7	0.7	2.4	1.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.5	0.0	0.7	0.8	0.0	1.6	1.0	1.1	2.1	2.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.4	16.8	0.0	31.2	16.4	0.0	24.5	18.0	18.2	22.8	17.7	15.2
LnGrp LOS	C	B		C	B		C	B	B	C	B	B
Approach Vol, veh/h		138			259			406			503	
Approach Delay, s/veh		19.0			19.4			20.6			19.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	15.4	10.1	18.7	4.9	16.6	12.2	16.6
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	11.0	33.6	13.0	37.4	11.0	33.6	17.0	* 34
Max Q Clear Time (g_c+I1), s	3.6	3.5	6.8	7.7	2.6	4.5	8.5	5.3
Green Ext Time (p_c), s	0.0	0.6	0.1	1.3	0.0	1.2	0.1	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	19.8
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	3	317	268	0
Future Vol, veh/h	0	3	3	317	268	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	3	3	334	282	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	622	282	282	0	-	0
Stage 1	282	-	-	-	-	-
Stage 2	340	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	454	762	1292	-	-	-
Stage 1	770	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	452	762	1292	-	-	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	768	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.75	0.07	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	17	-	762	-	-
HCM Lane V/C Ratio	0.002	-	0.004	-	-
HCM Control Delay (s/veh)	7.8	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	351	3	4	468	0	2	0	4	4	0	4
Future Vol, veh/h	3	351	3	4	468	0	2	0	4	4	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	369	3	4	493	0	2	0	4	4	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	493	0	0	373	0	0	632	878	186	692	880	246
Stage 1	-	-	-	-	-	-	377	377	-	501	501	-
Stage 2	-	-	-	-	-	-	255	501	-	191	379	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1081	-	-	1197	-	-	369	289	830	334	288	760
Stage 1	-	-	-	-	-	-	622	619	-	526	546	-
Stage 2	-	-	-	-	-	-	733	546	-	798	618	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1081	-	-	1197	-	-	364	286	830	330	286	760
Mov Cap-2 Maneuver	-	-	-	-	-	-	364	286	-	330	286	-
Stage 1	-	-	-	-	-	-	620	617	-	524	544	-
Stage 2	-	-	-	-	-	-	726	544	-	792	616	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.1	11.25	12.97
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	582	30	-	-	31	-	-	460
HCM Lane V/C Ratio	0.011	0.003	-	-	0.004	-	-	0.018
HCM Control Delay (s/veh)	11.3	8.3	0	-	8	0	-	13
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	354	0	2	470	0	3	0	0	3	0	0
Future Vol, veh/h	2	354	0	2	470	0	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	373	0	2	495	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	495	0	0	373	0	0	628	876	186	689	876	247
Stage 1	-	-	-	-	-	-	377	377	-	499	499	-
Stage 2	-	-	-	-	-	-	252	499	-	191	377	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1079	-	-	1197	-	-	371	290	830	336	290	759
Stage 1	-	-	-	-	-	-	622	619	-	527	547	-
Stage 2	-	-	-	-	-	-	736	547	-	799	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1079	-	-	1197	-	-	370	288	830	334	288	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	370	288	-	334	288	-
Stage 1	-	-	-	-	-	-	621	618	-	526	546	-
Stage 2	-	-	-	-	-	-	735	546	-	797	618	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.05	14.82	15.87
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	370	20	-	-	15	-	-	334
HCM Lane V/C Ratio	0.009	0.002	-	-	0.002	-	-	0.009
HCM Control Delay (s/veh)	14.8	8.3	0	-	8	0	-	15.9
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	353	1	2	466	0	3	0	0	3	0	6
Future Vol, veh/h	2	353	1	2	466	0	3	0	0	3	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	372	1	2	491	0	3	0	0	3	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	491	0	0	373	0	0	626	871	186	685	872	245
Stage 1	-	-	-	-	-	-	376	376	-	495	495	-
Stage 2	-	-	-	-	-	-	249	495	-	190	377	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1083	-	-	1197	-	-	373	291	830	338	291	761
Stage 1	-	-	-	-	-	-	623	620	-	530	549	-
Stage 2	-	-	-	-	-	-	738	549	-	799	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1083	-	-	1197	-	-	368	290	830	337	290	761
Mov Cap-2 Maneuver	-	-	-	-	-	-	368	290	-	337	290	-
Stage 1	-	-	-	-	-	-	621	618	-	529	548	-
Stage 2	-	-	-	-	-	-	731	548	-	798	618	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.05	14.86	11.84
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	368	20	-	-	15	-	-	536
HCM Lane V/C Ratio	0.009	0.002	-	-	0.002	-	-	0.018
HCM Control Delay (s/veh)	14.9	8.3	0	-	8	0	-	11.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	353	2	2	468	2	4	0	0	4	0	0
Future Vol, veh/h	2	353	2	2	468	2	4	0	0	4	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	372	2	2	493	2	4	0	0	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	495	0	0	374	0	0	627	876	187	688	876	247
Stage 1	-	-	-	-	-	-	377	377	-	498	498	-
Stage 2	-	-	-	-	-	-	251	499	-	190	378	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1079	-	-	1196	-	-	372	290	830	337	290	759
Stage 1	-	-	-	-	-	-	622	619	-	528	548	-
Stage 2	-	-	-	-	-	-	737	547	-	799	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1079	-	-	1196	-	-	370	288	830	335	288	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	370	288	-	335	288	-
Stage 1	-	-	-	-	-	-	621	618	-	527	547	-
Stage 2	-	-	-	-	-	-	736	546	-	798	617	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.05	14.83	15.88
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	370	20	-	-	15	-	-	335
HCM Lane V/C Ratio	0.011	0.002	-	-	0.002	-	-	0.013
HCM Control Delay (s/veh)	14.8	8.3	0	-	8	0	-	15.9
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	343	20	22	454	0	26	0	17	3	2	0
Future Vol, veh/h	3	343	20	22	454	0	26	0	17	3	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	361	21	23	478	0	27	0	18	3	2	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	478	0	0	382	0	0	664	902	191	711	913	239
Stage 1	-	-	-	-	-	-	378	378	-	524	524	-
Stage 2	-	-	-	-	-	-	286	524	-	187	388	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1095	-	-	1187	-	-	350	280	825	324	276	768
Stage 1	-	-	-	-	-	-	621	619	-	510	533	-
Stage 2	-	-	-	-	-	-	703	533	-	803	612	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1095	-	-	1187	-	-	338	272	825	309	269	768
Mov Cap-2 Maneuver	-	-	-	-	-	-	338	272	-	309	269	-
Stage 1	-	-	-	-	-	-	619	617	-	498	521	-
Stage 2	-	-	-	-	-	-	684	521	-	783	610	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.53	14.09	17.59
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	441	27	-	-	166	-	-	291
HCM Lane V/C Ratio	0.103	0.003	-	-	0.02	-	-	0.018
HCM Control Delay (s/veh)	14.1	8.3	0	-	8.1	0.2	-	17.6
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	354	13	18	468	4	9
Future Vol, veh/h	354	13	18	468	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	373	14	19	493	4	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	386	0	664	193
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	284	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1183	-	398	822
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	745	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1183	-	391	822
Mov Cap-2 Maneuver	-	-	-	-	391	-
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.43	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	614	-	-	133	-
HCM Lane V/C Ratio	0.022	-	-	0.016	-
HCM Control Delay (s/veh)	11	-	-	8.1	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	333	26	26	454	28	24
Future Vol, veh/h	333	26	26	454	28	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	351	27	27	478	29	25

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	378	0	658	189
Stage 1	-	-	-	-	364	-
Stage 2	-	-	-	-	294	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1192	-	402	827
Stage 1	-	-	-	-	679	-
Stage 2	-	-	-	-	737	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1192	-	391	827
Mov Cap-2 Maneuver	-	-	-	-	391	-
Stage 1	-	-	-	-	679	-
Stage 2	-	-	-	-	717	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.62	12.79
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	517	-	-	195	-
HCM Lane V/C Ratio	0.106	-	-	0.023	-
HCM Control Delay (s/veh)	12.8	-	-	8.1	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	353	23	59	470	17	27
Future Vol, veh/h	353	23	59	470	17	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	372	24	62	495	18	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	396	0	755	198
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	372	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1174	-	349	816
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	673	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1174	-	327	816
Mov Cap-2 Maneuver	-	-	-	-	327	-
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	632	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.28	12.64
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	518	-	-	402	-
HCM Lane V/C Ratio	0.089	-	-	0.053	-
HCM Control Delay (s/veh)	12.6	-	-	8.2	0.4
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	381	13	25	536	8	19
Future Vol, veh/h	381	13	25	536	8	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	401	14	26	564	8	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	415	0	743	207
Stage 1	-	-	-	-	408	-
Stage 2	-	-	-	-	335	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1155	-	355	805
Stage 1	-	-	-	-	646	-
Stage 2	-	-	-	-	703	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1155	-	346	805
Mov Cap-2 Maneuver	-	-	-	-	346	-
Stage 1	-	-	-	-	646	-
Stage 2	-	-	-	-	684	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.56	11.56
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	578	-	-	160	-
HCM Lane V/C Ratio	0.049	-	-	0.023	-
HCM Control Delay (s/veh)	11.6	-	-	8.2	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	45	384	552	116	83	39
Future Vol, veh/h	45	384	552	116	83	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	47	404	581	122	87	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	703	0	-	0	939	352
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	297	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	904	-	-	-	266	650
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	734	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	904	-	-	-	252	650
Mov Cap-2 Maneuver	-	-	-	-	365	-
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	734	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.97	0	17.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	904	-	-	-	425
HCM Lane V/C Ratio	0.052	-	-	-	0.302
HCM Control Delay (s/veh)	9.2	-	-	-	17.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	281	191	47	654	0	0	0	0	33	12	23
Future Volume (veh/h)	0	281	191	47	654	0	0	0	0	33	12	23
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	296	201	49	688	0				35	13	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	870	574	74	1986	0				96	34	62
Arrive On Green	0.00	0.49	0.49	0.10	1.00	0.00				0.07	0.07	0.07
Sat Flow, veh/h	0	1856	1173	1457	3159	0				1457	510	941
Grp Volume(v), veh/h	0	256	241	49	688	0				35	0	37
Grp Sat Flow(s),veh/h/ln	0	1539	1409	1457	1539	0				1457	0	1451
Q Serve(g_s), s	0.0	4.6	4.7	1.5	0.0	0.0				1.0	0.0	1.1
Cycle Q Clear(g_c), s	0.0	4.6	4.7	1.5	0.0	0.0				1.0	0.0	1.1
Prop In Lane	0.00		0.83	1.00		0.00				1.00		0.65
Lane Grp Cap(c), veh/h	0	754	690	74	1986	0				96	0	96
V/C Ratio(X)	0.00	0.34	0.35	0.66	0.35	0.00				0.36	0.00	0.39
Avail Cap(c_a), veh/h	0	754	690	165	1986	0				162	0	161
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.97	0.97	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.0	7.1	19.8	0.0	0.0				20.1	0.0	20.1
Incr Delay (d2), s/veh	0.0	1.2	1.4	3.6	0.5	0.0				0.9	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	1.0	0.5	0.1	0.0				0.3	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	8.2	8.5	23.4	0.5	0.0				21.0	0.0	21.1
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		497			737						72	
Approach Delay, s/veh		8.3			2.0						21.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.0	28.0		10.0		35.0
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0
Max Green Setting (Gmax), s	5.1	17.2		5.0		27.0
Max Q Clear Time (g_c+I1), s	3.5	6.7		3.1		2.0
Green Ext Time (p_c), s	0.0	1.2		0.0		2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	5.5
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	297	0	0	427	50	254	0	91	0	0	0
Future Volume (veh/h)	23	297	0	0	427	50	254	0	91	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	24	313	0	0	449	53	267	0	96			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	177	1760	0	0	1028	459	337	0	300			
Arrive On Green	0.22	1.00	0.00	0.00	0.30	0.30	0.20	0.00	0.20			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	24	313	0	0	449	53	267	0	96			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.5	0.0	0.0	0.0	4.8	1.1	6.7	0.0	2.4			
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.0	4.8	1.1	6.7	0.0	2.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	177	1760	0	0	1028	459	337	0	300			
V/C Ratio(X)	0.14	0.18	0.00	0.00	0.44	0.12	0.79	0.00	0.32			
Avail Cap(c_a), veh/h	180	1760	0	0	1028	459	381	0	339			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.9	0.0	0.0	0.0	12.7	11.4	17.2	0.0	15.5			
Incr Delay (d2), s/veh	0.3	0.2	0.0	0.0	1.3	0.5	9.8	0.0	0.6			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.0	0.0	1.4	0.3	3.2	0.0	0.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.2	0.2	0.0	0.0	14.0	11.9	27.0	0.0	16.1			
LnGrp LOS	B	A			B	B	C		B			
Approach Vol, veh/h		337			502			363				
Approach Delay, s/veh		1.4			13.8			24.1				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		29.2			9.6	19.5		15.8				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		22.0			5.0	12.3		10.0				
Max Q Clear Time (g_c+I1), s		2.0			2.5	6.8		8.7				
Green Ext Time (p_c), s		1.6			0.0	1.3		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.4
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	0	23	16	0	4	34	299	6	4	253	22
Future Vol, veh/h	23	0	23	16	0	4	34	299	6	4	253	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	24	0	24	17	0	4	36	315	6	4	266	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	673	679	145	528	684	315	289	0	0	321	0	0
Stage 1	286	286	-	386	386	-	-	-	-	-	-	-
Stage 2	386	393	-	142	298	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	358	376	883	451	374	730	1284	-	-	1250	-	-
Stage 1	703	678	-	641	613	-	-	-	-	-	-	-
Stage 2	641	610	-	853	671	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	345	364	883	425	362	730	1284	-	-	1250	-	-
Mov Cap-2 Maneuver	345	364	-	425	362	-	-	-	-	-	-	-
Stage 1	700	676	-	623	596	-	-	-	-	-	-	-
Stage 2	620	593	-	826	668	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.04	13.13	0.79	0.11
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1284	-	-	496	464	1250	-	-
HCM Lane V/C Ratio	0.028	-	-	0.098	0.045	0.003	-	-
HCM Control Delay (s/veh)	7.9	-	-	13	13.1	7.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	115	0	0	0	97	300	0	0	318	4
Future Vol, veh/h	1	0	115	0	0	0	97	300	0	0	318	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	0	121	0	0	0	102	316	0	0	335	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	699	857	169	687	859	158	339	0	0	316	0	0
Stage 1	337	337	-	520	520	-	-	-	-	-	-	-
Stage 2	362	520	-	167	339	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	330	297	851	337	296	866	1232	-	-	1256	-	-
Stage 1	657	645	-	512	535	-	-	-	-	-	-	-
Stage 2	635	535	-	824	644	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	303	272	851	265	272	866	1232	-	-	1256	-	-
Mov Cap-2 Maneuver	303	272	-	265	272	-	-	-	-	-	-	-
Stage 1	657	645	-	470	491	-	-	-	-	-	-	-
Stage 2	582	491	-	707	644	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.99	0	2	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1232	-	-	303	851	-	1256	-	-
HCM Lane V/C Ratio	0.083	-	-	0.003	0.142	-	-	-	-
HCM Control Delay (s/veh)	8.2	-	-	16.9	9.9	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0	0.5	-	0	-	-

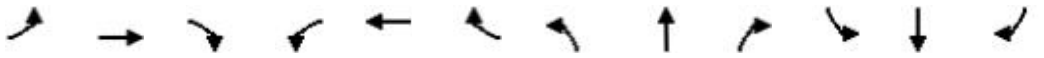
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	409	19	113	489	24	8	0	60	5	0	8
Future Vol, veh/h	9	409	19	113	489	24	8	0	60	5	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	431	20	119	515	25	8	0	63	5	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	540	0	0	451	0	0	955	1237	225	999	1235	270
Stage 1	-	-	-	-	-	-	459	459	-	765	765	-
Stage 2	-	-	-	-	-	-	495	778	-	234	469	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1039	-	-	1121	-	-	216	177	784	200	178	734
Stage 1	-	-	-	-	-	-	556	570	-	366	415	-
Stage 2	-	-	-	-	-	-	530	410	-	754	564	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1039	-	-	1121	-	-	189	157	784	163	158	734
Mov Cap-2 Maneuver	-	-	-	-	-	-	189	157	-	163	158	-
Stage 1	-	-	-	-	-	-	551	564	-	327	371	-
Stage 2	-	-	-	-	-	-	468	366	-	686	559	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	1.55	12.19	17.03
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	572	1039	-	-	1121	-	-	313
HCM Lane V/C Ratio	0.125	0.009	-	-	0.106	-	-	0.044
HCM Control Delay (s/veh)	12.2	8.5	-	-	8.6	-	-	17
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0.4	-	-	0.1



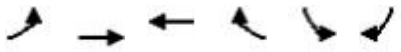
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	486	19	70	535	125	18	1	88	170	4	17
Future Volume (veh/h)	17	486	19	70	535	125	18	1	88	170	4	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	18	512	20	74	563	132	19	1	93	182	0	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	31	1266	49	106	1690	388	129	144	122	1057	0	479
Arrive On Green	0.02	0.38	0.38	0.07	0.42	0.42	0.08	0.08	0.08	0.31	0.00	0.31
Sat Flow, veh/h	1619	3356	131	1619	3994	917	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	18	261	271	74	460	235	19	1	93	182	0	18
Grp Sat Flow(s),veh/h/ln	1619	1710	1776	1619	1638	1635	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	1.2	12.3	12.3	4.9	10.3	10.7	1.2	0.1	6.6	4.3	0.0	0.9
Cycle Q Clear(g_c), s	1.2	12.3	12.3	4.9	10.3	10.7	1.2	0.1	6.6	4.3	0.0	0.9
Prop In Lane	1.00		0.07	1.00		0.56	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	645	670	106	1386	692	129	144	122	1057	0	479
V/C Ratio(X)	0.58	0.40	0.41	0.70	0.33	0.34	0.15	0.01	0.76	0.17	0.00	0.04
Avail Cap(c_a), veh/h	111	677	703	155	1386	692	273	303	257	1057	0	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.4	25.1	25.1	50.3	21.3	21.3	47.1	46.6	49.5	27.3	0.0	26.2
Incr Delay (d2), s/veh	15.8	0.4	0.4	8.1	0.6	1.3	0.5	0.0	9.5	0.4	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.9	5.1	2.2	4.0	4.2	0.5	0.0	2.8	1.8	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.2	25.5	25.5	58.4	21.9	22.7	47.6	46.6	59.1	27.7	0.0	26.3
LnGrp LOS	E	C	C	E	C	C	D	D	E	C		C
Approach Vol, veh/h		550			769			113			200	
Approach Delay, s/veh		27.0			25.7			57.0			27.6	
Approach LOS		C			C			E			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	45.9		39.0	6.6	51.0		13.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	43.5		34.5	7.5	46.5		18.5				
Max Q Clear Time (g_c+I1), s	6.9	14.3		6.3	3.2	12.7		8.6				
Green Ext Time (p_c), s	0.0	3.1		0.7	0.0	4.9		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh		28.5
HCM 7th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.



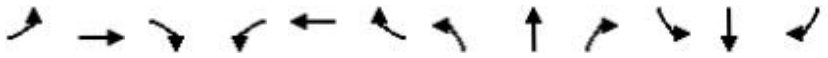
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	386	414	0	423	369
Future Volume (veh/h)	0	386	414	0	423	369
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	406	436	0	445	388
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1736	1736		910	488
Arrive On Green	0.00	0.51	0.51	0.00	0.31	0.31
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	406	436	0	445	388
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	4.3	4.7	0.0	8.0	14.6
Cycle Q Clear(g_c), s	0.0	4.3	4.7	0.0	8.0	14.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1736	1736		910	488
V/C Ratio(X)	0.00	0.23	0.25		0.49	0.79
Avail Cap(c_a), veh/h	0	1736	1736		955	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.9	9.0	0.0	18.3	20.6
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.5	8.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.4	1.5	0.0	2.6	6.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	9.3	9.4	0.0	18.8	29.0
LnGrp LOS		A	A		B	C
Approach Vol, veh/h		406	436		833	
Approach Delay, s/veh		9.3	9.4		23.6	
Approach LOS		A	A		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	39.0	26.0	39.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	32.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	6.3	16.6	6.7
Green Ext Time (p_c), s	2.2	1.7	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	16.4
HCM 7th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	451	0	0	682	117	280	109	217	43	0	300
Future Volume (veh/h)	189	451	0	0	682	117	280	109	217	43	0	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	199	475	0	0	718	123	205	241	228	45	0	316
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	321	2506	0	0	1237	210	371	412	699	0	0	0
Arrive On Green	0.11	0.51	0.00	0.00	0.29	0.29	0.23	0.23	0.23	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4392	717	1619	1800	3051		0	
Grp Volume(v), veh/h	199	475	0	0	554	287	205	241	228		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1671	1619	1800	1525			
Q Serve(g_s), s	3.0	2.4	0.0	0.0	6.6	6.7	5.1	5.5	2.9			
Cycle Q Clear(g_c), s	3.0	2.4	0.0	0.0	6.6	6.7	5.1	5.5	2.9			
Prop In Lane	1.00		0.00	0.00		0.43	1.00		1.00			
Lane Grp Cap(c), veh/h	321	2506	0	0	958	488	371	412	699			
V/C Ratio(X)	0.62	0.19	0.00	0.00	0.58	0.59	0.55	0.58	0.33			
Avail Cap(c_a), veh/h	322	4704	0	0	2423	1236	810	901	1527			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	19.6	6.1	0.0	0.0	13.9	13.9	15.6	15.8	14.8			
Incr Delay (d2), s/veh	3.2	0.0	0.0	0.0	0.4	0.8	1.6	1.6	0.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	0.6	0.0	0.0	2.0	2.2	1.6	1.9	0.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.8	6.1	0.0	0.0	14.3	14.7	17.2	17.4	15.1			
LnGrp LOS	C	A			B	B	B	B	B			
Approach Vol, veh/h		674			841			674				
Approach Delay, s/veh		11.1			14.4			16.5				
Approach LOS		B			B			B				

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	29.4	10.0	19.4	16.5
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0
Max Green Setting (Gmax), s	44.0	5.0	34.0	23.0
Max Q Clear Time (g_c+I1), s	4.4	5.0	8.7	7.5
Green Ext Time (p_c), s	2.8	0.0	4.7	3.1

Intersection Summary	
HCM 7th Control Delay, s/veh	14.0
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	0	5	27	0	59	2	330	26	34	368	0
Future Vol, veh/h	12	0	5	27	0	59	2	330	26	34	368	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	0	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	0	5	28	0	62	2	347	27	36	387	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	811	838	387	811	811	347	387	0	0	375	0	0
Stage 1	459	459	-	352	352	-	-	-	-	-	-	-
Stage 2	352	379	-	459	459	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	301	305	665	301	316	700	1182	-	-	1195	-	-
Stage 1	586	570	-	669	635	-	-	-	-	-	-	-
Stage 2	669	618	-	586	570	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	265	295	665	289	306	700	1182	-	-	1195	-	-
Mov Cap-2 Maneuver	265	295	-	289	306	-	-	-	-	-	-	-
Stage 1	568	553	-	668	634	-	-	-	-	-	-	-
Stage 2	609	617	-	564	553	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.83	14.15	0.04	0.69
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1182	-	-	322	484	1195	-	-
HCM Lane V/C Ratio	0.002	-	-	0.056	0.187	0.03	-	-
HCM Control Delay (s/veh)	8.1	-	-	16.8	14.1	8.1	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.7	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	5	305	33	6	353
Future Vol, veh/h	18	5	305	33	6	353
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	19	5	321	35	6	372

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	705	321	0	0	356	0
Stage 1	321	-	-	-	-	-
Stage 2	384	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	406	724	-	-	1214	-
Stage 1	740	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	403	724	-	-	1214	-
Mov Cap-2 Maneuver	403	-	-	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	688	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.53	0	0.13
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	446	30	-
HCM Lane V/C Ratio	-	-	0.054	0.005	-
HCM Control Delay (s/veh)	-	-	13.5	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	31	0	4	0	91	33	12	73	0
Future Vol, veh/h	0	0	0	31	0	4	0	91	33	12	73	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	33	0	4	0	96	35	13	77	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	198	233	77	215	215	113	77	0	0	131	0	0
Stage 1	102	102	-	113	113	-	-	-	-	-	-	-
Stage 2	96	131	-	102	102	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	765	671	990	746	686	945	1535	-	-	1467	-	-
Stage 1	909	815	-	897	806	-	-	-	-	-	-	-
Stage 2	916	792	-	909	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	755	665	990	739	680	945	1535	-	-	1467	-	-
Mov Cap-2 Maneuver	755	665	-	739	680	-	-	-	-	-	-	-
Stage 1	901	808	-	897	806	-	-	-	-	-	-	-
Stage 2	912	792	-	901	808	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	9.99	0	1.06
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1535	-	-	-	758	1467	-	-
HCM Lane V/C Ratio	-	-	-	-	0.049	0.009	-	-
HCM Control Delay (s/veh)	0	-	-	0	10	7.5	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	44	0	8	60	19	0	29	10	22	23	30
Future Vol, veh/h	43	44	0	8	60	19	0	29	10	22	23	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	46	0	8	63	20	0	31	11	23	24	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	148	127	40	129	138	36	56	0	0	41	0	0
Stage 1	86	86	-	36	36	-	-	-	-	-	-	-
Stage 2	62	41	-	94	102	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	824	767	1037	848	757	1043	1562	-	-	1581	-	-
Stage 1	926	827	-	985	869	-	-	-	-	-	-	-
Stage 2	954	865	-	918	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	730	756	1037	785	746	1043	1562	-	-	1581	-	-
Mov Cap-2 Maneuver	730	756	-	785	746	-	-	-	-	-	-	-
Stage 1	913	815	-	985	869	-	-	-	-	-	-	-
Stage 2	868	865	-	853	803	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.53	10.09	0	2.14
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1562	-	-	743	799	1581	-	-
HCM Lane V/C Ratio	-	-	-	0.123	0.115	0.015	-	-
HCM Control Delay (s/veh)	0	-	-	10.5	10.1	7.3	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	0	-	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	4	45	0	0	0	0	71	23	15	38	0
Future Vol, veh/h	7	4	45	0	0	0	0	71	23	15	38	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	4	47	0	0	0	0	75	24	16	40	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.3	8.2	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	76%	0%	8%	0%	100%
Vol Right, %	24%	0%	92%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	94	7	49	15	38
LT Vol	0	7	0	15	0
Through Vol	71	0	4	0	38
RT Vol	23	0	45	0	0
Lane Flow Rate	99	7	52	16	40
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.124	0.011	0.061	0.023	0.052
Departure Headway (Hd)	4.499	5.379	4.233	5.155	4.654
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	792	669	851	691	764
Service Time	2.557	3.079	1.933	2.914	2.413
HCM Lane V/C Ratio	0.125	0.01	0.061	0.023	0.052
HCM Control Delay, s/veh	8.2	8.1	7.2	8	7.7
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0	0.2	0.1	0.2

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	36	32	15	30	26	45
Future Vol, veh/h	36	32	15	30	26	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	38	34	16	32	27	47
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7.3	7.8	7.4
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	26	45	36	32	15	30
LT Vol	26	0	0	0	15	0
Through Vol	0	0	36	0	0	30
RT Vol	0	45	0	32	0	0
Lane Flow Rate	27	47	38	34	16	32
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.04	0.053	0.049	0.037	0.023	0.041
Departure Headway (Hd)	5.199	3.998	4.653	3.952	5.167	4.666
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	682	883	764	896	688	761
Service Time	2.98	1.779	2.419	1.718	2.934	2.433
HCM Lane V/C Ratio	0.04	0.053	0.05	0.038	0.023	0.042
HCM Control Delay, s/veh	8.2	7	7.7	6.9	8.1	7.6
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.2	0.1	0.1	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	205	144	286	237	8	177	51	222	24	69	31
Future Volume (veh/h)	22	205	144	286	237	8	177	51	222	24	69	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	23	216	152	301	249	8	186	54	234	25	73	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	45	376	253	363	1313	42	428	461	391	461	598	255
Arrive On Green	0.03	0.19	0.19	0.22	0.39	0.39	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1619	1957	1316	1619	3382	108	1171	1800	1525	1299	2336	995
Grp Volume(v), veh/h	23	187	181	301	126	131	186	54	234	25	52	54
Grp Sat Flow(s),veh/h/ln	1619	1710	1563	1619	1710	1780	1171	1800	1525	1299	1710	1621
Q Serve(g_s), s	0.6	4.5	4.8	8.0	2.2	2.2	6.6	1.0	6.1	0.7	1.1	1.2
Cycle Q Clear(g_c), s	0.6	4.5	4.8	8.0	2.2	2.2	7.8	1.0	6.1	1.7	1.1	1.2
Prop In Lane	1.00		0.84	1.00		0.06	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	45	328	300	363	664	691	428	461	391	461	438	415
V/C Ratio(X)	0.51	0.57	0.60	0.83	0.19	0.19	0.43	0.12	0.60	0.05	0.12	0.13
Avail Cap(c_a), veh/h	239	1491	1363	517	1784	1858	1185	1624	1377	1301	1543	1463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	16.7	16.8	16.8	9.2	9.2	16.0	13.0	14.9	13.6	13.0	13.0
Incr Delay (d2), s/veh	8.8	1.6	1.9	7.6	0.1	0.1	0.7	0.1	1.5	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.4	1.4	3.1	0.6	0.6	1.6	0.4	1.9	0.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.5	18.2	18.7	24.4	9.3	9.3	16.7	13.1	16.3	13.7	13.1	13.1
LnGrp LOS	C	B	B	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		391			558			474			131	
Approach Delay, s/veh		19.2			17.4			16.1			13.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.7	14.5		16.2	5.8	23.4		16.2				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	14.5	39.6		41.0	6.7	47.4		41.0				
Max Q Clear Time (g_c+I1), s	10.0	6.8		9.8	2.6	4.2		3.7				
Green Ext Time (p_c), s	0.4	1.9		1.9	0.0	1.4		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	17.1
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	449	76	114	509	13	67	3	104	15	6	13
Future Volume (veh/h)	11	449	76	114	509	13	67	3	104	15	6	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	12	473	80	120	536	14	71	3	109	16	6	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	511	1286	216	507	1496	39	418	258	219	433	69	161
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	779	2929	493	777	3405	89	1265	1800	1525	1285	480	1119
Grp Volume(v), veh/h	12	275	278	120	269	281	71	3	109	16	0	20
Grp Sat Flow(s),veh/h/ln	779	1710	1711	777	1710	1784	1265	1800	1525	1285	0	1599
Q Serve(g_s), s	0.3	3.1	3.1	3.5	3.0	3.0	1.5	0.0	1.9	0.3	0.0	0.3
Cycle Q Clear(g_c), s	3.3	3.1	3.1	6.6	3.0	3.0	1.8	0.0	1.9	0.4	0.0	0.3
Prop In Lane	1.00		0.29	1.00		0.05	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	511	751	752	507	751	784	418	258	219	433	0	230
V/C Ratio(X)	0.02	0.37	0.37	0.24	0.36	0.36	0.17	0.01	0.50	0.04	0.00	0.09
Avail Cap(c_a), veh/h	1171	2199	2201	1166	2199	2295	1820	2253	1909	1928	0	2089
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.5	5.4	5.4	7.6	5.4	5.4	11.5	10.6	11.4	10.7	0.0	10.7
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.2	0.3	0.3	0.2	0.0	1.7	0.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.3	0.4	0.4	0.3	0.0	0.6	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.5	5.7	5.7	7.9	5.7	5.6	11.7	10.6	13.1	10.8	0.0	10.8
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		565			670			183			36	
Approach Delay, s/veh		5.7			6.0			12.5			10.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	18.4	10.3	18.4	10.3
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	37.0	36.0	37.0	* 38
Max Q Clear Time (g_c+I1), s	5.3	3.9	8.6	2.4
Green Ext Time (p_c), s	3.3	0.6	4.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.8
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	572	87	56	596	6	98	0	55	9	3	8
Future Volume (veh/h)	3	572	87	56	596	6	98	0	55	9	3	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	3	602	92	59	627	6	103	0	58	9	3	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	531	1352	206	505	1577	15	487	0	219	392	90	219
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.14	0.00	0.14	0.14	0.14	0.14
Sat Flow, veh/h	722	2975	454	682	3471	33	1375	0	1525	968	631	1525
Grp Volume(v), veh/h	3	346	348	59	309	324	103	0	58	12	0	8
Grp Sat Flow(s),veh/h/ln	722	1710	1718	682	1710	1794	1375	0	1525	1598	0	1525
Q Serve(g_s), s	0.1	3.4	3.5	1.6	3.0	3.0	1.6	0.0	0.8	0.0	0.0	0.1
Cycle Q Clear(g_c), s	3.1	3.4	3.5	5.1	3.0	3.0	1.7	0.0	0.8	0.1	0.0	0.1
Prop In Lane	1.00		0.26	1.00		0.02	1.00		1.00	0.75		1.00
Lane Grp Cap(c), veh/h	531	777	781	505	777	815	487	0	219	483	0	219
V/C Ratio(X)	0.01	0.44	0.45	0.12	0.40	0.40	0.21	0.00	0.27	0.02	0.00	0.04
Avail Cap(c_a), veh/h	957	1788	1796	908	1788	1875	2151	0	2085	2259	0	2085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.5	4.6	4.6	6.4	4.5	4.5	9.8	0.0	9.5	9.2	0.0	9.2
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.1	0.3	0.3	0.2	0.0	0.6	0.0	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.1	0.4	0.4	0.4	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.5	5.0	5.0	6.5	4.8	4.8	10.1	0.0	10.1	9.2	0.0	9.2
LnGrp LOS	A	A	A	A	A	A	B		B	A		A
Approach Vol, veh/h		697			692			161			20	
Approach Delay, s/veh		5.0			5.0			10.1			9.2	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.7	8.2	16.7	8.2
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	26.0	34.0	26.0	34.0
Max Q Clear Time (g_c+I1), s	5.5	3.7	7.1	2.1
Green Ext Time (p_c), s	3.8	0.7	4.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.6
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	463	32	21	433	151	37	39	18	218	44	223
Future Volume (veh/h)	141	463	32	21	433	151	37	39	18	218	44	223
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	148	487	34	22	456	159	39	41	19	229	46	235
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	302	732	51	234	657	227	126	86	40	399	63	321
Arrive On Green	0.10	0.23	0.23	0.13	0.26	0.26	0.07	0.07	0.07	0.23	0.23	0.23
Sat Flow, veh/h	1714	3243	226	1810	2493	862	1810	1228	569	1714	270	1381
Grp Volume(v), veh/h	148	256	265	22	312	303	39	0	60	229	0	281
Grp Sat Flow(s),veh/h/ln	1714	1710	1759	1810	1710	1645	1810	0	1798	1714	0	1651
Q Serve(g_s), s	4.4	7.7	7.8	0.6	9.3	9.4	1.2	0.0	1.8	6.7	0.0	8.9
Cycle Q Clear(g_c), s	4.4	7.7	7.8	0.6	9.3	9.4	1.2	0.0	1.8	6.7	0.0	8.9
Prop In Lane	1.00		0.13	1.00		0.52	1.00		0.32	1.00		0.84
Lane Grp Cap(c), veh/h	302	386	397	234	451	434	126	0	125	399	0	384
V/C Ratio(X)	0.49	0.66	0.67	0.09	0.69	0.70	0.31	0.00	0.48	0.57	0.00	0.73
Avail Cap(c_a), veh/h	330	867	892	234	831	799	160	0	159	818	0	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.9	20.0	20.0	21.7	18.8	18.8	25.0	0.0	25.3	19.2	0.0	20.1
Incr Delay (d2), s/veh	1.2	2.0	1.9	0.2	1.9	2.1	1.4	0.0	2.8	1.3	0.0	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.0	3.1	0.3	3.5	3.5	0.5	0.0	0.8	2.6	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.2	21.9	21.9	21.9	20.7	20.9	26.4	0.0	28.2	20.5	0.0	22.8
LnGrp LOS	C	C	C	C	C	C	C		C	C		C
Approach Vol, veh/h		669			637			99			510	
Approach Delay, s/veh		22.0			20.8			27.5			21.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	17.9		8.5	10.3	19.5		18.3				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.3	* 29		5.0	6.7	27.5		27.0				
Max Q Clear Time (g_c+I1), s	12.6	9.8		3.8	6.4	11.4		10.9				
Green Ext Time (p_c), s	0.0	3.0		0.0	0.0	3.5		2.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	21.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	454	201	112	396	191	89
Future Volume (veh/h)	454	201	112	396	191	89
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	478	212	118	417	201	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	791	349	158	1942	299	282
Arrive On Green	0.34	0.34	0.10	0.57	0.18	0.18
Sat Flow, veh/h	2399	1018	1619	3510	1619	1525
Grp Volume(v), veh/h	353	337	118	417	201	94
Grp Sat Flow(s),veh/h/ln	1710	1617	1619	1710	1619	1525
Q Serve(g_s), s	6.0	6.1	2.5	2.1	4.1	1.9
Cycle Q Clear(g_c), s	6.0	6.1	2.5	2.1	4.1	1.9
Prop In Lane		0.63	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	586	554	158	1942	299	282
V/C Ratio(X)	0.60	0.61	0.75	0.21	0.67	0.33
Avail Cap(c_a), veh/h	1148	1085	355	3434	1197	1128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.6	9.6	15.4	3.7	13.3	12.5
Incr Delay (d2), s/veh	1.0	1.1	6.9	0.1	2.6	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.7	1.1	0.3	1.3	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.6	10.7	22.4	3.8	16.0	13.1
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	690			535	295	
Approach Delay, s/veh	10.6			7.9	15.1	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.9	16.6		10.6		24.6
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	7.5	* 24		26.0		35.3
Max Q Clear Time (g_c+I1), s	4.5	8.1		6.1		4.1
Green Ext Time (p_c), s	0.1	4.0		0.8		3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.5
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	67	74	251	47	91	43	420	259	107	526	5
Future Volume (veh/h)	10	67	74	251	47	91	43	420	259	107	526	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	11	71	78	264	49	96	45	442	0	113	554	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	460	269	295	459	186	365	76	533		140	1167	11
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.05	0.30	0.00	0.09	0.34	0.34
Sat Flow, veh/h	1130	784	861	1126	544	1065	1619	1800	1525	1619	3473	31
Grp Volume(v), veh/h	11	0	149	264	0	145	45	442	0	113	273	286
Grp Sat Flow(s),veh/h/ln	1130	0	1645	1126	0	1608	1619	1800	1525	1619	1710	1794
Q Serve(g_s), s	0.3	0.0	3.2	10.9	0.0	3.2	1.3	11.3	0.0	3.4	6.2	6.2
Cycle Q Clear(g_c), s	3.6	0.0	3.2	14.1	0.0	3.2	1.3	11.3	0.0	3.4	6.2	6.2
Prop In Lane	1.00		0.52	1.00		0.66	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	460	0	564	459	0	551	76	533		140	575	603
V/C Ratio(X)	0.02	0.00	0.26	0.58	0.00	0.26	0.60	0.83		0.81	0.47	0.47
Avail Cap(c_a), veh/h	535	0	672	533	0	657	201	699		240	706	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	0.0	11.7	16.8	0.0	11.7	23.0	16.1	0.0	22.1	12.9	12.9
Incr Delay (d2), s/veh	0.0	0.0	0.2	1.1	0.0	0.3	7.3	6.4	0.0	10.3	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.0	2.6	0.0	1.0	0.6	4.8	0.0	1.5	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.0	0.0	11.9	17.9	0.0	11.9	30.3	22.5	0.0	32.4	13.5	13.5
LnGrp LOS	B		B	B		B	C	C		C	B	B
Approach Vol, veh/h		160			409			487			672	
Approach Delay, s/veh		12.0			15.8			23.3			16.7	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	21.0		21.4	8.8	19.1		21.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.1	20.3		20.1	7.3	19.1		20.1				
Max Q Clear Time (g_c+I1), s	13.3	8.2		16.1	5.4	13.3		5.6				
Green Ext Time (p_c), s	0.0	2.6		0.8	0.0	1.3		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	17.9
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	217	0	130	369	718	0	0	640	350
Future Volume (veh/h)	0	0	0	217	0	130	369	718	0	0	640	350
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				228	0	137	388	756	0	0	674	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				285	0	254	491	2167	0	0	788	
Arrive On Green				0.17	0.00	0.17	0.61	1.00	0.00	0.00	0.23	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				228	0	137	388	756	0	0	674	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				7.7	0.0	4.9	10.9	0.0	0.0	0.0	11.3	0.0
Cycle Q Clear(g_c), s				7.7	0.0	4.9	10.9	0.0	0.0	0.0	11.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				285	0	254	491	2167	0	0	788	
V/C Ratio(X)				0.80	0.00	0.54	0.79	0.35	0.00	0.00	0.86	
Avail Cap(c_a), veh/h				286	0	254	510	2167	0	0	821	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.85	0.85	0.00	0.00	0.86	0.00
Uniform Delay (d), s/veh				24.1	0.0	22.9	10.4	0.0	0.0	0.0	22.1	0.0
Incr Delay (d2), s/veh				14.8	0.0	2.3	6.2	0.4	0.0	0.0	10.1	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.1	0.0	1.8	3.0	0.1	0.0	0.0	5.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				38.9	0.0	25.2	16.5	0.4	0.0	0.0	32.2	0.0
LnGrp LOS				D		C	B	A			C	
Approach Vol, veh/h					365			1144			674	
Approach Delay, s/veh					33.7			5.8			32.2	
Approach LOS					C			A			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	24.2	19.8		16.0		44.0						
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0						
Max Green Setting (Gmax), s	18.2	* 14		10.0		38.0						
Max Q Clear Time (g_c+I1), s	12.9	13.3		9.7		2.0						
Green Ext Time (p_c), s	0.4	0.5		0.1		5.8						

Intersection Summary	
HCM 7th Control Delay, s/veh	18.7
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	202	314	102	926	826	84
Future Volume (veh/h)	202	314	102	926	826	84
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	213	331	107	975	869	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	378	356	224	1938	1096	111
Arrive On Green	0.23	0.23	0.14	0.57	0.70	0.70
Sat Flow, veh/h	1619	1525	1619	3510	3225	318
Grp Volume(v), veh/h	213	331	107	975	474	483
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1743
Q Serve(g_s), s	7.0	12.7	3.7	10.4	11.2	11.2
Cycle Q Clear(g_c), s	7.0	12.7	3.7	10.4	11.2	11.2
Prop In Lane	1.00	1.00	1.00			0.18
Lane Grp Cap(c), veh/h	378	356	224	1938	598	609
V/C Ratio(X)	0.56	0.93	0.48	0.50	0.79	0.79
Avail Cap(c_a), veh/h	378	356	273	1938	598	609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.65	0.65	0.58	0.58
Uniform Delay (d), s/veh	20.3	22.5	23.8	7.9	7.6	7.6
Incr Delay (d2), s/veh	1.2	30.0	0.4	0.6	6.3	6.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	7.1	1.3	3.0	3.0	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.5	52.5	24.2	8.5	13.8	13.7
LnGrp LOS	C	D	C	A	B	B
Approach Vol, veh/h	544			1082	957	
Approach Delay, s/veh	40.4			10.0	13.7	
Approach LOS	D			B	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.0	27.0			40.0	20.0
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	10.1	19.2			34.0	14.0
Max Q Clear Time (g_c+I1), s	15.7	13.2			12.4	14.7
Green Ext Time (p_c), s	0.0	2.9			7.0	0.0

Intersection Summary		
HCM 7th Control Delay, s/veh		17.8
HCM 7th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	22	32	87	23	349	23	532	71	355	799	46
Future Volume (veh/h)	102	22	32	87	23	349	23	532	71	355	799	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	107	23	34	92	24	367	24	560	75	374	841	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	180	502	448	457	502	448	44	709	95	409	1510	86
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.23	0.23	0.25	0.46	0.46
Sat Flow, veh/h	902	1710	1525	1224	1710	1525	1619	3032	405	1619	3289	188
Grp Volume(v), veh/h	107	23	34	92	24	367	24	315	320	374	437	452
Grp Sat Flow(s),veh/h/ln	902	1710	1525	1224	1710	1525	1619	1710	1727	1619	1710	1766
Q Serve(g_s), s	4.3	0.6	1.0	3.6	0.6	13.7	0.9	10.6	10.7	13.8	11.4	11.4
Cycle Q Clear(g_c), s	18.0	0.6	1.0	4.6	0.6	13.7	0.9	10.6	10.7	13.8	11.4	11.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.11
Lane Grp Cap(c), veh/h	180	502	448	457	502	448	44	400	404	409	785	811
V/C Ratio(X)	0.59	0.05	0.08	0.20	0.05	0.82	0.54	0.79	0.79	0.91	0.56	0.56
Avail Cap(c_a), veh/h	180	502	448	457	502	448	277	502	507	409	785	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	15.5	15.7	17.3	15.5	20.2	29.4	22.1	22.1	22.3	12.1	12.1
Incr Delay (d2), s/veh	5.1	0.0	0.1	0.2	0.0	11.5	9.9	6.6	6.7	24.7	0.9	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.2	0.3	1.0	0.2	5.9	0.4	4.4	4.5	7.5	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.6	15.6	15.7	17.5	15.6	31.7	39.4	28.6	28.8	47.0	12.9	12.9
LnGrp LOS	C	B	B	B	B	C	D	C	C	D	B	B
Approach Vol, veh/h		164			483			659			1263	
Approach Delay, s/veh		28.0			28.2			29.1			23.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	32.7		22.5	20.0	18.8		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	23.0		18.0	15.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	12.9	13.4		15.7	15.8	12.7		20.0				
Green Ext Time (p_c), s	0.0	3.8		0.7	0.0	1.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	25.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	247	26	52	221	119	33	235	37	221	217	246
Future Volume (veh/h)	160	247	26	52	221	119	33	235	37	221	217	246
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	168	260	27	55	233	125	35	247	39	233	228	259
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	472	1081	111	496	621	527	431	1151	179	543	664	592
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1043	3130	322	993	1800	1525	826	2965	462	994	1710	1525
Grp Volume(v), veh/h	168	141	146	55	233	125	35	141	145	233	228	259
Grp Sat Flow(s),veh/h/ln	1043	1710	1742	993	1800	1525	826	1710	1717	994	1710	1525
Q Serve(g_s), s	4.9	2.0	2.0	1.4	3.3	2.0	1.1	1.9	1.9	6.9	3.2	4.2
Cycle Q Clear(g_c), s	8.2	2.0	2.0	3.4	3.3	2.0	5.3	1.9	1.9	8.8	3.2	4.2
Prop In Lane	1.00		0.18	1.00		1.00	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	472	590	601	496	621	527	431	664	667	543	664	592
V/C Ratio(X)	0.36	0.24	0.24	0.11	0.37	0.24	0.08	0.21	0.22	0.43	0.34	0.44
Avail Cap(c_a), veh/h	667	911	928	683	959	813	550	911	915	686	911	813
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	7.9	7.9	9.1	8.3	7.9	9.6	6.9	6.9	9.8	7.3	7.6
Incr Delay (d2), s/veh	0.5	0.2	0.2	0.1	0.4	0.2	0.1	0.2	0.2	0.5	0.3	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.5	0.6	0.2	0.9	0.5	0.1	0.4	0.4	0.9	0.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.8	8.1	8.1	9.2	8.7	8.1	9.7	7.0	7.1	10.4	7.6	8.1
LnGrp LOS	B	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		455			413			321			720	
Approach Delay, s/veh		9.5			8.6			7.3			8.7	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.6	16.2	17.6	16.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	7.3	10.2	10.8	5.4
Green Ext Time (p_c), s	1.2	1.5	2.3	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	8.6
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	368	0	17	482	5	19
Future Vol, veh/h	368	0	17	482	5	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	387	0	18	507	5	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	387	0	677	194
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	289	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1182	-	391	821
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	740	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1182	-	385	821
Mov Cap-2 Maneuver	-	-	-	-	491	-
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	729	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.28	10.18
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	721	-	-	1182	-
HCM Lane V/C Ratio	0.035	-	-	0.015	-
HCM Control Delay (s/veh)	10.2	-	-	8.1	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

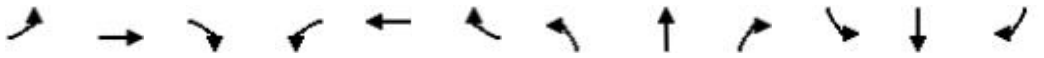
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	414	0	4	340	0	8
Future Vol, veh/h	414	0	4	340	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	436	0	4	358	0	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	436	0	802	436
Stage 1	-	-	-	-	436	-
Stage 2	-	-	-	-	366	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1135	-	356	625
Stage 1	-	-	-	-	656	-
Stage 2	-	-	-	-	706	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1135	-	354	625
Mov Cap-2 Maneuver	-	-	-	-	354	-
Stage 1	-	-	-	-	656	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	10.84
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	625	-	-	21	-
HCM Lane V/C Ratio	0.013	-	-	0.004	-
HCM Control Delay (s/veh)	10.8	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	130	363	40	70	213	253	200	40	149	141	16
Future Volume (veh/h)	31	130	363	40	70	213	253	200	40	149	141	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	33	137	0	42	74	0	266	211	42	157	148	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	50	702		60	723		321	799	156	199	369	313
Arrive On Green	0.03	0.19	0.00	0.04	0.20	0.00	0.19	0.27	0.27	0.12	0.19	0.19
Sat Flow, veh/h	1714	3610	1610	1714	3610	1610	1714	3011	588	1714	1900	1610
Grp Volume(v), veh/h	33	137	0	42	74	0	266	125	128	157	148	17
Grp Sat Flow(s),veh/h/ln	1714	1805	1610	1714	1805	1610	1714	1805	1794	1714	1900	1610
Q Serve(g_s), s	1.0	1.6	0.0	1.2	0.9	0.0	7.7	2.8	2.9	4.6	3.5	0.4
Cycle Q Clear(g_c), s	1.0	1.6	0.0	1.2	0.9	0.0	7.7	2.8	2.9	4.6	3.5	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	50	702		60	723		321	479	476	199	369	313
V/C Ratio(X)	0.66	0.20		0.70	0.10		0.83	0.26	0.27	0.79	0.40	0.05
Avail Cap(c_a), veh/h	333	2498		300	2428		1300	1403	1395	1529	1714	1452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	17.4	0.0	24.6	16.8	0.0	20.1	14.9	14.9	22.1	18.1	16.9
Incr Delay (d2), s/veh	5.4	0.1	0.0	5.3	0.1	0.0	2.1	0.3	0.3	2.6	0.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.6	0.0	0.5	0.3	0.0	2.6	0.9	1.0	1.7	1.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.1	17.5	0.0	29.9	16.9	0.0	22.2	15.2	15.2	24.7	18.8	16.9
LnGrp LOS	C	B		C	B		C	B	B	C	B	B
Approach Vol, veh/h		170			116			519			322	
Approach Delay, s/veh		19.9			21.6			18.8			21.6	
Approach LOS		B			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	15.4	13.6	16.6	5.5	15.7	10.0	20.3
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	9.0	35.6	39.0	46.4	10.0	34.6	45.9	* 40
Max Q Clear Time (g_c+I1), s	3.2	3.6	9.7	5.5	3.0	2.9	6.6	4.9
Green Ext Time (p_c), s	0.0	0.7	0.2	0.8	0.0	0.4	0.1	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	20.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	456	400	2
Future Vol, veh/h	5	0	0	456	400	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	0	480	421	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	902	422	423	0	-	0
Stage 1	422	-	-	-	-	-
Stage 2	480	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	311	636	1147	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	311	636	1147	-	-	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	627	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	16.79	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1147	-	311	-	-
HCM Lane V/C Ratio	-	-	0.017	-	-
HCM Control Delay (s/veh)	0	-	16.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	290	0	4	290	0	3	0	7	4	0	0
Future Vol, veh/h	4	290	0	4	290	0	3	0	7	4	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	305	0	4	305	0	3	0	7	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	305	0	0	475	627	153	475	627	153
Stage 1	-	-	-	-	-	-	314	314	-	314	314	-
Stage 2	-	-	-	-	-	-	161	314	-	161	314	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1267	-	-	1267	-	-	478	403	873	478	403	873
Stage 1	-	-	-	-	-	-	677	660	-	677	660	-
Stage 2	-	-	-	-	-	-	831	660	-	831	660	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1267	-	-	474	400	873	470	400	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	474	400	-	470	400	-
Stage 1	-	-	-	-	-	-	675	658	-	675	658	-
Stage 2	-	-	-	-	-	-	828	658	-	821	658	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.13	0.13	10.25	12.73
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	697	49	-	-	49	-	-	470
HCM Lane V/C Ratio	0.015	0.003	-	-	0.003	-	-	0.009
HCM Control Delay (s/veh)	10.2	7.9	0	-	7.9	0	-	12.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	294	3	3	290	0	3	0	0	3	0	0
Future Vol, veh/h	4	294	3	3	290	0	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	309	3	3	305	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	313	0	0	478	631	156	475	633	153
Stage 1	-	-	-	-	-	-	319	319	-	312	312	-
Stage 2	-	-	-	-	-	-	159	312	-	163	321	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1267	-	-	1259	-	-	475	401	868	478	400	873
Stage 1	-	-	-	-	-	-	672	656	-	679	661	-
Stage 2	-	-	-	-	-	-	833	661	-	828	655	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1259	-	-	472	398	868	475	397	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	472	398	-	475	397	-
Stage 1	-	-	-	-	-	-	670	654	-	677	660	-
Stage 2	-	-	-	-	-	-	831	660	-	825	653	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.13	0.1	12.68	12.64
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	472	47	-	-	37	-	-	475
HCM Lane V/C Ratio	0.007	0.003	-	-	0.003	-	-	0.007
HCM Control Delay (s/veh)	12.7	7.9	0	-	7.9	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	291	4	3	287	3	3	0	0	3	0	0
Future Vol, veh/h	3	291	4	3	287	3	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	306	4	3	302	3	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	311	0	0	472	626	155	469	627	153
Stage 1	-	-	-	-	-	-	315	315	-	310	310	-
Stage 2	-	-	-	-	-	-	157	312	-	159	317	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1267	-	-	1261	-	-	480	403	869	482	403	873
Stage 1	-	-	-	-	-	-	676	659	-	681	663	-
Stage 2	-	-	-	-	-	-	835	661	-	833	658	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1261	-	-	477	401	869	479	401	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	477	401	-	479	401	-
Stage 1	-	-	-	-	-	-	675	658	-	679	661	-
Stage 2	-	-	-	-	-	-	833	660	-	830	656	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.1	12.6	12.56
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	477	36	-	-	36	-	-	479
HCM Lane V/C Ratio	0.007	0.002	-	-	0.003	-	-	0.007
HCM Control Delay (s/veh)	12.6	7.8	0	-	7.9	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	306	0	4	280	0	3	0	0	3	0	0
Future Vol, veh/h	4	306	0	4	280	0	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	322	0	4	295	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	295	0	0	322	0	0	486	634	161	473	634	147
Stage 1	-	-	-	-	-	-	331	331	-	303	303	-
Stage 2	-	-	-	-	-	-	156	303	-	169	331	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1278	-	-	1249	-	-	469	399	862	479	399	879
Stage 1	-	-	-	-	-	-	662	649	-	687	667	-
Stage 2	-	-	-	-	-	-	837	667	-	822	649	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1278	-	-	1249	-	-	465	396	862	476	396	879
Mov Cap-2 Maneuver	-	-	-	-	-	-	465	396	-	476	396	-
Stage 1	-	-	-	-	-	-	660	647	-	684	665	-
Stage 2	-	-	-	-	-	-	834	665	-	819	647	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.13	0.14	12.79	12.62
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	465	46	-	-	51	-	-	476
HCM Lane V/C Ratio	0.007	0.003	-	-	0.003	-	-	0.007
HCM Control Delay (s/veh)	12.8	7.8	0	-	7.9	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	289	8	8	276	0	16	0	18	3	0	0
Future Vol, veh/h	4	289	8	8	276	0	16	0	18	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	304	8	8	291	0	17	0	19	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	291	0	0	313	0	0	479	624	156	468	628	145
Stage 1	-	-	-	-	-	-	317	317	-	307	307	-
Stage 2	-	-	-	-	-	-	162	307	-	161	321	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1283	-	-	1259	-	-	474	404	868	483	402	882
Stage 1	-	-	-	-	-	-	674	658	-	683	664	-
Stage 2	-	-	-	-	-	-	830	664	-	831	655	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1283	-	-	1259	-	-	469	400	868	467	398	882
Mov Cap-2 Maneuver	-	-	-	-	-	-	469	400	-	467	398	-
Stage 1	-	-	-	-	-	-	672	656	-	678	659	-
Stage 2	-	-	-	-	-	-	824	659	-	810	653	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.13	0.27	11.16	12.76
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	620	46	-	-	101	-	-	467
HCM Lane V/C Ratio	0.058	0.003	-	-	0.007	-	-	0.007
HCM Control Delay (s/veh)	11.2	7.8	0	-	7.9	0.1	-	12.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	300	13	21	269	18	22
Future Vol, veh/h	300	13	21	269	18	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	316	14	22	283	19	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	329	0	508	165
Stage 1	-	-	-	-	323	-
Stage 2	-	-	-	-	186	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1241	-	499	857
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	833	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1241	-	489	857
Mov Cap-2 Maneuver	-	-	-	-	489	-
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	817	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.7	11.02
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	640	-	-	261	-
HCM Lane V/C Ratio	0.066	-	-	0.018	-
HCM Control Delay (s/veh)	11	-	-	8	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	286	45	27	269	20	23
Future Vol, veh/h	286	45	27	269	20	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	301	47	28	283	21	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	348	0	523	174
Stage 1	-	-	-	-	325	-
Stage 2	-	-	-	-	198	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1222	-	488	845
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	822	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1222	-	476	845
Mov Cap-2 Maneuver	-	-	-	-	476	-
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	801	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.88	11.25
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	621	-	-	328	-
HCM Lane V/C Ratio	0.073	-	-	0.023	-
HCM Control Delay (s/veh)	11.2	-	-	8	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	292	13	13	298	16	41
Future Vol, veh/h	292	13	13	298	16	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	307	14	14	314	17	43

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	321	0	498	161
Stage 1	-	-	-	-	314	-
Stage 2	-	-	-	-	184	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1250	-	506	862
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	835	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1250	-	500	862
Mov Cap-2 Maneuver	-	-	-	-	500	-
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	825	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.41	10.48
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	717	-	-	150	-
HCM Lane V/C Ratio	0.084	-	-	0.011	-
HCM Control Delay (s/veh)	10.5	-	-	7.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	303	12	11	327	10	30
Future Vol, veh/h	303	12	11	327	10	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	319	13	12	344	11	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	332	0	521	166
Stage 1	-	-	-	-	325	-
Stage 2	-	-	-	-	195	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1239	-	490	856
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	824	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1239	-	485	856
Mov Cap-2 Maneuver	-	-	-	-	485	-
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	816	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	10.32
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	719	-	-	117	-
HCM Lane V/C Ratio	0.059	-	-	0.009	-
HCM Control Delay (s/veh)	10.3	-	-	7.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	333	314	47	119	42
Future Vol, veh/h	42	333	314	47	119	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	44	351	331	49	125	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	380	0	-	0	619	190
Stage 1	-	-	-	-	355	-
Stage 2	-	-	-	-	264	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1190	-	-	-	425	826
Stage 1	-	-	-	-	686	-
Stage 2	-	-	-	-	762	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1190	-	-	-	409	826
Mov Cap-2 Maneuver	-	-	-	-	508	-
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	762	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.91	0	14.09
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1190	-	-	-	564
HCM Lane V/C Ratio	0.037	-	-	-	0.3
HCM Control Delay (s/veh)	8.1	-	-	-	14.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	244	222	71	342	0	0	0	0	36	9	19
Future Volume (veh/h)	0	244	222	71	342	0	0	0	0	36	9	19
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1710	1710	1620	1710	0				1620	1710	1710
Adj Flow Rate, veh/h	0	257	234	75	360	0				34	15	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	965	846	92	2360	0				88	38	50
Arrive On Green	0.00	0.59	0.59	0.06	0.73	0.00				0.06	0.06	0.06
Sat Flow, veh/h	0	1724	1437	1543	3335	0				1543	665	886
Grp Volume(v), veh/h	0	255	236	75	360	0				34	0	35
Grp Sat Flow(s),veh/h/ln	0	1625	1451	1543	1625	0				1543	0	1551
Q Serve(g_s), s	0.0	4.6	4.8	2.9	2.0	0.0				1.3	0.0	1.3
Cycle Q Clear(g_c), s	0.0	4.6	4.8	2.9	2.0	0.0				1.3	0.0	1.3
Prop In Lane	0.00		0.99	1.00		0.00				1.00		0.57
Lane Grp Cap(c), veh/h	0	956	854	92	2360	0				88	0	88
V/C Ratio(X)	0.00	0.27	0.28	0.82	0.15	0.00				0.39	0.00	0.40
Avail Cap(c_a), veh/h	0	956	854	239	2360	0				129	0	129
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.0	6.1	27.9	2.5	0.0				27.3	0.0	27.3
Incr Delay (d2), s/veh	0.0	0.7	0.8	6.5	0.1	0.0				1.0	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	1.0	1.1	0.2	0.0				0.5	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	6.7	6.9	34.4	2.7	0.0				28.3	0.0	28.4
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		491			435						69	
Approach Delay, s/veh		6.8			8.1						28.3	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.3	41.3		10.4		49.6
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0
Max Green Setting (Gmax), s	9.3	28.0		5.0		42.0
Max Q Clear Time (g_c+I1), s	4.9	6.8		3.3		4.0
Green Ext Time (p_c), s	0.0	1.5		0.0		1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	8.9
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	255	0	0	223	52	172	0	91	0	0	0
Future Volume (veh/h)	21	255	0	0	223	52	172	0	91	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1800	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	22	268	0	0	235	55	181	0	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	154	2263	0	0	1631	727	247	0				
Arrive On Green	0.09	0.63	0.00	0.00	0.45	0.45	0.14	0.00	0.00			
Sat Flow, veh/h	1714	3705	0	0	3705	1610	1810	0	1610			
Grp Volume(v), veh/h	22	268	0	0	235	55	181	0	0			
Grp Sat Flow(s),veh/h/ln	1714	1805	0	0	1805	1610	1810	0	1610			
Q Serve(g_s), s	0.7	1.6	0.0	0.0	2.1	1.1	5.3	0.0	0.0			
Cycle Q Clear(g_c), s	0.7	1.6	0.0	0.0	2.1	1.1	5.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	154	2263	0	0	1631	727	247	0				
V/C Ratio(X)	0.14	0.12	0.00	0.00	0.14	0.08	0.73	0.00				
Avail Cap(c_a), veh/h	165	2263	0	0	1631	727	658	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	23.1	4.1	0.0	0.0	8.8	8.6	22.8	0.0	0.0			
Incr Delay (d2), s/veh	0.4	0.1	0.0	0.0	0.2	0.2	4.2	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.0	0.0	0.6	0.3	2.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.5	4.2	0.0	0.0	9.0	8.8	26.9	0.0	0.0			
LnGrp LOS	C	A			A	A	C					
Approach Vol, veh/h		290			290			181				
Approach Delay, s/veh		5.7			9.0			26.9				
Approach LOS		A			A			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		40.5			9.6	30.8		14.5				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		22.0			5.3	12.0		20.0				
Max Q Clear Time (g_c+I1), s		3.6			2.7	4.1		7.3				
Green Ext Time (p_c), s		1.3			0.0	0.8		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.0
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	1	42	2	0	0	51	463	20	9	365	35
Future Vol, veh/h	16	1	42	2	0	0	51	463	20	9	365	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	17	1	44	2	0	0	54	487	21	9	384	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1016	1037	211	806	1035	487	421	0	0	508	0	0
Stage 1	422	422	-	595	595	-	-	-	-	-	-	-
Stage 2	595	616	-	212	440	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	206	233	801	289	234	584	1149	-	-	1067	-	-
Stage 1	586	592	-	494	496	-	-	-	-	-	-	-
Stage 2	494	485	-	777	581	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	195	220	801	257	221	584	1149	-	-	1067	-	-
Mov Cap-2 Maneuver	195	220	-	257	221	-	-	-	-	-	-	-
Stage 1	580	587	-	471	473	-	-	-	-	-	-	-
Stage 2	471	462	-	726	576	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.94	19.12	0.79	0.18
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1149	-	-	424	257	1067	-	-
HCM Lane V/C Ratio	0.047	-	-	0.146	0.008	0.009	-	-
HCM Control Delay (s/veh)	8.3	-	-	14.9	19.1	8.4	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0	0	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	119	0	0	0	79	540	0	0	385	30
Future Vol, veh/h	20	0	119	0	0	0	79	540	0	0	385	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	21	0	125	0	0	0	83	568	0	0	405	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	872	1156	218	937	1172	284	437	0	0	568	0	0
Stage 1	421	421	-	735	735	-	-	-	-	-	-	-
Stage 2	451	735	-	203	437	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	248	198	792	222	194	719	1134	-	-	1014	-	-
Stage 1	586	592	-	382	429	-	-	-	-	-	-	-
Stage 2	563	429	-	786	583	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	230	184	792	173	180	719	1134	-	-	1014	-	-
Mov Cap-2 Maneuver	230	184	-	173	180	-	-	-	-	-	-	-
Stage 1	586	592	-	354	397	-	-	-	-	-	-	-
Stage 2	522	397	-	662	583	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.1	0	1.08	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1134	-	-	230	792	-	1014	-	-
HCM Lane V/C Ratio	0.073	-	-	0.092	0.158	-	-	-	-
HCM Control Delay (s/veh)	8.4	-	-	22.2	10.4	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.6	-	0	-	-

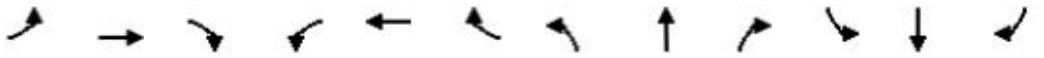
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	495	11	90	533	31	8	0	139	25	0	9
Future Vol, veh/h	2	495	11	90	533	31	8	0	139	25	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	521	12	95	561	33	8	0	146	26	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	594	0	0	533	0	0	1001	1314	266	1032	1304	297
Stage 1	-	-	-	-	-	-	531	531	-	767	767	-
Stage 2	-	-	-	-	-	-	470	783	-	265	537	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	992	-	-	1045	-	-	200	160	738	190	162	705
Stage 1	-	-	-	-	-	-	505	529	-	365	414	-
Stage 2	-	-	-	-	-	-	548	407	-	723	526	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	992	-	-	1045	-	-	179	145	738	138	147	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	179	145	-	138	147	-
Stage 1	-	-	-	-	-	-	504	528	-	332	377	-
Stage 2	-	-	-	-	-	-	492	370	-	579	525	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	1.21	12.55	30.68
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	631	992	-	-	1045	-	-	176
HCM Lane V/C Ratio	0.245	0.002	-	-	0.091	-	-	0.204
HCM Control Delay (s/veh)	12.6	8.6	-	-	8.8	-	-	30.7
HCM Lane LOS	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1	0	-	-	0.3	-	-	0.7



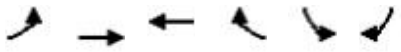
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	676	11	90	668	153	8	2	79	207	7	16
Future Volume (veh/h)	15	676	11	90	668	153	8	2	79	207	7	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1976	1800	1900	1900	1872	1900	1900
Adj Flow Rate, veh/h	16	712	12	95	703	161	8	2	83	223	0	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	31	1184	20	136	1638	370	150	166	141	1109	0	501
Arrive On Green	0.02	0.33	0.33	0.08	0.39	0.39	0.09	0.09	0.09	0.31	0.00	0.31
Sat Flow, veh/h	1714	3633	61	1714	4229	957	1714	1900	1610	3566	0	1610
Grp Volume(v), veh/h	16	354	370	95	573	291	8	2	83	223	0	17
Grp Sat Flow(s),veh/h/ln	1714	1805	1889	1714	1729	1728	1714	1900	1610	1783	0	1610
Q Serve(g_s), s	0.8	15.1	15.1	5.0	11.2	11.4	0.4	0.1	4.5	4.2	0.0	0.7
Cycle Q Clear(g_c), s	0.8	15.1	15.1	5.0	11.2	11.4	0.4	0.1	4.5	4.2	0.0	0.7
Prop In Lane	1.00		0.03	1.00		0.55	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	588	616	136	1339	669	150	166	141	1109	0	501
V/C Ratio(X)	0.51	0.60	0.60	0.70	0.43	0.43	0.05	0.01	0.59	0.20	0.00	0.03
Avail Cap(c_a), veh/h	271	699	731	271	1339	669	533	591	501	1109	0	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	25.9	25.9	41.1	20.6	20.7	38.4	38.2	40.3	23.2	0.0	22.0
Incr Delay (d2), s/veh	12.3	1.0	1.0	6.3	1.0	2.1	0.1	0.0	3.9	0.4	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	6.2	6.5	2.3	4.5	4.8	0.2	0.0	2.0	1.8	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.9	26.9	26.9	47.4	21.6	22.7	38.5	38.3	44.2	23.6	0.0	22.1
LnGrp LOS	E	C	C	D	C	C	D	D	D	C		C
Approach Vol, veh/h		740			959			93			240	
Approach Delay, s/veh		27.6			24.5			43.6			23.5	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	34.4		33.0	6.2	40.0		12.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	14.5	35.5		28.5	14.5	35.5		28.5				
Max Q Clear Time (g_c+I1), s	7.0	17.1		6.2	2.8	13.4		6.5				
Green Ext Time (p_c), s	0.1	4.0		0.8	0.0	5.8		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	26.4
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	529	542	0	255	415
Future Volume (veh/h)	0	529	542	0	255	415
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1700	1976
Adj Flow Rate, veh/h	0	557	571	0	268	437
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1833	1833	0	966	515
Arrive On Green	0.00	0.51	0.51	0.00	0.31	0.31
Sat Flow, veh/h	0	3800	3800	0	3141	1675
Grp Volume(v), veh/h	0	557	571	0	268	437
Grp Sat Flow(s),veh/h/ln	0	1805	1805	0	1570	1675
Q Serve(g_s), s	0.0	5.8	6.0	0.0	4.2	15.9
Cycle Q Clear(g_c), s	0.0	5.8	6.0	0.0	4.2	15.9
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1833	1833	0	966	515
V/C Ratio(X)	0.00	0.30	0.31	0.00	0.28	0.85
Avail Cap(c_a), veh/h	0	1833	1833	0	1015	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.3	9.4	0.0	17.0	21.1
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.0	0.2	11.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	2.1	0.0	1.5	7.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	9.7	9.8	0.0	17.2	33.0
LnGrp LOS		A	A		B	C
Approach Vol, veh/h		557	571		705	
Approach Delay, s/veh		9.7	9.8		27.0	
Approach LOS		A	A		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	39.0	26.0	39.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	32.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	7.8	17.9	8.0
Green Ext Time (p_c), s	3.1	1.1	3.1

Intersection Summary	
HCM 7th Control Delay, s/veh	16.4
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	392	0	0	690	48	356	89	308	7	0	285
Future Volume (veh/h)	116	392	0	0	690	48	356	89	308	7	0	285
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	0	0	1900	1900	1800	1900	1900	1800	0	1976
Adj Flow Rate, veh/h	122	413	0	0	726	51	235	291	324	7	0	300
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	357	2577	0	0	1332	93	394	436	740	0	0	0
Arrive On Green	0.11	0.50	0.00	0.00	0.27	0.27	0.23	0.23	0.23	0.00	0.00	0.00
Sat Flow, veh/h	3141	5358	0	0	5121	346	1714	1900	3220		0	
Grp Volume(v), veh/h	122	413	0	0	506	271	235	291	324		0.0	
Grp Sat Flow(s),veh/h/ln	1570	1729	0	0	1729	1838	1714	1900	1610			
Q Serve(g_s), s	1.6	1.9	0.0	0.0	5.5	5.5	5.4	6.1	3.8			
Cycle Q Clear(g_c), s	1.6	1.9	0.0	0.0	5.5	5.5	5.4	6.1	3.8			
Prop In Lane	1.00		0.00	0.00		0.19	1.00		1.00			
Lane Grp Cap(c), veh/h	357	2577	0	0	931	495	394	436	740			
V/C Ratio(X)	0.34	0.16	0.00	0.00	0.54	0.55	0.60	0.67	0.44			
Avail Cap(c_a), veh/h	358	5201	0	0	2679	1424	508	563	954			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	17.9	6.0	0.0	0.0	13.7	13.7	15.1	15.4	14.5			
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	0.4	0.7	1.7	2.3	0.5			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.0	0.0	1.8	1.9	1.8	2.3	1.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.3	6.1	0.0	0.0	14.1	14.5	16.8	17.7	15.0			
LnGrp LOS	B	A			B	B	B	B	B			
Approach Vol, veh/h		535			777			850				
Approach Delay, s/veh		8.9			14.2			16.4				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		27.8			10.0	17.8		16.1				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		13.0				
Max Q Clear Time (g_c+I1), s		3.9			3.6	7.5		8.1				
Green Ext Time (p_c), s		2.4			0.0	4.3		2.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.8
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	3	3	28	0	71	6	397	11	24	232	0
Future Vol, veh/h	0	3	3	28	0	71	6	397	11	24	232	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	0	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	3	3	29	0	75	6	418	12	25	244	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	725	737	244	727	725	418	244	0	0	429	0	0
Stage 1	295	295	-	431	431	-	-	-	-	-	-	-
Stage 2	431	442	-	296	295	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	343	348	800	342	354	639	1334	-	-	1141	-	-
Stage 1	718	673	-	607	587	-	-	-	-	-	-	-
Stage 2	607	580	-	717	673	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	295	339	800	329	344	639	1334	-	-	1141	-	-
Mov Cap-2 Maneuver	295	339	-	329	344	-	-	-	-	-	-	-
Stage 1	702	658	-	604	584	-	-	-	-	-	-	-
Stage 2	533	577	-	695	658	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.66	13.99	0.11	0.77
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1334	-	-	476	504	1141	-	-
HCM Lane V/C Ratio	0.005	-	-	0.013	0.207	0.022	-	-
HCM Control Delay (s/veh)	7.7	-	-	12.7	14	8.2	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.8	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	8	390	23	6	218
Future Vol, veh/h	28	8	390	23	6	218
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	29	8	411	24	6	229

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	653	411	0	0	435	0
Stage 1	411	-	-	-	-	-
Stage 2	242	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	435	645	-	-	1136	-
Stage 1	674	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	433	645	-	-	1136	-
Mov Cap-2 Maneuver	433	-	-	-	-	-
Stage 1	674	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.39	0	0.22
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	467	48	-
HCM Lane V/C Ratio	-	-	0.081	0.006	-
HCM Control Delay (s/veh)	-	-	13.4	8.2	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	3	27	0	0	2	23	52	0	49	0
Future Vol, veh/h	0	0	3	27	0	0	2	23	52	0	49	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	3	28	0	0	2	24	55	0	52	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	80	135	52	107	107	52	52	0	0	79	0	0
Stage 1	52	52	-	56	56	-	-	-	-	-	-	-
Stage 2	28	83	-	52	52	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	913	760	1022	876	786	1022	1567	-	-	1532	-	-
Stage 1	966	856	-	961	852	-	-	-	-	-	-	-
Stage 2	994	830	-	966	856	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	912	759	1022	873	785	1022	1567	-	-	1532	-	-
Mov Cap-2 Maneuver	912	759	-	873	785	-	-	-	-	-	-	-
Stage 1	966	856	-	960	851	-	-	-	-	-	-	-
Stage 2	992	829	-	963	856	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.53	9.26	0.19	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	41	-	-	1022	873	1532	-	-
HCM Lane V/C Ratio	0.001	-	-	0.003	0.033	-	-	-
HCM Control Delay (s/veh)	7.3	0	-	8.5	9.3	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	45	1	11	42	16	0	18	6	20	30	17
Future Vol, veh/h	18	45	1	11	42	16	0	18	6	20	30	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	47	1	12	44	17	0	19	6	21	32	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	124	108	41	119	114	22	49	0	0	25	0	0
Stage 1	83	83	-	22	22	-	-	-	-	-	-	-
Stage 2	41	25	-	97	92	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	855	786	1036	861	780	1061	1570	-	-	1602	-	-
Stage 1	931	830	-	1001	881	-	-	-	-	-	-	-
Stage 2	979	878	-	914	823	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	784	776	1036	797	770	1061	1570	-	-	1602	-	-
Mov Cap-2 Maneuver	784	776	-	797	770	-	-	-	-	-	-	-
Stage 1	918	819	-	1001	881	-	-	-	-	-	-	-
Stage 2	915	878	-	849	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.04	9.77	0	2.17
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1570	-	-	781	827	1602	-	-
HCM Lane V/C Ratio	-	-	-	0.086	0.088	0.013	-	-
HCM Control Delay (s/veh)	0	-	-	10	9.8	7.3	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	50	0	0	0	0	38	28	25	17	0
Future Vol, veh/h	11	0	50	0	0	0	0	38	28	25	17	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	0	53	0	0	0	0	40	29	26	18	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.2	7.9	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	58%	0%	0%	0%	100%
Vol Right, %	42%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	66	11	50	25	17
LT Vol	0	11	0	25	0
Through Vol	38	0	0	0	17
RT Vol	28	0	50	0	0
Lane Flow Rate	69	12	53	26	18
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.085	0.017	0.058	0.038	0.023
Departure Headway (Hd)	4.389	5.194	3.993	5.148	4.647
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	811	682	884	693	767
Service Time	2.442	2.979	1.777	2.897	2.396
HCM Lane V/C Ratio	0.085	0.018	0.06	0.038	0.023
HCM Control Delay, s/veh	7.9	8.1	7	8.1	7.5
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.3	0.1	0.2	0.1	0.1

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	22	21	8	25	18	30
Future Vol, veh/h	22	21	8	25	18	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	23	22	8	26	19	32
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7.1	7.6	7.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	30	22	21	8	25
LT Vol	18	0	0	0	8	0
Through Vol	0	0	22	0	0	25
RT Vol	0	30	0	21	0	0
Lane Flow Rate	19	32	23	22	8	26
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.027	0.035	0.03	0.024	0.012	0.034
Departure Headway (Hd)	5.134	3.933	4.605	3.904	5.112	4.611
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	694	903	775	913	699	774
Service Time	2.888	1.687	2.347	1.646	2.853	2.352
HCM Lane V/C Ratio	0.027	0.035	0.03	0.024	0.011	0.034
HCM Control Delay, s/veh	8	6.8	7.5	6.7	7.9	7.5
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1	0.1	0	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	201	183	190	125	3	128	42	253	15	70	12
Future Volume (veh/h)	12	201	183	190	125	3	128	42	253	15	70	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	13	212	193	200	132	3	135	44	266	16	74	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	27	381	330	248	1216	28	457	452	383	486	733	126
Arrive On Green	0.02	0.22	0.22	0.15	0.36	0.36	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1619	1738	1502	1619	3419	77	1191	1800	1525	1311	2920	500
Grp Volume(v), veh/h	13	208	197	200	66	69	135	44	266	16	43	44
Grp Sat Flow(s),veh/h/ln	1619	1710	1530	1619	1710	1786	1191	1800	1525	1311	1710	1710
Q Serve(g_s), s	0.3	4.3	4.6	4.7	1.0	1.0	3.9	0.7	6.3	0.4	0.8	0.8
Cycle Q Clear(g_c), s	0.3	4.3	4.6	4.7	1.0	1.0	4.7	0.7	6.3	1.1	0.8	0.8
Prop In Lane	1.00		0.98	1.00		0.04	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	27	375	336	248	608	635	457	452	383	486	429	429
V/C Ratio(X)	0.48	0.56	0.59	0.81	0.11	0.11	0.30	0.10	0.69	0.03	0.10	0.10
Avail Cap(c_a), veh/h	249	1624	1453	348	1727	1804	1331	1773	1503	1449	1684	1684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.3	13.7	13.8	16.2	8.5	8.5	13.2	11.4	13.4	11.8	11.4	11.4
Incr Delay (d2), s/veh	12.4	1.3	1.6	9.2	0.1	0.1	0.4	0.1	2.3	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.2	1.2	1.9	0.3	0.3	0.9	0.3	2.0	0.1	0.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.7	15.0	15.5	25.4	8.6	8.6	13.6	11.5	15.7	11.8	11.5	11.5
LnGrp LOS	C	B	B	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		418			335			445			103	
Approach Delay, s/veh		15.7			18.6			14.6			11.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	14.5		14.5	5.2	19.9		14.5				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	8.5	37.6		39.0	6.1	40.0		39.0				
Max Q Clear Time (g_c+I1), s	6.3	6.6		8.3	2.3	3.0		3.1				
Green Ext Time (p_c), s	0.1	2.2		1.7	0.0	0.7		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.8
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	389	54	77	270	25	88	8	135	36	8	19
Future Volume (veh/h)	29	389	54	77	270	25	88	8	135	36	8	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	31	409	57	81	284	26	93	8	142	38	8	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	598	1255	174	522	1319	120	442	302	256	460	76	191
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	972	3017	418	842	3170	288	1256	1800	1525	1279	456	1139
Grp Volume(v), veh/h	31	231	235	81	152	158	93	8	142	38	0	28
Grp Sat Flow(s),veh/h/ln	972	1710	1725	842	1710	1748	1256	1800	1525	1279	0	1595
Q Serve(g_s), s	0.6	2.6	2.7	2.1	1.6	1.7	2.0	0.1	2.5	0.7	0.0	0.4
Cycle Q Clear(g_c), s	2.3	2.6	2.7	4.7	1.6	1.7	2.4	0.1	2.5	0.8	0.0	0.4
Prop In Lane	1.00		0.24	1.00		0.16	1.00		1.00	1.00		0.71
Lane Grp Cap(c), veh/h	598	711	717	522	711	727	442	302	256	460	0	267
V/C Ratio(X)	0.05	0.32	0.33	0.16	0.21	0.22	0.21	0.03	0.56	0.08	0.00	0.10
Avail Cap(c_a), veh/h	1340	2017	2035	1166	2017	2062	1713	2123	1799	1825	0	1970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.1	5.7	5.7	7.3	5.4	5.4	11.2	10.0	11.0	10.4	0.0	10.2
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.1	0.1	0.2	0.0	1.9	0.1	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.4	0.2	0.2	0.2	0.4	0.0	0.7	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.2	5.9	6.0	7.4	5.5	5.6	11.4	10.1	12.9	10.5	0.0	10.3
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		497			391			243			66	
Approach Delay, s/veh		6.0			5.9			12.2			10.4	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.8	11.0	17.8	11.0
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	34.0	34.0	34.0	* 36
Max Q Clear Time (g_c+I1), s	4.7	4.5	6.7	2.8
Green Ext Time (p_c), s	2.7	0.8	2.1	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	7.5
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	470	129	41	440	15	78	8	47	9	0	2
Future Volume (veh/h)	9	470	129	41	440	15	78	8	47	9	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	9	495	136	43	463	16	82	8	49	9	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	604	1208	330	536	1534	53	453	16	200	497	0	200
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.13	0.13	0.13	0.13	0.00	0.13
Sat Flow, veh/h	832	2654	725	723	3373	116	1281	125	1525	1516	0	1525
Grp Volume(v), veh/h	9	318	313	43	234	245	90	0	49	9	0	2
Grp Sat Flow(s),veh/h/ln	832	1710	1669	723	1710	1779	1406	0	1525	1516	0	1525
Q Serve(g_s), s	0.2	3.0	3.0	1.0	2.1	2.1	1.3	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.3	3.0	3.0	4.1	2.1	2.1	1.4	0.0	0.7	0.1	0.0	0.0
Prop In Lane	1.00		0.43	1.00		0.07	0.91		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	604	778	760	536	778	809	469	0	200	497	0	200
V/C Ratio(X)	0.01	0.41	0.41	0.08	0.30	0.30	0.19	0.00	0.24	0.02	0.00	0.01
Avail Cap(c_a), veh/h	1018	1627	1589	895	1627	1693	2132	0	2020	2112	0	2020
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.9	4.4	4.4	5.8	4.2	4.2	9.7	0.0	9.4	9.2	0.0	9.1
Incr Delay (d2), s/veh	0.0	0.3	0.4	0.1	0.2	0.2	0.2	0.0	0.6	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.1	0.3	0.3	0.3	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.9	4.8	4.8	5.8	4.4	4.4	9.9	0.0	10.0	9.2	0.0	9.2
LnGrp LOS	A	A	A	A	A	A	A		B	A		A
Approach Vol, veh/h		640			522			139			11	
Approach Delay, s/veh		4.8			4.5			10.0			9.2	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.4	7.8	16.4	7.8
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	23.0	32.0	23.0	32.0
Max Q Clear Time (g_c+I1), s	5.0	3.4	6.1	2.1
Green Ext Time (p_c), s	3.4	0.6	2.9	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.2
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	341	27	24	289	155	44	64	27	222	95	211
Future Volume (veh/h)	180	341	27	24	289	155	44	64	27	222	95	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	189	359	28	25	304	163	46	67	28	234	100	222
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	320	583	45	240	465	243	145	102	43	436	133	296
Arrive On Green	0.11	0.18	0.18	0.13	0.21	0.21	0.08	0.08	0.08	0.25	0.25	0.25
Sat Flow, veh/h	1714	3215	250	1810	2170	1135	1810	1272	532	1714	525	1165
Grp Volume(v), veh/h	189	190	197	25	238	229	46	0	95	234	0	322
Grp Sat Flow(s),veh/h/ln	1714	1710	1755	1810	1710	1596	1810	0	1804	1714	0	1690
Q Serve(g_s), s	5.9	5.7	5.7	0.7	7.0	7.3	1.3	0.0	2.8	6.5	0.0	9.7
Cycle Q Clear(g_c), s	5.9	5.7	5.7	0.7	7.0	7.3	1.3	0.0	2.8	6.5	0.0	9.7
Prop In Lane	1.00		0.14	1.00		0.71	1.00		0.29	1.00		0.69
Lane Grp Cap(c), veh/h	320	310	318	240	366	342	145	0	145	436	0	430
V/C Ratio(X)	0.59	0.61	0.62	0.10	0.65	0.67	0.32	0.00	0.66	0.54	0.00	0.75
Avail Cap(c_a), veh/h	320	775	795	240	778	726	164	0	164	777	0	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.2	20.8	20.8	21.0	19.8	19.9	24.0	0.0	24.6	17.8	0.0	19.0
Incr Delay (d2), s/veh	2.9	2.0	2.0	0.2	1.9	2.3	1.2	0.0	7.8	1.0	0.0	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.2	2.3	0.3	2.7	2.7	0.6	0.0	1.4	2.4	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.0	22.8	22.8	21.2	21.7	22.2	25.2	0.0	32.4	18.8	0.0	21.6
LnGrp LOS	C	C	C	C	C	C	C		C	B		C
Approach Vol, veh/h		576			492			141			556	
Approach Delay, s/veh		23.8			21.9			30.1			20.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	15.1		9.0	10.6	16.4		19.1				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.3	* 25		5.0	6.1	25.1		25.0				
Max Q Clear Time (g_c+I1), s	12.3	7.7		4.8	7.9	9.3		11.7				
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	2.6		2.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	22.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	346	153	69	280	150	80
Future Volume (veh/h)	346	153	69	280	150	80
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	364	161	73	295	158	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	811	353	121	1943	251	236
Arrive On Green	0.35	0.35	0.07	0.57	0.15	0.15
Sat Flow, veh/h	2409	1009	1619	3510	1619	1525
Grp Volume(v), veh/h	267	258	73	295	158	84
Grp Sat Flow(s),veh/h/ln	1710	1618	1619	1710	1619	1525
Q Serve(g_s), s	3.8	3.9	1.4	1.3	2.9	1.5
Cycle Q Clear(g_c), s	3.8	3.9	1.4	1.3	2.9	1.5
Prop In Lane		0.62	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	598	566	121	1943	251	236
V/C Ratio(X)	0.45	0.46	0.60	0.15	0.63	0.36
Avail Cap(c_a), veh/h	1296	1226	387	3844	1340	1263
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.9	7.9	14.1	3.2	12.4	11.9
Incr Delay (d2), s/veh	0.5	0.6	4.7	0.0	2.6	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.0	0.6	0.2	0.9	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.4	8.5	18.8	3.2	15.0	12.8
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h	525			368	242	
Approach Delay, s/veh	8.4			6.3	14.3	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.9	15.6		9.0		22.4
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	7.5	* 24		26.0		35.3
Max Q Clear Time (g_c+I1), s	3.4	5.9		4.9		3.3
Green Ext Time (p_c), s	0.0	3.1		0.7		2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	9.0
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	48	46	167	44	71	28	537	207	77	333	9
Future Volume (veh/h)	1	48	46	167	44	71	28	537	207	77	333	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	51	48	176	46	75	29	565	0	81	351	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	379	213	200	399	154	250	55	680		115	1413	36
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.03	0.38	0.00	0.07	0.41	0.41
Sat Flow, veh/h	1155	853	803	1178	616	1004	1619	1800	1525	1619	3407	87
Grp Volume(v), veh/h	1	0	99	176	0	121	29	565	0	81	176	184
Grp Sat Flow(s),veh/h/ln	1155	0	1656	1178	0	1619	1619	1800	1525	1619	1710	1784
Q Serve(g_s), s	0.0	0.0	2.1	6.3	0.0	2.7	0.8	12.7	0.0	2.2	3.0	3.0
Cycle Q Clear(g_c), s	2.7	0.0	2.1	8.4	0.0	2.7	0.8	12.7	0.0	2.2	3.0	3.0
Prop In Lane	1.00		0.48	1.00		0.62	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	379	0	413	399	0	404	55	680		115	709	740
V/C Ratio(X)	0.00	0.00	0.24	0.44	0.00	0.30	0.53	0.83		0.71	0.25	0.25
Avail Cap(c_a), veh/h	569	0	685	592	0	670	380	906		380	860	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	13.4	16.8	0.0	13.6	21.3	12.6	0.0	20.3	8.5	8.5
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.8	0.0	0.4	7.7	5.0	0.0	7.7	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.7	1.5	0.0	0.9	0.4	4.8	0.0	1.0	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	0.0	13.7	17.5	0.0	14.0	29.0	17.6	0.0	28.0	8.7	8.7
LnGrp LOS	B		B	B		B	C	B		C	A	A
Approach Vol, veh/h		100			297			594			441	
Approach Delay, s/veh		13.7			16.1			18.2			12.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	23.1		15.7	7.7	21.4		15.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.5	22.5		18.5	10.5	22.5		18.5
Max Q Clear Time (g_c+I1), s	12.8	5.0		10.4	4.2	14.7		4.7
Green Ext Time (p_c), s	0.0	1.8		0.8	0.1	2.2		0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	15.6
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	118	0	83	323	812	0	0	483	174
Future Volume (veh/h)	0	0	0	118	0	83	323	812	0	0	483	174
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				124	0	87	340	855	0	0	508	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				277	0	247	567	2183	0	0	644	
Arrive On Green				0.16	0.00	0.16	0.70	1.00	0.00	0.00	0.19	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				124	0	87	340	855	0	0	508	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				3.9	0.0	3.0	6.5	0.0	0.0	0.0	8.5	0.0
Cycle Q Clear(g_c), s				3.9	0.0	3.0	6.5	0.0	0.0	0.0	8.5	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				277	0	247	567	2183	0	0	644	
V/C Ratio(X)				0.45	0.00	0.35	0.60	0.39	0.00	0.00	0.79	
Avail Cap(c_a), veh/h				286	0	254	567	2183	0	0	741	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.76	0.76	0.00	0.00	0.95	0.00
Uniform Delay (d), s/veh				22.7	0.0	22.4	6.8	0.0	0.0	0.0	23.2	0.0
Incr Delay (d2), s/veh				1.1	0.0	0.9	0.9	0.4	0.0	0.0	9.1	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.6	0.0	1.1	1.5	0.1	0.0	0.0	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				23.9	0.0	23.2	7.8	0.4	0.0	0.0	32.3	0.0
LnGrp LOS				C		C	A	A			C	
Approach Vol, veh/h					211			1195			508	
Approach Delay, s/veh					23.6			2.5			32.3	
Approach LOS					C			A			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	7.0	17.3		15.7		44.3						
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0						
Max Green Setting (Gmax), s	20.3	* 13		10.0		38.0						
Max Q Clear Time (g_c+I1), s	8.5	10.5		5.9		2.0						
Green Ext Time (p_c), s	0.4	0.8		0.3		6.8						

Intersection Summary	
HCM 7th Control Delay, s/veh	12.7
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	317	354	190	952	449	69
Future Volume (veh/h)	317	354	190	952	449	69
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	334	373	200	1002	473	73
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	449	424	260	1787	842	129
Arrive On Green	0.28	0.28	0.16	0.52	0.57	0.57
Sat Flow, veh/h	1619	1525	1619	3510	3062	456
Grp Volume(v), veh/h	334	373	200	1002	271	275
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1718
Q Serve(g_s), s	11.3	14.0	7.1	11.9	6.0	6.1
Cycle Q Clear(g_c), s	11.3	14.0	7.1	11.9	6.0	6.1
Prop In Lane	1.00	1.00	1.00			0.27
Lane Grp Cap(c), veh/h	449	424	260	1787	484	487
V/C Ratio(X)	0.74	0.88	0.77	0.56	0.56	0.56
Avail Cap(c_a), veh/h	540	508	278	1787	484	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.67	0.67	0.90	0.90
Uniform Delay (d), s/veh	19.7	20.7	24.1	9.7	10.6	10.6
Incr Delay (d2), s/veh	3.4	12.9	7.0	0.9	4.2	4.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	6.0	3.0	3.7	2.2	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.1	33.6	31.1	10.5	14.8	14.9
LnGrp LOS	C	C	C	B	B	B
Approach Vol, veh/h	707			1202	546	
Approach Delay, s/veh	28.6			14.0	14.8	
Approach LOS	C			B	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.3	23.0			37.3	22.7
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	10.3	13.0			28.0	20.0
Max Q Clear Time (g_c+I1), s	9.1	8.1			13.9	16.0
Green Ext Time (p_c), s	0.0	1.4			5.9	0.6

Intersection Summary		
HCM 7th Control Delay, s/veh	18.4	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	13	25	46	18	312	15	675	40	251	667	18
Future Volume (veh/h)	84	13	25	46	18	312	15	675	40	251	667	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	88	14	26	48	19	328	16	711	42	264	702	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	243	536	478	500	536	478	32	878	52	297	1467	40
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.02	0.27	0.27	0.18	0.43	0.43
Sat Flow, veh/h	940	1710	1525	1243	1710	1525	1619	3281	194	1619	3401	92
Grp Volume(v), veh/h	88	14	26	48	19	328	16	370	383	264	353	368
Grp Sat Flow(s),veh/h/ln	940	1710	1525	1243	1710	1525	1619	1710	1765	1619	1710	1783
Q Serve(g_s), s	5.2	0.3	0.7	1.6	0.4	10.8	0.6	11.6	11.6	9.1	8.5	8.5
Cycle Q Clear(g_c), s	15.9	0.3	0.7	2.3	0.4	10.8	0.6	11.6	11.6	9.1	8.5	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.05
Lane Grp Cap(c), veh/h	243	536	478	500	536	478	32	457	472	297	737	769
V/C Ratio(X)	0.36	0.03	0.05	0.10	0.04	0.69	0.50	0.81	0.81	0.89	0.48	0.48
Avail Cap(c_a), veh/h	244	538	480	502	538	480	297	538	555	297	737	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	13.6	13.7	14.5	13.6	17.2	27.8	19.6	19.6	22.8	11.7	11.7
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.1	0.0	4.0	11.8	7.9	7.7	26.3	0.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.1	0.2	0.4	0.2	3.9	0.3	4.8	5.0	5.3	2.7	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.1	13.6	13.8	14.6	13.7	21.2	39.6	27.5	27.3	49.1	12.2	12.1
LnGrp LOS	C	B	B	B	B	C	D	C	C	D	B	B
Approach Vol, veh/h		128			395			769			985	
Approach Delay, s/veh		21.5			20.1			27.6			22.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	29.2		22.4	15.0	19.8		22.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	18.0		18.0	10.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	12.6	10.5		12.8	11.1	13.6		17.9				
Green Ext Time (p_c), s	0.0	2.6		1.1	0.0	1.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	23.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	147	40	54	243	204	20	170	21	243	236	146
Future Volume (veh/h)	186	147	40	54	243	204	20	170	21	243	236	146
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	196	155	42	57	256	215	21	179	22	256	248	154
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	481	990	261	565	665	564	458	1129	137	562	756	453
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1021	2678	705	1078	1800	1525	893	3071	372	1074	2056	1232
Grp Volume(v), veh/h	196	97	100	57	256	215	21	99	102	256	205	197
Grp Sat Flow(s),veh/h/ln	1021	1710	1673	1078	1800	1525	893	1710	1733	1074	1710	1578
Q Serve(g_s), s	6.0	1.3	1.4	1.3	3.6	3.5	0.6	1.3	1.4	7.2	2.9	3.1
Cycle Q Clear(g_c), s	9.6	1.3	1.4	2.7	3.6	3.5	3.7	1.3	1.4	8.6	2.9	3.1
Prop In Lane	1.00		0.42	1.00		1.00	1.00		0.21	1.00		0.78
Lane Grp Cap(c), veh/h	481	632	618	565	665	564	458	629	637	562	629	580
V/C Ratio(X)	0.41	0.15	0.16	0.10	0.38	0.38	0.05	0.16	0.16	0.46	0.33	0.34
Avail Cap(c_a), veh/h	640	899	879	733	946	802	599	899	911	732	899	829
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	7.2	7.2	8.1	7.9	7.9	9.2	7.3	7.3	10.2	7.8	7.8
Incr Delay (d2), s/veh	0.6	0.1	0.1	0.1	0.4	0.4	0.0	0.1	0.1	0.6	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.3	0.4	0.2	1.0	0.8	0.1	0.3	0.3	1.0	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.0	7.3	7.4	8.2	8.3	8.3	9.2	7.4	7.4	10.7	8.1	8.2
LnGrp LOS	B	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		393			528			222			658	
Approach Delay, s/veh		9.7			8.3			7.6			9.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.1	17.2	17.1	17.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	5.7	11.6	10.6	5.6
Green Ext Time (p_c), s	0.8	1.1	2.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	8.8
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	290	5	5	221	4	5
Future Vol, veh/h	290	5	5	221	4	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	305	5	5	233	4	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	311	0	435	155
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	127	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1261	-	555	869
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	891	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1261	-	553	869
Mov Cap-2 Maneuver	-	-	-	-	608	-
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	888	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.17	10
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	730	-	-	1261	-
HCM Lane V/C Ratio	0.013	-	-	0.004	-
HCM Control Delay (s/veh)	10	-	-	7.9	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	302	34	22	1127	0	14
Future Vol, veh/h	302	34	22	1127	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	318	36	23	1186	0	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	354	0	1568	336
Stage 1	-	-	-	-	336	-
Stage 2	-	-	-	-	1233	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1216	-	123	711
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	278	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1216	-	116	711
Mov Cap-2 Maneuver	-	-	-	-	116	-
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	262	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.15	10.17
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	711	-	-	34	-
HCM Lane V/C Ratio	0.021	-	-	0.019	-
HCM Control Delay (s/veh)	10.2	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	90	366	60	180	216	521	175	80	195	202	40
Future Volume (veh/h)	18	90	366	60	180	216	521	175	80	195	202	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	19	95	0	63	189	0	548	184	84	205	213	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	31	547		79	648		591	866	380	249	295	250
Arrive On Green	0.02	0.15	0.00	0.05	0.18	0.00	0.34	0.35	0.35	0.15	0.16	0.16
Sat Flow, veh/h	1714	3610	1610	1714	3610	1610	1714	2442	1071	1714	1900	1610
Grp Volume(v), veh/h	19	95	0	63	189	0	548	134	134	205	213	42
Grp Sat Flow(s),veh/h/ln	1714	1805	1610	1714	1805	1610	1714	1805	1707	1714	1900	1610
Q Serve(g_s), s	0.7	1.5	0.0	2.4	3.0	0.0	20.3	3.4	3.6	7.7	7.0	1.5
Cycle Q Clear(g_c), s	0.7	1.5	0.0	2.4	3.0	0.0	20.3	3.4	3.6	7.7	7.0	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.63	1.00		1.00
Lane Grp Cap(c), veh/h	31	547		79	648		591	640	605	249	295	250
V/C Ratio(X)	0.62	0.17		0.80	0.29		0.93	0.21	0.22	0.82	0.72	0.17
Avail Cap(c_a), veh/h	260	1947		234	1892		1013	1094	1034	1192	1335	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	24.4	0.0	31.2	23.5	0.0	20.8	14.9	14.9	27.4	26.5	24.2
Incr Delay (d2), s/veh	7.4	0.1	0.0	6.9	0.2	0.0	5.3	0.2	0.2	2.6	3.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.6	0.0	1.1	1.2	0.0	7.5	1.2	1.2	2.9	3.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.6	24.6	0.0	38.1	23.7	0.0	26.1	15.0	15.1	30.0	29.9	24.5
LnGrp LOS	D	C		D	C		C	B	B	C	C	C
Approach Vol, veh/h		114			252			816			460	
Approach Delay, s/veh		27.1			27.3			22.5			29.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	15.4	26.7	16.8	5.2	17.2	13.6	30.0
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	9.0	35.6	39.0	46.4	10.0	34.6	45.9	* 40
Max Q Clear Time (g_c+I1), s	4.4	3.5	22.3	9.0	2.7	5.0	9.7	5.6
Green Ext Time (p_c), s	0.0	0.5	0.4	1.2	0.0	1.1	0.1	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	25.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	4	713	518	0
Future Vol, veh/h	0	3	4	713	518	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	3	4	751	545	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1304	545	545	0	-	0
Stage 1	545	-	-	-	-	-
Stage 2	759	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	179	542	1034	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	466	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	177	542	1034	-	-	-
Mov Cap-2 Maneuver	177	-	-	-	-	-
Stage 1	581	-	-	-	-	-
Stage 2	466	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.68	0.05	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	10	-	542	-	-
HCM Lane V/C Ratio	0.004	-	0.006	-	-
HCM Control Delay (s/veh)	8.5	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	351	3	5	468	0	4	0	5	4	0	4
Future Vol, veh/h	3	351	3	5	468	0	4	0	5	4	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	369	3	5	493	0	4	0	5	4	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	493	0	0	373	0	0	634	881	186	694	882	246
Stage 1	-	-	-	-	-	-	377	377	-	503	503	-
Stage 2	-	-	-	-	-	-	257	503	-	191	379	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1081	-	-	1197	-	-	368	288	830	333	287	760
Stage 1	-	-	-	-	-	-	622	619	-	524	545	-
Stage 2	-	-	-	-	-	-	731	545	-	798	618	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1081	-	-	1197	-	-	363	285	830	328	285	760
Mov Cap-2 Maneuver	-	-	-	-	-	-	363	285	-	328	285	-
Stage 1	-	-	-	-	-	-	620	617	-	522	542	-
Stage 2	-	-	-	-	-	-	723	542	-	791	616	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.12	11.95	13
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	528	30	-	-	38	-	-	458
HCM Lane V/C Ratio	0.018	0.003	-	-	0.004	-	-	0.018
HCM Control Delay (s/veh)	11.9	8.3	0	-	8	0	-	13
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	354	0	4	470	0	3	0	0	3	0	0
Future Vol, veh/h	4	354	0	4	470	0	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	373	0	4	495	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	495	0	0	373	0	0	637	884	186	698	884	247
Stage 1	-	-	-	-	-	-	381	381	-	503	503	-
Stage 2	-	-	-	-	-	-	256	503	-	195	381	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1079	-	-	1197	-	-	366	286	830	331	286	759
Stage 1	-	-	-	-	-	-	619	617	-	524	545	-
Stage 2	-	-	-	-	-	-	732	545	-	794	617	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1079	-	-	1197	-	-	363	284	830	328	284	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	363	284	-	328	284	-
Stage 1	-	-	-	-	-	-	616	614	-	522	542	-
Stage 2	-	-	-	-	-	-	729	542	-	791	614	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.13	0.1	15	16.07
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	363	40	-	-	30	-	-	328
HCM Lane V/C Ratio	0.009	0.004	-	-	0.004	-	-	0.01
HCM Control Delay (s/veh)	15	8.3	0	-	8	0	-	16.1
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	353	3	3	466	0	3	0	0	3	0	7
Future Vol, veh/h	4	353	3	3	466	0	3	0	0	3	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	372	3	3	491	0	3	0	0	3	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	491	0	0	375	0	0	633	878	187	691	880	245
Stage 1	-	-	-	-	-	-	382	382	-	497	497	-
Stage 2	-	-	-	-	-	-	252	497	-	194	383	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1083	-	-	1195	-	-	368	289	829	335	288	761
Stage 1	-	-	-	-	-	-	618	616	-	529	548	-
Stage 2	-	-	-	-	-	-	736	548	-	795	615	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1083	-	-	1195	-	-	362	286	829	332	286	761
Mov Cap-2 Maneuver	-	-	-	-	-	-	362	286	-	332	286	-
Stage 1	-	-	-	-	-	-	615	614	-	527	547	-
Stage 2	-	-	-	-	-	-	727	547	-	791	613	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.13	0.08	15.03	11.69
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	362	40	-	-	23	-	-	549
HCM Lane V/C Ratio	0.009	0.004	-	-	0.003	-	-	0.019
HCM Control Delay (s/veh)	15	8.3	0	-	8	0	-	11.7
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	353	3	3	468	3	5	0	0	5	0	0
Future Vol, veh/h	3	353	3	3	468	3	5	0	0	5	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	372	3	3	493	3	5	0	0	5	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	496	0	0	375	0	0	632	882	187	693	882	248
Stage 1	-	-	-	-	-	-	379	379	-	501	501	-
Stage 2	-	-	-	-	-	-	253	502	-	192	381	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1078	-	-	1195	-	-	369	287	829	334	287	758
Stage 1	-	-	-	-	-	-	620	618	-	526	546	-
Stage 2	-	-	-	-	-	-	735	545	-	797	617	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1078	-	-	1195	-	-	367	286	829	332	286	758
Mov Cap-2 Maneuver	-	-	-	-	-	-	367	286	-	332	286	-
Stage 1	-	-	-	-	-	-	618	616	-	525	544	-
Stage 2	-	-	-	-	-	-	733	544	-	795	615	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.07	14.96	16.03
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	367	30	-	-	23	-	-	332
HCM Lane V/C Ratio	0.014	0.003	-	-	0.003	-	-	0.016
HCM Control Delay (s/veh)	15	8.3	0	-	8	0	-	16
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	341	26	30	448	0	32	0	24	2	4	0
Future Vol, veh/h	4	341	26	30	448	0	32	0	24	2	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	359	27	32	472	0	34	0	25	2	4	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	472	0	0	386	0	0	682	916	193	723	929	236
Stage 1	-	-	-	-	-	-	381	381	-	535	535	-
Stage 2	-	-	-	-	-	-	301	535	-	188	395	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1101	-	-	1183	-	-	340	274	822	318	269	772
Stage 1	-	-	-	-	-	-	619	617	-	502	527	-
Stage 2	-	-	-	-	-	-	689	527	-	802	608	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1101	-	-	1183	-	-	323	265	822	297	260	772
Mov Cap-2 Maneuver	-	-	-	-	-	-	323	265	-	297	260	-
Stage 1	-	-	-	-	-	-	616	614	-	487	511	-
Stage 2	-	-	-	-	-	-	662	511	-	774	606	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.12	0.72	14.53	18.58
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	436	35	-	-	226	-	-	271
HCM Lane V/C Ratio	0.135	0.004	-	-	0.027	-	-	0.023
HCM Control Delay (s/veh)	14.5	8.3	0	-	8.1	0.2	-	18.6
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	350	19	23	465	6	12
Future Vol, veh/h	350	19	23	465	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	368	20	24	489	6	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	388	0	672	194
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	293	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1181	-	394	821
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	737	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1181	-	385	821
Mov Cap-2 Maneuver	-	-	-	-	385	-
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	720	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.55	11.24
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	596	-	-	170	-
HCM Lane V/C Ratio	0.032	-	-	0.02	-
HCM Control Delay (s/veh)	11.2	-	-	8.1	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	331	35	35	448	35	33
Future Vol, veh/h	331	35	35	448	35	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	348	37	37	472	37	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	385	0	676	193
Stage 1	-	-	-	-	367	-
Stage 2	-	-	-	-	309	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1184	-	391	823
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	723	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1184	-	377	823
Mov Cap-2 Maneuver	-	-	-	-	377	-
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	698	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.82	13.18
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	512	-	-	261	-
HCM Lane V/C Ratio	0.14	-	-	0.031	-
HCM Control Delay (s/veh)	13.2	-	-	8.1	0.3
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	351	34	74	464	28	34
Future Vol, veh/h	351	34	74	464	28	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	369	36	78	488	29	36

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	405	0	787	203
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1164	-	333	811
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	652	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1164	-	307	811
Mov Cap-2 Maneuver	-	-	-	-	307	-
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	601	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.56	13.99
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	466	-	-	495	-
HCM Lane V/C Ratio	0.14	-	-	0.067	-
HCM Control Delay (s/veh)	14	-	-	8.3	0.5
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	376	15	34	533	16	21
Future Vol, veh/h	376	15	34	533	16	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	396	16	36	561	17	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	412	0	756	206
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	352	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1158	-	348	807
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	689	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1158	-	336	807
Mov Cap-2 Maneuver	-	-	-	-	336	-
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	664	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.74	12.77
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	502	-	-	216	-
HCM Lane V/C Ratio	0.078	-	-	0.031	-
HCM Control Delay (s/veh)	12.8	-	-	8.2	0.3
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	68	384	548	146	96	69
Future Vol, veh/h	68	384	548	146	96	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	72	404	577	154	101	73

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	731	0	-	0	999	365
Stage 1	-	-	-	-	654	-
Stage 2	-	-	-	-	345	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	883	-	-	-	244	637
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	883	-	-	-	224	637
Mov Cap-2 Maneuver	-	-	-	-	342	-
Stage 1	-	-	-	-	446	-
Stage 2	-	-	-	-	694	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.42	0	19.25
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	883	-	-	-	424
HCM Lane V/C Ratio	0.081	-	-	-	0.41
HCM Control Delay (s/veh)	9.4	-	-	-	19.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	281	198	58	647	0	0	0	0	41	23	20
Future Volume (veh/h)	0	281	198	58	647	0	0	0	0	41	23	20
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1710	1710	1620	1710	0				1620	1710	1710
Adj Flow Rate, veh/h	0	296	208	61	681	0				43	24	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1085	742	82	2337	0				99	54	47
Arrive On Green	0.00	0.59	0.59	0.11	1.00	0.00				0.06	0.06	0.06
Sat Flow, veh/h	0	1931	1262	1543	3335	0				1543	841	736
Grp Volume(v), veh/h	0	260	244	61	681	0				43	0	45
Grp Sat Flow(s),veh/h/ln	0	1625	1483	1543	1625	0				1543	0	1577
Q Serve(g_s), s	0.0	4.7	4.9	2.3	0.0	0.0				1.6	0.0	1.6
Cycle Q Clear(g_c), s	0.0	4.7	4.9	2.3	0.0	0.0				1.6	0.0	1.6
Prop In Lane	0.00		0.85	1.00		0.00				1.00		0.47
Lane Grp Cap(c), veh/h	0	955	872	82	2337	0				99	0	101
V/C Ratio(X)	0.00	0.27	0.28	0.74	0.29	0.00				0.43	0.00	0.44
Avail Cap(c_a), veh/h	0	955	872	147	2337	0				129	0	131
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.98	0.98	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.1	6.1	26.4	0.0	0.0				27.0	0.0	27.0
Incr Delay (d2), s/veh	0.0	0.7	0.8	4.8	0.3	0.0				1.1	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.1	1.0	0.8	0.1	0.0				0.6	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	6.8	6.9	31.2	0.3	0.0				28.1	0.0	28.2
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		504			742						88	
Approach Delay, s/veh		6.8			2.9						28.2	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.9	41.3		10.8		49.2
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0
Max Green Setting (Gmax), s	5.7	31.6		5.0		42.0
Max Q Clear Time (g_c+I1), s	4.3	6.9		3.6		2.0
Green Ext Time (p_c), s	0.0	1.6		0.0		2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	6.0
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	297	0	0	427	79	254	0	144	0	0	0
Future Volume (veh/h)	21	297	0	0	427	79	254	0	144	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1800	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	22	313	0	0	449	83	267	0	152			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	142	2104	0	0	1522	679	363	0	323			
Arrive On Green	0.17	1.00	0.00	0.00	0.42	0.42	0.20	0.00	0.20			
Sat Flow, veh/h	1714	3705	0	0	3705	1610	1810	0	1610			
Grp Volume(v), veh/h	22	313	0	0	449	83	267	0	152			
Grp Sat Flow(s),veh/h/ln	1714	1805	0	0	1805	1610	1810	0	1610			
Q Serve(g_s), s	0.7	0.0	0.0	0.0	4.9	1.9	8.3	0.0	5.0			
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.0	4.9	1.9	8.3	0.0	5.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	142	2104	0	0	1522	679	363	0	323			
V/C Ratio(X)	0.15	0.15	0.00	0.00	0.30	0.12	0.74	0.00	0.47			
Avail Cap(c_a), veh/h	143	2104	0	0	1522	679	703	0	625			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.2	0.0	0.0	0.0	11.5	10.6	22.5	0.0	21.2			
Incr Delay (d2), s/veh	0.5	0.1	0.0	0.0	0.5	0.4	2.9	0.0	1.1			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.0	1.5	0.6	3.6	0.0	1.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.7	0.1	0.0	0.0	12.0	11.0	25.4	0.0	22.2			
LnGrp LOS	C	A			B	B	C		C			
Approach Vol, veh/h		335			532			419				
Approach Delay, s/veh		1.7			11.8			24.3				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		41.0			9.7	31.3		19.0				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		23.7			5.0	14.0		23.3				
Max Q Clear Time (g_c+I1), s		2.0			2.7	6.9		10.3				
Green Ext Time (p_c), s		1.6			0.0	1.6		1.7				
Intersection Summary												
HCM 7th Control Delay, s/veh			13.2									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	36	25	0	3	51	689	10	2	502	22
Future Vol, veh/h	26	0	36	25	0	3	51	689	10	2	502	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	0	38	26	0	3	54	725	11	2	528	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1377	1387	276	1101	1388	725	552	0	0	736	0	0
Stage 1	544	544	-	833	833	-	-	-	-	-	-	-
Stage 2	833	843	-	268	556	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	114	144	728	180	144	428	1028	-	-	879	-	-
Stage 1	496	522	-	366	387	-	-	-	-	-	-	-
Stage 2	366	382	-	720	516	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	107	136	728	161	136	428	1028	-	-	879	-	-
Mov Cap-2 Maneuver	107	136	-	161	136	-	-	-	-	-	-	-
Stage 1	495	521	-	347	366	-	-	-	-	-	-	-
Stage 2	344	362	-	681	515	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	29.26	30.11	0.59	0.03
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1028	-	-	213	173	879	-	-
HCM Lane V/C Ratio	0.052	-	-	0.307	0.171	0.002	-	-
HCM Control Delay (s/veh)	8.7	-	-	29.3	30.1	9.1	-	-
HCM Lane LOS	A	-	-	D	D	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.2	0.6	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	0	90	0	0	0	92	643	0	0	532	35
Future Vol, veh/h	19	0	90	0	0	0	92	643	0	0	532	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	20	0	95	0	0	0	97	677	0	0	560	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1111	1449	298	1151	1467	338	597	0	0	677	0	0
Stage 1	578	578	-	871	871	-	-	-	-	-	-	-
Stage 2	532	871	-	280	597	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	166	132	704	156	129	663	990	-	-	924	-	-
Stage 1	473	504	-	317	371	-	-	-	-	-	-	-
Stage 2	504	371	-	709	495	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	150	119	704	121	116	663	990	-	-	924	-	-
Mov Cap-2 Maneuver	150	119	-	121	116	-	-	-	-	-	-	-
Stage 1	473	504	-	286	335	-	-	-	-	-	-	-
Stage 2	455	335	-	613	495	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.7	0	1.13	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	990	-	-	150	704	-	924	-	-
HCM Lane V/C Ratio	0.098	-	-	0.133	0.135	-	-	-	-
HCM Control Delay (s/veh)	9	-	-	32.6	10.9	0	0	-	-
HCM Lane LOS	A	-	-	D	B	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.4	0.5	-	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	622	18	160	761	34	10	0	82	8	0	10
Future Vol, veh/h	11	622	18	160	761	34	10	0	82	8	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	655	19	168	801	36	11	0	86	8	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	837	0	0	674	0	0	1425	1861	337	1506	1853	418
Stage 1	-	-	-	-	-	-	687	687	-	1156	1156	-
Stage 2	-	-	-	-	-	-	737	1174	-	351	697	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	806	-	-	927	-	-	98	74	665	85	75	589
Stage 1	-	-	-	-	-	-	408	450	-	212	273	-
Stage 2	-	-	-	-	-	-	381	268	-	645	446	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	806	-	-	927	-	-	77	60	665	60	60	589
Mov Cap-2 Maneuver	-	-	-	-	-	-	77	60	-	60	60	-
Stage 1	-	-	-	-	-	-	402	444	-	174	224	-
Stage 2	-	-	-	-	-	-	306	219	-	553	439	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.16	1.63	18.43	40.86
HCM LOS			C	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	364	806	-	-	927	-	-	119
HCM Lane V/C Ratio	0.266	0.014	-	-	0.182	-	-	0.159
HCM Control Delay (s/veh)	18.4	9.5	-	-	9.7	-	-	40.9
HCM Lane LOS	C	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	1.1	0	-	-	0.7	-	-	0.5

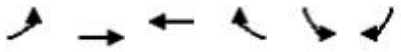
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	775	15	108	858	180	14	1	134	245	4	13
Future Volume (veh/h)	13	775	15	108	858	180	14	1	134	245	4	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1976	1800	1900	1900	1872	1900	1900
Adj Flow Rate, veh/h	14	816	16	114	903	189	15	1	141	261	0	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	28	1125	22	143	1624	339	191	211	179	1081	0	488
Arrive On Green	0.02	0.31	0.31	0.08	0.38	0.38	0.11	0.11	0.11	0.30	0.00	0.30
Sat Flow, veh/h	1714	3621	71	1714	4300	896	1714	1900	1610	3566	0	1610
Grp Volume(v), veh/h	14	407	425	114	725	367	15	1	141	261	0	14
Grp Sat Flow(s),veh/h/ln	1714	1805	1887	1714	1729	1739	1714	1900	1610	1783	0	1610
Q Serve(g_s), s	0.8	18.8	18.8	6.1	15.5	15.6	0.7	0.0	8.0	5.2	0.0	0.6
Cycle Q Clear(g_c), s	0.8	18.8	18.8	6.1	15.5	15.6	0.7	0.0	8.0	5.2	0.0	0.6
Prop In Lane	1.00		0.04	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	28	561	586	143	1306	657	191	211	179	1081	0	488
V/C Ratio(X)	0.50	0.73	0.73	0.80	0.56	0.56	0.08	0.00	0.79	0.24	0.00	0.03
Avail Cap(c_a), veh/h	264	682	713	264	1306	657	520	576	488	1081	0	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.8	28.8	28.8	42.3	23.0	23.1	37.4	37.1	40.7	24.6	0.0	23.0
Incr Delay (d2), s/veh	13.2	3.0	2.9	9.7	1.7	3.4	0.2	0.0	7.5	0.5	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	8.2	8.5	2.9	6.3	6.7	0.3	0.0	3.5	2.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.1	31.9	31.7	52.0	24.7	26.5	37.6	37.1	48.2	25.1	0.0	23.1
LnGrp LOS	E	C	C	D	C	C	D	D	D	C		C
Approach Vol, veh/h		846			1206			157			275	
Approach Delay, s/veh		32.3			27.8			47.1			25.0	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	33.7		33.0	6.0	40.0		14.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	14.5	35.5		28.5	14.5	35.5		28.5				
Max Q Clear Time (g_c+I1), s	8.1	20.8		7.2	2.8	17.6		10.0				
Green Ext Time (p_c), s	0.1	4.3		0.9	0.0	6.9		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	30.2
HCM 7th LOS	C

Notes

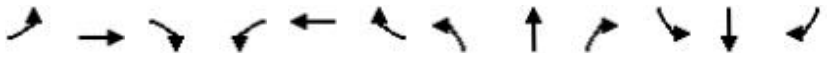
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	692	645	0	588	540
Future Volume (veh/h)	0	692	645	0	588	540
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1700	1976
Adj Flow Rate, veh/h	0	728	679	0	619	568
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1666	1666	0	1111	593
Arrive On Green	0.00	0.46	0.46	0.00	0.35	0.35
Sat Flow, veh/h	0	3800	3800	0	3141	1675
Grp Volume(v), veh/h	0	728	679	0	619	568
Grp Sat Flow(s),veh/h/ln	0	1805	1805	0	1570	1675
Q Serve(g_s), s	0.0	8.8	8.1	0.0	10.3	21.6
Cycle Q Clear(g_c), s	0.0	8.8	8.1	0.0	10.3	21.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1666	1666	0	1111	593
V/C Ratio(X)	0.00	0.44	0.41	0.00	0.56	0.96
Avail Cap(c_a), veh/h	0	1666	1666	0	1111	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.8	11.6	0.0	16.9	20.5
Incr Delay (d2), s/veh	0.0	0.8	0.7	0.0	0.7	27.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.2	2.9	0.0	3.6	12.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	12.6	12.3	0.0	17.6	47.5
LnGrp LOS		B	B		B	D
Approach Vol, veh/h		728	679		1187	
Approach Delay, s/veh		12.6	12.3		31.9	
Approach LOS		B	B		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	36.0	29.0	36.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	30.0	23.0	30.0
Max Q Clear Time (g_c+I1), s	10.8	23.6	10.1
Green Ext Time (p_c), s	3.9	0.0	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	21.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	274	815	0	0	1212	149	368	124	297	54	0	416
Future Volume (veh/h)	274	815	0	0	1212	149	368	124	297	54	0	416
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	0	0	1900	1900	1800	1900	1900	1800	0	1976
Adj Flow Rate, veh/h	288	858	0	0	1276	157	259	310	313	57	0	438
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	277	3008	0	0	1888	232	357	396	671	0	0	0
Arrive On Green	0.09	0.58	0.00	0.00	0.40	0.40	0.21	0.21	0.21	0.00	0.00	0.00
Sat Flow, veh/h	3141	5358	0	0	4850	576	1714	1900	3220		0	
Grp Volume(v), veh/h	288	858	0	0	943	490	259	310	313		0.0	
Grp Sat Flow(s),veh/h/ln	1570	1729	0	0	1729	1796	1714	1900	1610			
Q Serve(g_s), s	5.0	4.7	0.0	0.0	12.7	12.7	8.0	8.7	4.8			
Cycle Q Clear(g_c), s	5.0	4.7	0.0	0.0	12.7	12.7	8.0	8.7	4.8			
Prop In Lane	1.00		0.00	0.00		0.32	1.00		1.00			
Lane Grp Cap(c), veh/h	277	3008	0	0	1395	725	357	396	671			
V/C Ratio(X)	1.04	0.29	0.00	0.00	0.68	0.68	0.72	0.78	0.47			
Avail Cap(c_a), veh/h	277	4026	0	0	2074	1077	393	436	738			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	25.8	6.0	0.0	0.0	13.9	13.9	20.9	21.2	19.7			
Incr Delay (d2), s/veh	64.8	0.0	0.0	0.0	0.4	0.8	6.3	8.6	0.6			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.2	1.2	0.0	0.0	4.2	4.4	3.3	4.2	1.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	90.6	6.0	0.0	0.0	14.3	14.7	27.2	29.9	20.3			
LnGrp LOS	F	A			B	B	C	C	C			
Approach Vol, veh/h		1146			1433			882				
Approach Delay, s/veh		27.3			14.4			25.7				
Approach LOS		C			B			C				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		38.9			10.0	28.9		17.8				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		13.0				
Max Q Clear Time (g_c+I1), s		6.7			7.0	14.7		10.7				
Green Ext Time (p_c), s		5.5			0.0	8.2		1.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			21.6									
HCM 7th LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	0	5	27	0	72	2	330	26	47	368	0
Future Vol, veh/h	13	0	5	27	0	72	2	330	26	47	368	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	0	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	14	0	5	28	0	76	2	347	27	49	387	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	838	865	387	838	838	347	387	0	0	375	0	0
Stage 1	486	486	-	352	352	-	-	-	-	-	-	-
Stage 2	352	379	-	486	486	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	288	294	665	288	305	700	1182	-	-	1195	-	-
Stage 1	566	554	-	669	635	-	-	-	-	-	-	-
Stage 2	669	618	-	566	554	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	246	281	665	273	292	700	1182	-	-	1195	-	-
Mov Cap-2 Maneuver	246	281	-	273	292	-	-	-	-	-	-	-
Stage 1	543	531	-	668	634	-	-	-	-	-	-	-
Stage 2	596	617	-	538	531	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.9	14.29	0.04	0.92
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1182	-	-	298	491	1195	-	-
HCM Lane V/C Ratio	0.002	-	-	0.064	0.212	0.041	-	-
HCM Control Delay (s/veh)	8.1	-	-	17.9	14.3	8.1	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.8	0.1	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	8	311	43	9	358
Future Vol, veh/h	24	8	311	43	9	358
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	8	327	45	9	377

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	723	327	0	0	373	0
Stage 1	327	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	396	719	-	-	1197	-
Stage 1	735	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	392	719	-	-	1197	-
Mov Cap-2 Maneuver	392	-	-	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.81	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	442	44	-
HCM Lane V/C Ratio	-	-	0.076	0.008	-
HCM Control Delay (s/veh)	-	-	13.8	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	82	0	4	0	91	49	12	73	0
Future Vol, veh/h	0	0	0	82	0	4	0	91	49	12	73	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	86	0	4	0	96	52	13	77	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	198	249	77	224	224	122	77	0	0	147	0	0
Stage 1	102	102	-	122	122	-	-	-	-	-	-	-
Stage 2	96	147	-	102	102	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	765	657	990	736	679	935	1535	-	-	1447	-	-
Stage 1	909	815	-	888	799	-	-	-	-	-	-	-
Stage 2	916	779	-	909	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	755	651	990	730	673	935	1535	-	-	1447	-	-
Mov Cap-2 Maneuver	755	651	-	730	673	-	-	-	-	-	-	-
Stage 1	901	807	-	888	799	-	-	-	-	-	-	-
Stage 2	912	779	-	901	807	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	10.56	0	1.06
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1535	-	-	-	737	1447	-	-
HCM Lane V/C Ratio	-	-	-	-	0.123	0.009	-	-
HCM Control Delay (s/veh)	0	-	-	0	10.6	7.5	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.4	0	-	-

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	71	0	8	96	19	0	28	10	22	23	30
Future Vol, veh/h	43	71	0	8	96	19	0	28	10	22	23	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	75	0	8	101	20	0	29	11	23	24	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	166	126	40	143	137	35	56	0	0	40	0	0
Stage 1	86	86	-	35	35	-	-	-	-	-	-	-
Stage 2	80	40	-	108	102	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	802	768	1037	831	758	1044	1562	-	-	1583	-	-
Stage 1	926	827	-	986	870	-	-	-	-	-	-	-
Stage 2	934	866	-	902	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	672	757	1037	739	747	1044	1562	-	-	1583	-	-
Mov Cap-2 Maneuver	672	757	-	739	747	-	-	-	-	-	-	-
Stage 1	913	815	-	986	870	-	-	-	-	-	-	-
Stage 2	809	866	-	808	803	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.97	10.53	0	2.14
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1562	-	-	722	781	1583	-	-
HCM Lane V/C Ratio	-	-	-	0.166	0.166	0.015	-	-
HCM Control Delay (s/veh)	0	-	-	11	10.5	7.3	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.6	0	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	14	44	0	0	0	0	71	24	19	38	0
Future Vol, veh/h	11	14	44	0	0	0	0	71	24	19	38	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	15	46	0	0	0	0	75	25	20	40	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.5	8.3	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	75%	0%	24%	0%	100%
Vol Right, %	25%	0%	76%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	11	58	19	38
LT Vol	0	11	0	19	0
Through Vol	71	0	14	0	38
RT Vol	24	0	44	0	0
Lane Flow Rate	100	12	61	20	40
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.126	0.017	0.074	0.029	0.052
Departure Headway (Hd)	4.519	5.393	4.36	5.177	4.677
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	785	668	827	685	758
Service Time	2.594	3.093	2.06	2.954	2.453
HCM Lane V/C Ratio	0.127	0.018	0.074	0.029	0.053
HCM Control Delay, s/veh	8.3	8.2	7.4	8.1	7.7
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0.1	0.2	0.1	0.2

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	61	32	15	50	26	45
Future Vol, veh/h	61	32	15	50	26	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	64	34	16	53	27	47
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7.6	7.9	7.5
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	26	45	61	32	15	50
LT Vol	26	0	0	0	15	0
Through Vol	0	0	61	0	0	50
RT Vol	0	45	0	32	0	0
Lane Flow Rate	27	47	64	34	16	53
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.041	0.055	0.083	0.037	0.023	0.068
Departure Headway (Hd)	5.391	4.189	4.664	3.963	5.18	4.68
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	668	860	760	892	684	757
Service Time	3.091	1.889	2.441	1.74	2.961	2.459
HCM Lane V/C Ratio	0.04	0.055	0.084	0.038	0.023	0.07
HCM Control Delay, s/veh	8.3	7.1	7.9	6.9	8.1	7.8
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.3	0.1	0.1	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	153	200	355	171	3	245	83	278	21	115	28
Future Volume (veh/h)	18	153	200	355	171	3	245	83	278	21	115	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	19	161	211	374	180	3	258	87	293	22	121	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	37	333	297	387	1416	24	443	577	489	479	883	206
Arrive On Green	0.02	0.19	0.19	0.24	0.41	0.41	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1619	1710	1525	1619	3442	57	1125	1800	1525	1261	2753	641
Grp Volume(v), veh/h	19	161	211	374	89	94	258	87	293	22	74	76
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1790	1125	1800	1525	1261	1710	1685
Q Serve(g_s), s	0.7	5.1	7.8	13.9	2.0	2.0	12.9	2.1	9.8	0.8	1.9	2.0
Cycle Q Clear(g_c), s	0.7	5.1	7.8	13.9	2.0	2.0	14.8	2.1	9.8	2.9	1.9	2.0
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	37	333	297	387	703	736	443	577	489	479	548	540
V/C Ratio(X)	0.52	0.48	0.71	0.97	0.13	0.13	0.58	0.15	0.60	0.05	0.13	0.14
Avail Cap(c_a), veh/h	200	1116	996	387	1313	1375	843	1216	1031	927	1156	1138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	21.7	22.8	22.8	11.1	11.1	19.9	14.7	17.3	15.7	14.6	14.7
Incr Delay (d2), s/veh	11.0	1.1	3.1	36.9	0.1	0.1	1.2	0.1	1.2	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.8	2.6	8.5	0.6	0.6	3.2	0.8	3.3	0.2	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.3	22.8	26.0	59.7	11.2	11.2	21.1	14.8	18.5	15.8	14.7	14.8
LnGrp LOS	D	C	C	E	B	B	C	B	B	B	B	B
Approach Vol, veh/h		391			557			638			172	
Approach Delay, s/veh		25.4			43.8			19.1			14.9	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	17.6		24.1	5.9	30.7		24.1				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	4.5	39.6		41.0	7.5	46.6		41.0				
Max Q Clear Time (g_c+I1), s	15.9	9.8		16.8	2.7	4.0		4.9				
Green Ext Time (p_c), s	0.0	2.0		2.6	0.0	0.9		0.9				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	383	106	147	439	13	96	7	133	16	10	16
Future Volume (veh/h)	12	383	106	147	439	13	96	7	133	16	10	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	13	403	112	155	462	14	101	7	140	17	11	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	531	1175	323	510	1503	45	425	299	254	443	106	164
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	835	2650	729	805	3389	103	1256	1800	1525	1280	637	985
Grp Volume(v), veh/h	13	259	256	155	233	243	101	7	140	17	0	28
Grp Sat Flow(s),veh/h/ln	835	1710	1669	805	1710	1782	1256	1800	1525	1280	0	1623
Q Serve(g_s), s	0.3	3.0	3.1	4.8	2.7	2.7	2.3	0.1	2.6	0.3	0.0	0.5
Cycle Q Clear(g_c), s	3.0	3.0	3.1	7.9	2.7	2.7	2.7	0.1	2.6	0.4	0.0	0.5
Prop In Lane	1.00		0.44	1.00		0.06	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	531	758	740	510	758	790	425	299	254	443	0	270
V/C Ratio(X)	0.02	0.34	0.35	0.30	0.31	0.31	0.24	0.02	0.55	0.04	0.00	0.10
Avail Cap(c_a), veh/h	1165	2058	2008	1122	2058	2144	1687	2108	1786	1796	0	1985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.5	5.6	5.6	8.2	5.5	5.5	12.0	10.7	11.8	10.9	0.0	10.9
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.3	0.2	0.2	0.3	0.0	1.9	0.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.4	0.4	0.4	0.5	0.0	0.8	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.5	5.9	5.9	8.6	5.7	5.7	12.3	10.8	13.6	10.9	0.0	11.0
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		528			631			248			45	
Approach Delay, s/veh		5.9			6.4			13.0			11.0	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	19.4	11.3	19.4	11.3
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	37.0	36.0	37.0	* 38
Max Q Clear Time (g_c+I1), s	5.1	4.7	9.9	2.5
Green Ext Time (p_c), s	3.0	0.8	3.7	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	7.5
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	567	111	79	594	9	125	0	79	11	5	7
Future Volume (veh/h)	3	567	111	79	594	9	125	0	79	11	5	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	3	597	117	83	625	9	132	0	83	12	5	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	517	1336	261	483	1617	23	491	0	252	378	115	252
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.17	0.00	0.17	0.17	0.17	0.17
Sat Flow, veh/h	721	2852	558	669	3451	50	1375	0	1525	926	697	1525
Grp Volume(v), veh/h	3	357	357	83	310	324	132	0	83	17	0	7
Grp Sat Flow(s),veh/h/ln	721	1710	1700	669	1710	1791	1375	0	1525	1622	0	1525
Q Serve(g_s), s	0.1	3.8	3.9	2.6	3.2	3.2	2.2	0.0	1.3	0.0	0.0	0.1
Cycle Q Clear(g_c), s	3.3	3.8	3.9	6.5	3.2	3.2	2.4	0.0	1.3	0.2	0.0	0.1
Prop In Lane	1.00		0.33	1.00		0.03	1.00		1.00	0.71		1.00
Lane Grp Cap(c), veh/h	517	801	796	483	801	839	491	0	252	493	0	252
V/C Ratio(X)	0.01	0.45	0.45	0.17	0.39	0.39	0.27	0.00	0.33	0.03	0.00	0.03
Avail Cap(c_a), veh/h	865	1627	1617	806	1627	1704	1956	0	1898	2078	0	1898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	4.9	4.9	7.1	4.7	4.7	10.5	0.0	10.1	9.6	0.0	9.6
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.2	0.3	0.3	0.3	0.0	0.8	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.2	0.5	0.5	0.5	0.0	0.4	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.8	5.3	5.3	7.2	5.0	5.0	10.8	0.0	10.8	9.6	0.0	9.6
LnGrp LOS	A	A	A	A	A	A	B		B	A		A
Approach Vol, veh/h		717			717			215			24	
Approach Delay, s/veh		5.3			5.3			10.8			9.6	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	18.2	9.1	18.2	9.1
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	26.0	34.0	26.0	34.0
Max Q Clear Time (g_c+I1), s	5.9	4.4	8.5	2.2
Green Ext Time (p_c), s	4.0	1.0	4.3	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.0
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	463	34	21	433	198	39	63	19	281	75	285
Future Volume (veh/h)	187	463	34	21	433	198	39	63	19	281	75	285
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	197	487	36	22	456	208	41	66	20	296	79	300
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	284	688	51	266	609	276	124	96	29	482	98	370
Arrive On Green	0.10	0.21	0.21	0.15	0.27	0.27	0.07	0.07	0.07	0.28	0.28	0.28
Sat Flow, veh/h	1714	3229	238	1810	2288	1036	1810	1400	424	1714	347	1316
Grp Volume(v), veh/h	197	257	266	22	340	324	41	0	86	296	0	379
Grp Sat Flow(s),veh/h/ln	1714	1710	1757	1810	1710	1614	1810	0	1824	1714	0	1663
Q Serve(g_s), s	6.9	9.3	9.4	0.7	12.2	12.4	1.4	0.0	3.1	10.0	0.0	14.2
Cycle Q Clear(g_c), s	6.9	9.3	9.4	0.7	12.2	12.4	1.4	0.0	3.1	10.0	0.0	14.2
Prop In Lane	1.00		0.14	1.00		0.64	1.00		0.23	1.00		0.79
Lane Grp Cap(c), veh/h	284	364	375	266	455	429	124	0	125	482	0	468
V/C Ratio(X)	0.69	0.71	0.71	0.08	0.75	0.75	0.33	0.00	0.69	0.61	0.00	0.81
Avail Cap(c_a), veh/h	284	720	740	266	697	658	135	0	136	691	0	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.0	24.4	24.4	24.7	22.5	22.6	29.7	0.0	30.5	20.9	0.0	22.4
Incr Delay (d2), s/veh	7.1	2.5	2.5	0.1	2.5	2.7	1.5	0.0	12.2	1.3	0.0	4.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	3.8	3.9	0.3	4.9	4.7	0.7	0.0	1.7	3.9	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.1	26.9	26.9	24.8	25.0	25.3	31.2	0.0	42.7	22.2	0.0	27.3
LnGrp LOS	C	C	C	C	C	C	C		D	C		C
Approach Vol, veh/h		720			686			127			675	
Approach Delay, s/veh		28.6			25.1			39.0			25.1	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.5	19.4		9.2	11.4	22.4		23.9				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.5	* 28		5.0	6.9	27.3		27.0				
Max Q Clear Time (g_c+I1), s	12.7	11.4		5.1	8.9	14.4		16.2				
Green Ext Time (p_c), s	0.0	2.9		0.0	0.0	3.5		2.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	452	225	138	394	216	110
Future Volume (veh/h)	452	225	138	394	216	110
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	476	237	145	415	227	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	754	373	180	1948	328	309
Arrive On Green	0.34	0.34	0.11	0.57	0.20	0.20
Sat Flow, veh/h	2306	1097	1619	3510	1619	1525
Grp Volume(v), veh/h	367	346	145	415	227	116
Grp Sat Flow(s),veh/h/ln	1710	1603	1619	1710	1619	1525
Q Serve(g_s), s	6.9	6.9	3.3	2.3	5.0	2.5
Cycle Q Clear(g_c), s	6.9	6.9	3.3	2.3	5.0	2.5
Prop In Lane		0.68	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	582	545	180	1948	328	309
V/C Ratio(X)	0.63	0.64	0.81	0.21	0.69	0.38
Avail Cap(c_a), veh/h	1067	1000	318	3166	1104	1040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.6	10.6	16.5	4.0	14.1	13.1
Incr Delay (d2), s/veh	1.1	1.2	8.2	0.1	2.6	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.0	1.4	0.4	1.7	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	11.7	11.8	24.7	4.1	16.7	13.9
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	713			560	343	
Approach Delay, s/veh	11.8			9.4	15.8	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.7	17.6		11.8		26.3
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	7.5	* 24		26.0		35.3
Max Q Clear Time (g_c+I1), s	5.3	8.9		7.0		4.3
Green Ext Time (p_c), s	0.1	4.0		1.0		2.9

Intersection Summary		
HCM 7th Control Delay, s/veh		11.8
HCM 7th LOS		B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	79	86	293	54	107	49	490	302	124	614	6
Future Volume (veh/h)	11	79	86	293	54	107	49	490	302	124	614	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	12	83	91	308	57	113	52	516	0	131	646	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	450	306	335	448	210	416	73	583		163	1317	12
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.04	0.32	0.00	0.10	0.38	0.38
Sat Flow, veh/h	1104	785	860	1100	539	1069	1619	1800	1525	1619	3472	32
Grp Volume(v), veh/h	12	0	174	308	0	170	52	516	0	131	318	334
Grp Sat Flow(s),veh/h/ln	1104	0	1645	1100	0	1608	1619	1800	1525	1619	1710	1794
Q Serve(g_s), s	0.5	0.0	5.2	19.2	0.0	5.2	2.3	19.7	0.0	5.7	10.3	10.3
Cycle Q Clear(g_c), s	5.8	0.0	5.2	24.4	0.0	5.2	2.3	19.7	0.0	5.7	10.3	10.3
Prop In Lane	1.00		0.52	1.00		0.66	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	450	0	641	448	0	626	73	583		163	649	681
V/C Ratio(X)	0.03	0.00	0.27	0.69	0.00	0.27	0.72	0.89		0.81	0.49	0.49
Avail Cap(c_a), veh/h	576	0	829	575	0	810	235	708		257	697	731
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	0.0	15.1	23.4	0.0	15.1	34.1	23.2	0.0	31.9	17.1	17.1
Incr Delay (d2), s/veh	0.0	0.0	0.2	2.4	0.0	0.2	12.4	11.2	0.0	9.6	0.6	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.9	4.9	0.0	1.8	1.1	9.4	0.0	2.6	3.8	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.1	0.0	15.3	25.8	0.0	15.3	46.5	34.5	0.0	41.4	17.7	17.7
LnGrp LOS	B		B	C		B	D	C		D	B	B
Approach Vol, veh/h		186			478			568			783	
Approach Delay, s/veh		15.4			22.1			35.6			21.7	
Approach LOS		B			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	32.0		32.7	11.8	27.9		32.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	29.5		36.5	11.5	28.5		36.5				
Max Q Clear Time (g_c+I1), s	4.3	12.3		26.4	7.7	21.7		7.8				
Green Ext Time (p_c), s	0.0	3.6		1.7	0.1	1.8		1.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	25.1
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	302	0	129	533	866	0	0	803	346
Future Volume (veh/h)	0	0	0	302	0	129	533	866	0	0	803	346
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				318	0	136	561	912	0	0	845	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				348	0	309	630	2384	0	0	884	
Arrive On Green				0.20	0.00	0.20	0.39	0.70	0.00	0.00	0.26	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				318	0	136	561	912	0	0	845	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				21.8	0.0	9.4	38.9	13.2	0.0	0.0	29.2	0.0
Cycle Q Clear(g_c), s				21.8	0.0	9.4	38.9	13.2	0.0	0.0	29.2	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				348	0	309	630	2384	0	0	884	
V/C Ratio(X)				0.91	0.00	0.44	0.89	0.38	0.00	0.00	0.96	
Avail Cap(c_a), veh/h				371	0	331	630	2384	0	0	884	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.76	0.76	0.00	0.00	0.80	0.00
Uniform Delay (d), s/veh				46.8	0.0	41.9	34.3	7.5	0.0	0.0	43.8	0.0
Incr Delay (d2), s/veh				25.7	0.0	1.0	11.5	0.4	0.0	0.0	18.4	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.7	0.0	3.6	16.8	4.5	0.0	0.0	14.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				72.5	0.0	42.8	45.8	7.9	0.0	0.0	62.3	0.0
LnGrp LOS				E		D	D	A			E	
Approach Vol, veh/h					454			1473			845	
Approach Delay, s/veh					63.6			22.3			62.3	
Approach LOS					E			C			E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.7	37.0		30.3		89.7
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0
Max Green Setting (Gmax), s	46.3	* 31		26.0		82.0
Max Q Clear Time (g_c+I1), s	40.9	31.2		23.8		15.2
Green Ext Time (p_c), s	0.5	0.0		0.6		7.9

Intersection Summary	
HCM 7th Control Delay, s/veh	41.3
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	202	474	170	1266	1099	84
Future Volume (veh/h)	202	474	170	1266	1099	84
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	213	499	179	1333	1157	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	557	525	185	1787	1146	87
Arrive On Green	0.34	0.34	0.11	0.52	0.36	0.36
Sat Flow, veh/h	1619	1525	1619	3510	3311	245
Grp Volume(v), veh/h	213	499	179	1333	614	631
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1756
Q Serve(g_s), s	8.9	28.7	9.9	27.4	32.0	32.0
Cycle Q Clear(g_c), s	8.9	28.7	9.9	27.4	32.0	32.0
Prop In Lane	1.00	1.00	1.00			0.14
Lane Grp Cap(c), veh/h	557	525	185	1787	609	625
V/C Ratio(X)	0.38	0.95	0.97	0.75	1.01	1.01
Avail Cap(c_a), veh/h	576	542	185	1787	609	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	0.40	0.40
Uniform Delay (d), s/veh	22.3	28.8	39.7	16.8	29.0	29.0
Incr Delay (d2), s/veh	0.2	26.0	12.7	0.3	25.1	25.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	13.8	4.5	9.7	16.5	17.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.5	54.7	52.4	17.1	54.1	54.3
LnGrp LOS	C	D	D	B	F	F
Approach Vol, veh/h	712			1512	1245	
Approach Delay, s/veh	45.1			21.3	54.2	
Approach LOS	D			C	D	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	15.0	38.0			53.0	37.0
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	10.3	31.0			46.0	32.0
Max Q Clear Time (g_c+I1), s	11.9	34.0			29.4	30.7
Green Ext Time (p_c), s	0.0	0.0			8.8	0.3

Intersection Summary		
HCM 7th Control Delay, s/veh	38.0	
HCM 7th LOS	D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	28	40	110	29	479	31	756	88	485	1134	66
Future Volume (veh/h)	142	28	40	110	29	479	31	756	88	485	1134	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	149	29	42	116	31	504	33	796	93	511	1194	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	90	447	399	380	447	399	53	814	95	496	1766	102
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.03	0.26	0.26	0.31	0.54	0.54
Sat Flow, veh/h	790	1710	1525	1208	1710	1525	1619	3085	360	1619	3286	190
Grp Volume(v), veh/h	149	29	42	116	31	504	33	441	448	511	621	642
Grp Sat Flow(s),veh/h/ln	790	1710	1525	1208	1710	1525	1619	1710	1735	1619	1710	1766
Q Serve(g_s), s	0.0	1.0	1.7	6.5	1.1	20.9	1.6	20.5	20.5	24.5	21.1	21.1
Cycle Q Clear(g_c), s	20.9	1.0	1.7	8.1	1.1	20.9	1.6	20.5	20.5	24.5	21.1	21.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.11
Lane Grp Cap(c), veh/h	90	447	399	380	447	399	53	451	458	496	919	949
V/C Ratio(X)	1.66	0.06	0.11	0.30	0.07	1.26	0.63	0.98	0.98	1.03	0.68	0.68
Avail Cap(c_a), veh/h	90	447	399	380	447	399	103	451	458	496	919	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	22.2	22.4	25.5	22.2	29.6	38.2	29.2	29.2	27.8	13.4	13.4
Incr Delay (d2), s/veh	339.0	0.1	0.1	0.4	0.1	137.8	11.6	36.6	36.4	48.5	2.0	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	0.4	0.6	1.8	0.4	22.5	0.8	12.2	12.3	15.5	7.5	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	379.0	22.3	22.6	26.0	22.3	167.3	49.9	65.8	65.6	76.2	15.4	15.4
LnGrp LOS	F	C	C	C	C	F	D	E	E	F	B	B
Approach Vol, veh/h		220			651			922			1774	
Approach Delay, s/veh		263.9			135.2			65.1			32.9	
Approach LOS		F			F			E			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	47.5		25.4	29.0	25.6		25.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.1	40.5		20.9	24.5	21.1		20.9
Max Q Clear Time (g_c+I1), s	3.6	23.1		22.9	26.5	22.5		22.9
Green Ext Time (p_c), s	0.0	8.0		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 7th Control Delay, s/veh	74.2	
HCM 7th LOS	E	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	319	33	65	291	171	40	320	46	313	297	343
Future Volume (veh/h)	229	319	33	65	291	171	40	320	46	313	297	343
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	241	336	35	68	306	180	42	337	48	329	313	361
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	388	1182	122	422	680	577	331	1330	188	481	756	674
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	976	3128	324	919	1800	1525	695	3009	425	907	1710	1525
Grp Volume(v), veh/h	241	183	188	68	306	180	42	190	195	329	313	361
Grp Sat Flow(s),veh/h/ln	976	1710	1742	919	1800	1525	695	1710	1724	907	1710	1525
Q Serve(g_s), s	12.3	3.7	3.8	2.8	6.4	4.2	2.4	3.5	3.6	17.9	6.3	8.6
Cycle Q Clear(g_c), s	18.7	3.7	3.8	6.6	6.4	4.2	11.0	3.5	3.6	21.4	6.3	8.6
Prop In Lane	1.00		0.19	1.00		1.00	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	388	646	658	422	680	577	331	756	762	481	756	674
V/C Ratio(X)	0.62	0.28	0.29	0.16	0.45	0.31	0.13	0.25	0.26	0.68	0.41	0.54
Avail Cap(c_a), veh/h	388	646	658	422	680	577	331	756	762	481	756	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	10.8	10.8	13.1	11.7	11.0	14.2	8.8	8.8	15.5	9.5	10.2
Incr Delay (d2), s/veh	3.0	0.2	0.2	0.2	0.5	0.3	0.2	0.2	0.2	4.0	0.4	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	1.2	1.3	0.5	2.2	1.2	0.3	0.9	1.0	3.2	1.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.7	11.1	11.1	13.3	12.1	11.3	14.4	8.9	9.0	19.5	9.9	11.0
LnGrp LOS	C	B	B	B	B	B	B	A	A	B	A	B
Approach Vol, veh/h		612			554			427			1003	
Approach Delay, s/veh		15.2			12.0			9.5			13.5	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.6	23.4	26.6	23.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	22.1	18.9	22.1	18.9
Max Q Clear Time (g_c+I1), s	13.0	20.7	23.4	8.6
Green Ext Time (p_c), s	1.6	0.0	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	12.9
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	368	0	23	482	9	22
Future Vol, veh/h	368	0	23	482	9	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	387	0	24	507	9	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	387	0	689	194
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	302	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1182	-	384	821
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	730	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1182	-	376	821
Mov Cap-2 Maneuver	-	-	-	-	485	-
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	715	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.37	10.53
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	683	-	-	1182	-
HCM Lane V/C Ratio	0.048	-	-	0.02	-
HCM Control Delay (s/veh)	10.5	-	-	8.1	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	239	105	0	0	0
Future Vol, veh/h	0	239	105	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	252	111	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	111	0	-	0	362	111
Stage 1	-	-	-	-	111	-
Stage 2	-	-	-	-	252	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1492	-	-	-	641	948
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	795	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1492	-	-	-	641	948
Mov Cap-2 Maneuver	-	-	-	-	641	-
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	795	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1492	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	195	0	3	133	155	0	3	12	144	3	5
Future Volume (veh/h)	5	195	0	3	133	155	0	3	12	144	3	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	5	205	0	3	140	163	0	3	13	159	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	568	449	0	550	449	381	0	79	342	1434	482	0
Arrive On Green	0.25	0.25	0.00	0.25	0.25	0.25	0.00	0.27	0.27	0.27	0.00	0.00
Sat Flow, veh/h	978	1800	0	1070	1800	1525	0	294	1276	2540	1800	0
Grp Volume(v), veh/h	5	205	0	3	140	163	0	0	16	159	0	0
Grp Sat Flow(s),veh/h/ln	978	1800	0	1070	1800	1525	0	0	1570	1270	1800	0
Q Serve(g_s), s	0.1	1.8	0.0	0.0	1.2	1.7	0.0	0.0	0.1	0.9	0.0	0.0
Cycle Q Clear(g_c), s	1.3	1.8	0.0	1.8	1.2	1.7	0.0	0.0	0.1	1.1	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.81	1.00		0.00
Lane Grp Cap(c), veh/h	568	449	0	550	449	381	0	0	421	1434	482	0
V/C Ratio(X)	0.01	0.46	0.00	0.01	0.31	0.43	0.00	0.00	0.04	0.11	0.00	0.00
Avail Cap(c_a), veh/h	1268	1737	0	1315	1737	1472	0	0	1515	3203	1737	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	5.9	0.0	6.7	5.7	5.9	0.0	0.0	5.0	5.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.2	6.7	0.0	6.7	6.1	6.6	0.0	0.0	5.1	5.5	0.0	0.0
LnGrp LOS	A	A		A	A	A			A	A		
Approach Vol, veh/h		210			306			16			159	
Approach Delay, s/veh		6.6			6.4			5.1			5.5	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.5		9.2		9.5		9.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		2.1		3.8		3.1		3.8				
Green Ext Time (p_c), s		0.0		0.8		0.5		1.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	6.2
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	182	93	40	157	250	96	358	40	155	185	74
Future Volume (veh/h)	96	182	93	40	157	250	96	358	40	155	185	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	101	192	0	42	165	0	101	377	42	163	195	78
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	125	825		57	682		125	619	69	202	446	378
Arrive On Green	0.08	0.24	0.00	0.04	0.20	0.00	0.08	0.20	0.20	0.13	0.25	0.25
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	3104	344	1619	1800	1525
Grp Volume(v), veh/h	101	192	0	42	165	0	101	207	212	163	195	78
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1738	1619	1800	1525
Q Serve(g_s), s	3.1	2.3	0.0	1.3	2.0	0.0	3.1	5.5	5.6	4.9	4.6	2.0
Cycle Q Clear(g_c), s	3.1	2.3	0.0	1.3	2.0	0.0	3.1	5.5	5.6	4.9	4.6	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	125	825		57	682		125	341	347	202	446	378
V/C Ratio(X)	0.81	0.23		0.73	0.24		0.81	0.61	0.61	0.81	0.44	0.21
Avail Cap(c_a), veh/h	355	2293		355	2293		420	1157	1176	549	1343	1138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	15.3	0.0	23.9	16.9	0.0	22.8	18.3	18.3	21.3	15.9	15.0
Incr Delay (d2), s/veh	4.7	0.1	0.0	6.6	0.2	0.0	4.7	1.7	1.8	2.8	0.7	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.7	0.0	0.5	0.7	0.0	1.1	1.9	2.0	1.7	1.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.5	15.4	0.0	30.5	17.1	0.0	27.4	20.0	20.0	24.2	16.6	15.2
LnGrp LOS	C	B		C	B		C	C	C	C	B	B
Approach Vol, veh/h		293			207			520			436	
Approach Delay, s/veh		19.6			19.8			21.5			19.2	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	17.5	7.9	19.0	7.9	15.4	10.3	16.6
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	1.8	33.6	13.0	37.4	11.0	33.6	17.0	* 34
Max Q Clear Time (g_c+I1), s	3.3	4.3	5.1	6.6	5.1	4.0	6.9	7.6
Green Ext Time (p_c), s	0.0	1.1	0.0	1.2	0.0	0.9	0.1	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	20.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	0	0	478	295	2
Future Vol, veh/h	7	0	0	478	295	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	0	0	503	311	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	815	312	313	0	-	0
Stage 1	312	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	350	733	1259	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	350	733	1259	-	-	-
Mov Cap-2 Maneuver	350	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	611	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	15.5	1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1259	-	350	-	-
HCM Lane V/C Ratio	-	-	0.021	-	-
HCM Control Delay (s/veh)	0	-	15.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	330	0	2	362	0	2	0	5	2	0	0
Future Vol, veh/h	3	330	0	2	362	0	2	0	5	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	347	0	2	381	0	2	0	5	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	381	0	0	347	0	0	548	739	174	565	739	191
Stage 1	-	-	-	-	-	-	354	354	-	385	385	-
Stage 2	-	-	-	-	-	-	195	385	-	180	354	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1188	-	-	1223	-	-	423	348	846	412	348	825
Stage 1	-	-	-	-	-	-	642	634	-	615	614	-
Stage 2	-	-	-	-	-	-	794	614	-	810	634	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1188	-	-	1223	-	-	421	346	846	407	346	825
Mov Cap-2 Maneuver	-	-	-	-	-	-	421	346	-	407	346	-
Stage 1	-	-	-	-	-	-	640	632	-	614	613	-
Stage 2	-	-	-	-	-	-	793	613	-	803	632	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.06	10.54	13.89
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	657	32	-	-	20	-	-	407
HCM Lane V/C Ratio	0.011	0.003	-	-	0.002	-	-	0.005
HCM Control Delay (s/veh)	10.5	8	0	-	7.9	0	-	13.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	334	2	2	362	0	2	0	0	2	0	0
Future Vol, veh/h	3	334	2	2	362	0	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	352	2	2	381	0	2	0	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	381	0	0	354	0	0	554	744	177	567	745	191
Stage 1	-	-	-	-	-	-	359	359	-	385	385	-
Stage 2	-	-	-	-	-	-	195	385	-	182	360	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1188	-	-	1216	-	-	420	345	842	410	345	825
Stage 1	-	-	-	-	-	-	637	631	-	615	614	-
Stage 2	-	-	-	-	-	-	794	614	-	808	630	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1188	-	-	1216	-	-	418	343	842	408	343	825
Mov Cap-2 Maneuver	-	-	-	-	-	-	418	343	-	408	343	-
Stage 1	-	-	-	-	-	-	635	629	-	614	613	-
Stage 2	-	-	-	-	-	-	793	613	-	805	628	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.06	13.66	13.86
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	418	32	-	-	20	-	-	408
HCM Lane V/C Ratio	0.005	0.003	-	-	0.002	-	-	0.005
HCM Control Delay (s/veh)	13.7	8	0	-	8	0	-	13.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	331	3	3	359	2	2	0	0	2	0	0
Future Vol, veh/h	2	331	3	3	359	2	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	348	3	3	378	2	2	0	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	380	0	0	352	0	0	549	741	176	564	741	190
Stage 1	-	-	-	-	-	-	354	354	-	385	385	-
Stage 2	-	-	-	-	-	-	195	386	-	178	356	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1190	-	-	1218	-	-	423	347	843	413	347	826
Stage 1	-	-	-	-	-	-	641	634	-	615	614	-
Stage 2	-	-	-	-	-	-	794	613	-	812	633	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1190	-	-	1218	-	-	421	345	843	411	345	826
Mov Cap-2 Maneuver	-	-	-	-	-	-	421	345	-	411	345	-
Stage 1	-	-	-	-	-	-	640	632	-	613	612	-
Stage 2	-	-	-	-	-	-	791	612	-	810	631	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.09	13.6	13.81
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	421	21	-	-	29	-	-	411
HCM Lane V/C Ratio	0.005	0.002	-	-	0.003	-	-	0.005
HCM Control Delay (s/veh)	13.6	8	0	-	8	0	-	13.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	346	0	3	352	0	2	0	0	2	0	0
Future Vol, veh/h	3	346	0	3	352	0	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	364	0	3	371	0	2	0	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	371	0	0	364	0	0	562	747	182	565	747	185
Stage 1	-	-	-	-	-	-	371	371	-	377	377	-
Stage 2	-	-	-	-	-	-	192	377	-	188	371	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1199	-	-	1206	-	-	414	344	836	412	344	832
Stage 1	-	-	-	-	-	-	627	623	-	622	619	-
Stage 2	-	-	-	-	-	-	798	619	-	801	623	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1199	-	-	1206	-	-	412	342	836	409	342	832
Mov Cap-2 Maneuver	-	-	-	-	-	-	412	342	-	409	342	-
Stage 1	-	-	-	-	-	-	626	622	-	620	618	-
Stage 2	-	-	-	-	-	-	795	618	-	799	622	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.09	13.79	13.84
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	412	31	-	-	30	-	-	409
HCM Lane V/C Ratio	0.005	0.003	-	-	0.003	-	-	0.005
HCM Control Delay (s/veh)	13.8	8	0	-	8	0	-	13.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	329	6	5	348	0	12	0	12	2	0	0
Future Vol, veh/h	3	329	6	5	348	0	12	0	12	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	346	6	5	366	0	13	0	13	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	366	0	0	353	0	0	549	733	176	556	736	183
Stage 1	-	-	-	-	-	-	356	356	-	377	377	-
Stage 2	-	-	-	-	-	-	194	377	-	179	359	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1203	-	-	1217	-	-	423	350	843	418	349	834
Stage 1	-	-	-	-	-	-	640	633	-	622	619	-
Stage 2	-	-	-	-	-	-	795	619	-	811	631	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1203	-	-	1217	-	-	419	348	843	408	346	834
Mov Cap-2 Maneuver	-	-	-	-	-	-	419	348	-	408	346	-
Stage 1	-	-	-	-	-	-	638	631	-	619	616	-
Stage 2	-	-	-	-	-	-	792	616	-	796	629	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.15	11.73	13.86
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	560	31	-	-	51	-	-	408
HCM Lane V/C Ratio	0.045	0.003	-	-	0.004	-	-	0.005
HCM Control Delay (s/veh)	11.7	8	0	-	8	0	-	13.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	340	9	16	341	10	16
Future Vol, veh/h	340	9	16	341	10	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	358	9	17	359	11	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	367	0	576	184
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	213	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1202	-	453	834
Stage 1	-	-	-	-	680	-
Stage 2	-	-	-	-	808	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1202	-	446	834
Mov Cap-2 Maneuver	-	-	-	-	446	-
Stage 1	-	-	-	-	680	-
Stage 2	-	-	-	-	795	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.47	11.03
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	624	-	-	161	-
HCM Lane V/C Ratio	0.044	-	-	0.014	-
HCM Control Delay (s/veh)	11	-	-	8	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	326	32	17	341	14	14
Future Vol, veh/h	326	32	17	341	14	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	343	34	18	359	15	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	377	0	575	188
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	215	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1193	-	453	828
Stage 1	-	-	-	-	683	-
Stage 2	-	-	-	-	806	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1193	-	445	828
Mov Cap-2 Maneuver	-	-	-	-	445	-
Stage 1	-	-	-	-	683	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.5	11.55
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	579	-	-	171	-
HCM Lane V/C Ratio	0.051	-	-	0.015	-
HCM Control Delay (s/veh)	11.5	-	-	8.1	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	332	8	11	370	7	33
Future Vol, veh/h	332	8	11	370	7	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	349	8	12	389	7	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	358	0	572	179
Stage 1	-	-	-	-	354	-
Stage 2	-	-	-	-	218	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1212	-	455	839
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	803	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1212	-	451	839
Mov Cap-2 Maneuver	-	-	-	-	451	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	795	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.31	10.24
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	729	-	-	104	-
HCM Lane V/C Ratio	0.058	-	-	0.01	-
HCM Control Delay (s/veh)	10.2	-	-	8	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	343	8	9	399	3	25
Future Vol, veh/h	343	8	9	399	3	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	361	8	9	420	3	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	369	0	594	185
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	229	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1200	-	441	832
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	793	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1200	-	437	832
Mov Cap-2 Maneuver	-	-	-	-	437	-
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	786	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.24	9.94
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	759	-	-	79	-
HCM Lane V/C Ratio	0.039	-	-	0.008	-
HCM Control Delay (s/veh)	9.9	-	-	8	0.1
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

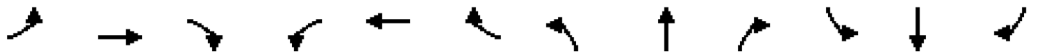
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	373	386	80	102	21
Future Vol, veh/h	19	373	386	80	102	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	20	393	406	84	107	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	491	0	-	0	685	245
Stage 1	-	-	-	-	448	-
Stage 2	-	-	-	-	236	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1083	-	-	-	386	761
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	787	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1083	-	-	-	379	761
Mov Cap-2 Maneuver	-	-	-	-	479	-
Stage 1	-	-	-	-	605	-
Stage 2	-	-	-	-	787	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.41	0	14.42
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1083	-	-	-	511
HCM Lane V/C Ratio	0.018	-	-	-	0.253
HCM Control Delay (s/veh)	8.4	-	-	-	14.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	280	204	56	450	0	0	0	0	23	3	14
Future Volume (veh/h)	0	280	204	56	450	0	0	0	0	23	3	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	295	215	59	474	0				21	7	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	841	596	83	1988	0				67	21	45
Arrive On Green	0.00	0.49	0.49	0.06	0.65	0.00				0.05	0.05	0.05
Sat Flow, veh/h	0	1801	1219	1457	3159	0				1457	459	984
Grp Volume(v), veh/h	0	263	247	59	474	0				21	0	22
Grp Sat Flow(s),veh/h/ln	0	1539	1401	1457	1539	0				1457	0	1443
Q Serve(g_s), s	0.0	5.0	5.1	1.9	3.0	0.0				0.7	0.0	0.7
Cycle Q Clear(g_c), s	0.0	5.0	5.1	1.9	3.0	0.0				0.7	0.0	0.7
Prop In Lane	0.00		0.87	1.00		0.00				1.00		0.68
Lane Grp Cap(c), veh/h	0	752	684	83	1988	0				67	0	66
V/C Ratio(X)	0.00	0.35	0.36	0.71	0.24	0.00				0.32	0.00	0.33
Avail Cap(c_a), veh/h	0	752	684	164	1988	0				155	0	154
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.99	0.99	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.4	7.5	21.8	3.5	0.0				21.7	0.0	21.7
Incr Delay (d2), s/veh	0.0	1.3	1.5	4.1	0.3	0.0				1.0	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.1	1.1	0.6	0.3	0.0				0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	8.7	8.9	25.8	3.8	0.0				22.7	0.0	22.8
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		510			533						43	
Approach Delay, s/veh		8.8			6.2						22.8	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	7.4	29.0		10.6		36.4						
Change Period (Y+Rc), s	4.7	6.0		8.5		6.0						
Max Green Setting (Gmax), s	5.3	17.0		5.0		27.0						
Max Q Clear Time (g_c+I1), s	3.9	7.1		2.7		5.0						
Green Ext Time (p_c), s	0.0	1.2		0.0		1.6						

Intersection Summary												
HCM 7th Control Delay, s/veh			8.1									
HCM 7th LOS			A									

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	291	0	0	311	28	192	0	50	0	0	0
Future Volume (veh/h)	21	291	0	0	311	28	192	0	50	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	22	306	0	0	327	29	202	0	53			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	197	1762	0	0	944	421	274	0	244			
Arrive On Green	0.12	0.52	0.00	0.00	0.28	0.28	0.16	0.00	0.16			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	22	306	0	0	327	29	202	0	53			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.5	1.9	0.0	0.0	3.1	0.6	4.5	0.0	1.2			
Cycle Q Clear(g_c), s	0.5	1.9	0.0	0.0	3.1	0.6	4.5	0.0	1.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	197	1762	0	0	944	421	274	0	244			
V/C Ratio(X)	0.11	0.17	0.00	0.00	0.35	0.07	0.74	0.00	0.22			
Avail Cap(c_a), veh/h	202	1762	0	0	944	421	386	0	343			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.6	5.2	0.0	0.0	11.6	10.7	16.0	0.0	14.6			
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.0	1.0	0.3	4.5	0.0	0.4			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.0	0.0	0.9	0.2	1.8	0.0	0.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.9	5.4	0.0	0.0	12.6	11.0	20.5	0.0	15.1			
LnGrp LOS	B	A			B	B	C		B			
Approach Vol, veh/h		328			356			255				
Approach Delay, s/veh		6.1			12.5			19.4				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		26.6			9.6	17.0		13.4				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		18.0			5.0	8.3		9.0				
Max Q Clear Time (g_c+I1), s		3.9			2.5	5.1		6.5				
Green Ext Time (p_c), s		1.3			0.0	0.6		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.1
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	14	23	1	0	0	26	474	11	5	271	23
Future Vol, veh/h	12	14	23	1	0	0	26	474	11	5	271	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	15	24	1	0	0	27	499	12	5	285	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	862	873	155	714	874	499	309	0	0	511	0	0
Stage 1	308	308	-	554	554	-	-	-	-	-	-	-
Stage 2	554	565	-	161	320	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	265	291	870	335	290	576	1262	-	-	1065	-	-
Stage 1	683	664	-	521	517	-	-	-	-	-	-	-
Stage 2	521	511	-	831	656	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	258	283	870	301	283	576	1262	-	-	1065	-	-
Mov Cap-2 Maneuver	258	283	-	301	283	-	-	-	-	-	-	-
Stage 1	679	661	-	509	506	-	-	-	-	-	-	-
Stage 2	509	500	-	786	653	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	15.33	17	0.4	0.14
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1262	-	-	400	301	1065	-	-
HCM Lane V/C Ratio	0.022	-	-	0.129	0.003	0.005	-	-
HCM Control Delay (s/veh)	7.9	-	-	15.3	17	8.4	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	173	0	0	0	77	509	0	0	291	7
Future Vol, veh/h	7	0	173	0	0	0	77	509	0	0	291	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	0	182	0	0	0	81	536	0	0	306	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	740	1008	157	851	1012	268	314	0	0	536	0	0
Stage 1	310	310	-	698	698	-	-	-	-	-	-	-
Stage 2	430	698	-	153	314	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	309	242	867	257	241	736	1258	-	-	1042	-	-
Stage 1	681	663	-	402	445	-	-	-	-	-	-	-
Stage 2	579	445	-	840	660	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	289	227	867	190	226	736	1258	-	-	1042	-	-
Mov Cap-2 Maneuver	289	227	-	190	226	-	-	-	-	-	-	-
Stage 1	681	663	-	376	417	-	-	-	-	-	-	-
Stage 2	542	417	-	663	660	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.55	0	1.06	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1258	-	-	289	867	-	1042	-	-
HCM Lane V/C Ratio	0.064	-	-	0.026	0.21	-	-	-	-
HCM Control Delay (s/veh)	8.1	-	-	17.8	10.3	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.8	-	0	-	-

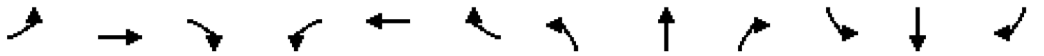
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	351	15	53	536	19	9	0	85	12	0	9
Future Vol, veh/h	3	351	15	53	536	19	9	0	85	12	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	369	16	56	564	20	9	0	89	13	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	584	0	0	385	0	0	777	1079	193	877	1077	292
Stage 1	-	-	-	-	-	-	384	384	-	686	686	-
Stage 2	-	-	-	-	-	-	394	696	-	191	392	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1000	-	-	1184	-	-	290	220	823	246	221	710
Stage 1	-	-	-	-	-	-	616	615	-	409	451	-
Stage 2	-	-	-	-	-	-	608	446	-	798	610	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1000	-	-	1184	-	-	272	209	823	208	210	710
Mov Cap-2 Maneuver	-	-	-	-	-	-	272	209	-	208	210	-
Stage 1	-	-	-	-	-	-	614	613	-	389	430	-
Stage 2	-	-	-	-	-	-	572	425	-	709	608	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.07	0.71	11.1	18.01
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	689	1000	-	-	1184	-	-	299
HCM Lane V/C Ratio	0.144	0.003	-	-	0.047	-	-	0.074
HCM Control Delay (s/veh)	11.1	8.6	-	-	8.2	-	-	18
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0.2



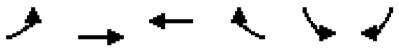
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	419	16	48	588	90	8	3	47	119	9	20
Future Volume (veh/h)	21	419	16	48	588	90	8	3	47	119	9	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	22	441	17	51	619	95	8	3	49	131	0	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	36	614	24	428	1830	277	118	132	112	1062	0	481
Arrive On Green	0.02	0.18	0.18	0.26	0.42	0.42	0.07	0.07	0.07	0.32	0.00	0.32
Sat Flow, veh/h	1619	3358	129	1619	4306	652	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	22	224	234	51	469	245	8	3	49	131	0	21
Grp Sat Flow(s),veh/h/ln	1619	1710	1777	1619	1638	1683	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	1.5	13.5	13.6	2.6	10.5	10.7	0.5	0.2	3.4	3.0	0.0	1.0
Cycle Q Clear(g_c), s	1.5	13.5	13.6	2.6	10.5	10.7	0.5	0.2	3.4	3.0	0.0	1.0
Prop In Lane	1.00		0.07	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	36	313	325	428	1392	715	118	132	112	1062	0	481
V/C Ratio(X)	0.61	0.72	0.72	0.12	0.34	0.34	0.07	0.02	0.44	0.12	0.00	0.04
Avail Cap(c_a), veh/h	111	633	658	428	1392	715	274	304	258	1062	0	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.0	42.1	42.1	30.6	21.1	21.2	47.2	47.1	48.6	26.7	0.0	26.0
Incr Delay (d2), s/veh	15.5	3.1	3.0	0.1	0.7	1.3	0.2	0.1	2.7	0.2	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	5.8	6.1	1.0	4.1	4.4	0.2	0.1	1.4	1.3	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.5	45.1	45.1	30.7	21.8	22.5	47.5	47.2	51.3	26.9	0.0	26.2
LnGrp LOS	E	D	D	C	C	C	D	D	D	C		C
Approach Vol, veh/h		480			765			60			152	
Approach Delay, s/veh		46.2			22.6			50.6			26.8	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.4	24.5		39.0	6.9	51.0		12.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	13.5	40.5		34.5	7.5	46.5		18.5				
Max Q Clear Time (g_c+I1), s	4.6	15.6		5.0	3.5	12.7		5.4				
Green Ext Time (p_c), s	0.0	2.5		0.5	0.0	5.0		0.1				

Intersection Summary		
HCM 7th Control Delay, s/veh	32.0	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	257	483	0	182	300
Future Volume (veh/h)	0	257	483	0	182	300
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	271	508	0	192	316
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1736	1736		910	488
Arrive On Green	0.00	0.51	0.51	0.00	0.31	0.31
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	271	508	0	192	316
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	2.8	5.6	0.0	3.1	11.2
Cycle Q Clear(g_c), s	0.0	2.8	5.6	0.0	3.1	11.2
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1736	1736		910	488
V/C Ratio(X)	0.00	0.16	0.29		0.21	0.65
Avail Cap(c_a), veh/h	0	1736	1736		955	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.6	9.2	0.0	16.7	19.5
Incr Delay (d2), s/veh	0.0	0.2	0.4	0.0	0.1	2.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	1.8	0.0	1.0	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.7	9.7	0.0	16.8	22.3
LnGrp LOS		A	A		B	C
Approach Vol, veh/h		271	508		508	
Approach Delay, s/veh		8.7	9.7		20.2	
Approach LOS		A	A		C	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	39.0		26.0		39.0
Change Period (Y+Rc), s	6.0		6.0		6.0
Max Green Setting (Gmax), s	32.0		21.0		32.0
Max Q Clear Time (g_c+I1), s	4.8		13.2		7.6
Green Ext Time (p_c), s	1.4		1.5		2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	13.7
HCM 7th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	181	0	0	333	33	391	79	188	6	0	189
Future Volume (veh/h)	71	181	0	0	333	33	391	79	188	6	0	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	75	191	0	0	351	35	471	0	198	6	0	199
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	366	2114	0	0	795	78	821	0	774	0	0	0
Arrive On Green	0.12	0.43	0.00	0.00	0.17	0.17	0.25	0.00	0.25	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4712	446	3238	0	3051		0	
Grp Volume(v), veh/h	75	191	0	0	251	135	471	0	198		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1720	1619	0	1525			
Q Serve(g_s), s	0.9	0.9	0.0	0.0	2.6	2.7	4.8	0.0	2.0			
Cycle Q Clear(g_c), s	0.9	0.9	0.0	0.0	2.6	2.7	4.8	0.0	2.0			
Prop In Lane	1.00		0.00	0.00		0.26	1.00		1.00			
Lane Grp Cap(c), veh/h	366	2114	0	0	573	301	821	0	774			
V/C Ratio(X)	0.21	0.09	0.00	0.00	0.44	0.45	0.57	0.00	0.26			
Avail Cap(c_a), veh/h	389	5696	0	0	2934	1540	1962	0	1848			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.0	6.4	0.0	0.0	14.0	14.0	12.4	0.0	11.3			
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.4	0.8	0.8	0.0	0.2			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.0	0.0	0.8	0.9	1.3	0.0	0.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.2	6.4	0.0	0.0	14.4	14.8	13.1	0.0	11.5			
LnGrp LOS	B	A			B	B	B		B			
Approach Vol, veh/h		266			386			669				
Approach Delay, s/veh		8.9			14.5			12.7				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		22.3			9.7	12.6		15.6				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		23.0				
Max Q Clear Time (g_c+I1), s		2.9			2.9	4.7		6.8				
Green Ext Time (p_c), s		1.1			0.0	2.0		2.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.4
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	8	56	29	40	52	219	443	12	16	285	73
Future Volume (veh/h)	12	8	56	29	40	52	219	443	12	16	285	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	13	8	0	31	42	55	231	466	13	17	300	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	27	172		60	82	107	389	633	537	35	435	369
Arrive On Green	0.02	0.10	0.00	0.04	0.12	0.12	0.13	0.35	0.35	0.02	0.24	0.24
Sat Flow, veh/h	1619	1800	1525	1619	707	926	2956	1800	1525	1619	1800	1525
Grp Volume(v), veh/h	13	8	0	31	0	97	231	466	13	17	300	77
Grp Sat Flow(s),veh/h/ln	1619	1800	1525	1619	0	1633	1478	1800	1525	1619	1800	1525
Q Serve(g_s), s	0.3	0.1	0.0	0.7	0.0	2.0	2.7	8.3	0.2	0.4	5.5	1.5
Cycle Q Clear(g_c), s	0.3	0.1	0.0	0.7	0.0	2.0	2.7	8.3	0.2	0.4	5.5	1.5
Prop In Lane	1.00		1.00	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	27	172		60	0	189	389	633	537	35	435	369
V/C Ratio(X)	0.47	0.05		0.52	0.00	0.51	0.59	0.74	0.02	0.48	0.69	0.21
Avail Cap(c_a), veh/h	222	889		222	0	807	1703	1679	1423	222	889	753
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	15.0	0.0	17.2	0.0	15.2	14.9	10.3	7.7	17.6	12.6	11.0
Incr Delay (d2), s/veh	12.2	0.1	0.0	6.8	0.0	2.2	1.4	1.7	0.0	10.0	2.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.0	0.3	0.0	0.7	0.7	2.0	0.0	0.2	1.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.0	15.1	0.0	24.0	0.0	17.3	16.3	12.0	7.7	27.6	14.5	11.3
LnGrp LOS	C	B		C		B	B	B	A	C	B	B
Approach Vol, veh/h		21			128			710			394	
Approach Delay, s/veh		24.3			18.9			13.3			14.5	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	17.3	5.8	8.0	9.3	13.3	5.1	8.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	34.0	5.0	18.0	21.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	2.4	10.3	2.7	2.1	4.7	7.5	2.3	4.0
Green Ext Time (p_c), s	0.0	2.6	0.0	0.0	0.6	1.2	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	14.5
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	4	443	15	5	341
Future Vol, veh/h	20	4	443	15	5	341
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	21	4	466	16	5	359

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	836	466	0	0	482	0
Stage 1	466	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	340	601	-	-	1091	-
Stage 1	636	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	338	601	-	-	1091	-
Mov Cap-2 Maneuver	338	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	699	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	15.61	0	0.12
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	365	26	-
HCM Lane V/C Ratio	-	-	0.069	0.005	-
HCM Control Delay (s/veh)	-	-	15.6	8.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	67	0	0	1	60	57	0	128	0
Future Vol, veh/h	0	0	2	67	0	0	1	60	57	0	128	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	2	71	0	0	1	63	60	0	135	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	200	260	135	230	230	93	135	0	0	123	0	0
Stage 1	135	135	-	95	95	-	-	-	-	-	-	-
Stage 2	65	125	-	135	135	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	763	648	920	729	673	969	1462	-	-	1476	-	-
Stage 1	873	789	-	916	820	-	-	-	-	-	-	-
Stage 2	950	796	-	873	789	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	762	648	920	727	673	969	1462	-	-	1476	-	-
Mov Cap-2 Maneuver	762	648	-	727	673	-	-	-	-	-	-	-
Stage 1	873	789	-	916	819	-	-	-	-	-	-	-
Stage 2	950	796	-	871	789	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.92	10.48	0.06	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	14	-	-	920	727	1476	-	-
HCM Lane V/C Ratio	0.001	-	-	0.002	0.097	-	-	-
HCM Control Delay (s/veh)	7.5	0	-	8.9	10.5	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	20	5	37	19	16	1	43	17	20	77	17
Future Vol, veh/h	18	20	5	37	19	16	1	43	17	20	77	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	21	5	39	20	17	1	45	18	21	81	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	189	197	90	190	197	54	99	0	0	63	0	0
Stage 1	132	132	-	56	56	-	-	-	-	-	-	-
Stage 2	57	65	-	134	141	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	775	702	973	774	702	1019	1507	-	-	1552	-	-
Stage 1	876	791	-	961	852	-	-	-	-	-	-	-
Stage 2	960	844	-	875	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	730	692	973	736	692	1019	1507	-	-	1552	-	-
Mov Cap-2 Maneuver	730	692	-	736	692	-	-	-	-	-	-	-
Stage 1	864	780	-	960	851	-	-	-	-	-	-	-
Stage 2	921	844	-	835	773	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.24	10.18	0.12	1.29
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1507	-	-	732	771	1552	-	-
HCM Lane V/C Ratio	0.001	-	-	0.062	0.098	0.014	-	-
HCM Control Delay (s/veh)	7.4	-	-	10.2	10.2	7.4	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0	-	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	77	0	0	0	0	63	18	20	39	0
Future Vol, veh/h	6	0	77	0	0	0	0	63	18	20	39	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	0	81	0	0	0	0	66	19	21	41	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.4	8.2	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	78%	0%	0%	0%	100%
Vol Right, %	22%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	81	6	77	20	39
LT Vol	0	6	0	20	0
Through Vol	63	0	0	0	39
RT Vol	18	0	77	0	0
Lane Flow Rate	85	6	81	21	41
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.108	0.009	0.094	0.03	0.054
Departure Headway (Hd)	4.566	5.365	4.162	5.198	4.697
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	778	671	866	684	756
Service Time	2.639	3.065	1.862	2.968	2.467
HCM Lane V/C Ratio	0.109	0.009	0.094	0.031	0.054
HCM Control Delay, s/veh	8.2	8.1	7.3	8.1	7.7
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0	0.3	0.1	0.2

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	43	8	12	27	46
Future Vol, veh/h	6	43	8	12	27	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	45	8	13	28	48
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7	7.7	7.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	46	6	43	8	12
LT Vol	27	0	0	0	8	0
Through Vol	0	0	6	0	0	12
RT Vol	0	46	0	43	0	0
Lane Flow Rate	28	48	6	45	8	13
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.04	0.053	0.008	0.05	0.012	0.016
Departure Headway (Hd)	5.121	3.921	4.643	3.942	5.16	4.659
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	698	909	767	902	690	764
Service Time	2.863	1.662	2.397	1.696	2.916	2.415
HCM Lane V/C Ratio	0.04	0.053	0.008	0.05	0.012	0.017
HCM Control Delay, s/veh	8.1	6.9	7.4	6.9	8	7.5
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0	0.2	0	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	288	124	147	219	4	107	20	181	18	36	12
Future Volume (veh/h)	14	288	124	147	219	4	107	20	181	18	36	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	15	303	131	155	231	4	113	21	191	19	38	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	142	564	238	194	807	14	445	364	309	470	513	167
Arrive On Green	0.09	0.24	0.24	0.12	0.23	0.23	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1619	2342	990	1619	3440	59	1230	1800	1525	1339	2537	825
Grp Volume(v), veh/h	15	219	215	155	115	120	113	21	191	19	25	26
Grp Sat Flow(s),veh/h/ln	1619	1710	1622	1619	1710	1789	1230	1800	1525	1339	1710	1652
Q Serve(g_s), s	0.3	3.8	3.9	3.2	1.9	1.9	2.8	0.3	3.9	0.4	0.4	0.4
Cycle Q Clear(g_c), s	0.3	3.8	3.9	3.2	1.9	1.9	3.2	0.3	3.9	0.7	0.4	0.4
Prop In Lane	1.00		0.61	1.00		0.03	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	142	411	390	194	401	420	445	364	309	470	346	334
V/C Ratio(X)	0.11	0.53	0.55	0.80	0.29	0.29	0.25	0.06	0.62	0.04	0.07	0.08
Avail Cap(c_a), veh/h	238	1857	1761	432	2063	2158	1604	2060	1746	1731	1957	1890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	11.3	11.3	14.6	10.7	10.7	12.3	11.0	12.4	11.3	11.0	11.0
Incr Delay (d2), s/veh	0.3	1.1	1.2	7.4	0.4	0.4	0.3	0.1	2.0	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.9	0.9	1.2	0.5	0.5	0.6	0.1	1.2	0.1	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.6	12.3	12.5	22.0	11.1	11.1	12.6	11.0	14.4	11.3	11.1	11.1
LnGrp LOS	B	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		449			390			325			70	
Approach Delay, s/veh		12.5			15.4			13.6			11.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	14.0		11.5	8.8	13.8		11.5				
Change Period (Y+Rc), s	4.5	5.8		4.6	5.8	* 5.8		4.6				
Max Green Setting (Gmax), s	9.1	37.0		39.0	5.0	* 41		39.0				
Max Q Clear Time (g_c+I1), s	5.2	5.9		5.9	2.3	3.9		2.7				
Green Ext Time (p_c), s	0.1	2.3		1.2	0.0	1.2		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.6
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	439	39	54	345	18	65	4	99	28	3	13
Future Volume (veh/h)	19	439	39	54	345	18	65	4	99	28	3	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	20	462	41	57	363	19	68	4	104	29	3	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	580	1356	120	524	1411	74	430	264	223	442	41	189
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	910	3178	281	814	3306	172	1269	1800	1525	1284	277	1291
Grp Volume(v), veh/h	20	248	255	57	187	195	68	4	104	29	0	17
Grp Sat Flow(s),veh/h/ln	910	1710	1749	814	1710	1769	1269	1800	1525	1284	0	1568
Q Serve(g_s), s	0.4	2.7	2.8	1.4	2.0	2.0	1.4	0.1	1.8	0.6	0.0	0.3
Cycle Q Clear(g_c), s	2.4	2.7	2.8	4.2	2.0	2.0	1.6	0.1	1.8	0.6	0.0	0.3
Prop In Lane	1.00		0.16	1.00		0.10	1.00		1.00	1.00		0.82
Lane Grp Cap(c), veh/h	580	730	746	524	730	755	430	264	223	442	0	230
V/C Ratio(X)	0.03	0.34	0.34	0.11	0.26	0.26	0.16	0.02	0.47	0.07	0.00	0.07
Avail Cap(c_a), veh/h	1292	2068	2116	1161	2068	2140	1779	2177	1845	1880	0	1985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.0	5.4	5.4	6.8	5.2	5.2	11.1	10.3	11.0	10.5	0.0	10.4
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.2	0.2	0.2	0.0	1.5	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.1	0.2	0.2	0.3	0.0	0.5	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.0	5.7	5.7	6.9	5.4	5.4	11.2	10.3	12.5	10.6	0.0	10.5
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		523			439			176			46	
Approach Delay, s/veh		5.7			5.6			12.0			10.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.8	10.3	17.8	10.3
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	34.0	34.0	34.0	* 36
Max Q Clear Time (g_c+I1), s	4.8	3.8	6.2	2.6
Green Ext Time (p_c), s	2.9	0.6	2.4	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.8
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	485	98	23	475	10	71	4	24	5	0	1
Future Volume (veh/h)	9	485	98	23	475	10	71	4	24	5	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	9	511	103	24	500	11	75	4	25	5	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	609	1324	266	562	1597	35	442	8	166	473	0	166
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.11	0.11	0.11	0.11	0.00	0.11
Sat Flow, veh/h	808	2838	569	735	3421	75	1319	70	1525	1533	0	1525
Grp Volume(v), veh/h	9	307	307	24	250	261	79	0	25	5	0	1
Grp Sat Flow(s),veh/h/ln	808	1710	1698	735	1710	1786	1389	0	1525	1533	0	1525
Q Serve(g_s), s	0.2	2.7	2.8	0.5	2.1	2.2	1.2	0.0	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.3	2.7	2.8	3.3	2.1	2.2	1.3	0.0	0.3	0.1	0.0	0.0
Prop In Lane	1.00		0.34	1.00		0.04	0.95		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	609	798	792	562	798	834	449	0	166	473	0	166
V/C Ratio(X)	0.01	0.38	0.39	0.04	0.31	0.31	0.18	0.00	0.15	0.01	0.00	0.01
Avail Cap(c_a), veh/h	1021	1669	1657	936	1669	1744	2175	0	2072	2171	0	2072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.6	4.1	4.1	5.2	3.9	3.9	9.9	0.0	9.5	9.4	0.0	9.4
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.2	0.2	0.2	0.0	0.4	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.2	0.2	0.3	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.7	4.4	4.4	5.2	4.1	4.1	10.1	0.0	9.9	9.4	0.0	9.4
LnGrp LOS	A	A	A	A	A	A	B		A	A		A
Approach Vol, veh/h		623			535			104			6	
Approach Delay, s/veh		4.4			4.2			10.1			9.4	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.4	7.2	16.4	7.2
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	23.0	32.0	23.0	32.0
Max Q Clear Time (g_c+I1), s	4.8	3.3	5.3	2.1
Green Ext Time (p_c), s	3.2	0.5	3.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	4.8
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	346	30	24	302	109	52	30	24	158	49	168
Future Volume (veh/h)	132	346	30	24	302	109	52	30	24	158	49	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	139	364	32	25	318	115	55	32	25	166	52	177
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	321	680	59	154	528	188	148	81	63	352	78	265
Arrive On Green	0.10	0.21	0.21	0.08	0.21	0.21	0.08	0.08	0.08	0.21	0.21	0.21
Sat Flow, veh/h	1714	3182	278	1810	2474	878	1810	989	772	1714	379	1289
Grp Volume(v), veh/h	139	195	201	25	218	215	55	0	57	166	0	229
Grp Sat Flow(s),veh/h/ln	1714	1710	1750	1810	1710	1642	1810	0	1761	1714	0	1668
Q Serve(g_s), s	3.5	4.7	4.8	0.6	5.4	5.5	1.3	0.0	1.4	4.0	0.0	5.9
Cycle Q Clear(g_c), s	3.5	4.7	4.8	0.6	5.4	5.5	1.3	0.0	1.4	4.0	0.0	5.9
Prop In Lane	1.00		0.16	1.00		0.53	1.00		0.44	1.00		0.77
Lane Grp Cap(c), veh/h	321	365	374	154	365	351	148	0	144	352	0	342
V/C Ratio(X)	0.43	0.53	0.54	0.16	0.60	0.61	0.37	0.00	0.40	0.47	0.00	0.67
Avail Cap(c_a), veh/h	355	928	949	205	939	901	193	0	188	915	0	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	16.3	16.4	19.9	16.6	16.7	20.4	0.0	20.4	16.4	0.0	17.1
Incr Delay (d2), s/veh	0.9	1.2	1.2	0.5	1.6	1.7	1.5	0.0	1.8	1.0	0.0	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.7	1.8	0.2	2.0	2.0	0.6	0.0	0.6	1.5	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.0	17.5	17.6	20.4	18.2	18.4	21.9	0.0	22.1	17.4	0.0	19.4
LnGrp LOS	B	B	B	C	B	B	C		C	B		B
Approach Vol, veh/h		535			458			112			395	
Approach Delay, s/veh		17.9			18.4			22.0			18.5	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	15.1		8.4	9.1	14.6		14.7				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.3	* 25		5.0	5.5	25.7		25.0				
Max Q Clear Time (g_c+I1), s	2.6	6.8		3.4	5.5	7.5		7.9				
Green Ext Time (p_c), s	0.0	2.2		0.1	0.0	2.4		1.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.5
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	350	132	49	289	134	59
Future Volume (veh/h)	350	132	49	289	134	59
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	368	139	52	304	141	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	892	332	95	1964	221	208
Arrive On Green	0.37	0.37	0.06	0.57	0.14	0.14
Sat Flow, veh/h	2529	908	1619	3510	1619	1525
Grp Volume(v), veh/h	256	251	52	304	141	62
Grp Sat Flow(s),veh/h/ln	1710	1637	1619	1710	1619	1525
Q Serve(g_s), s	3.4	3.4	0.9	1.2	2.5	1.1
Cycle Q Clear(g_c), s	3.4	3.4	0.9	1.2	2.5	1.1
Prop In Lane		0.55	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	625	599	95	1964	221	208
V/C Ratio(X)	0.41	0.42	0.55	0.15	0.64	0.30
Avail Cap(c_a), veh/h	1395	1335	366	4019	1401	1320
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.1	7.1	13.8	3.0	12.3	11.7
Incr Delay (d2), s/veh	0.4	0.5	4.9	0.0	3.1	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	0.4	0.1	0.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.5	7.6	18.6	3.0	15.3	12.5
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h	507			356	203	
Approach Delay, s/veh	7.6			5.3	14.5	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.3	15.6		8.2		21.8
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	6.8	* 25		26.0		35.3
Max Q Clear Time (g_c+I1), s	2.9	5.4		4.5		3.2
Green Ext Time (p_c), s	0.0	3.0		0.5		2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	8.1
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	39	41	149	36	57	24	436	172	63	273	8
Future Volume (veh/h)	1	39	41	149	36	57	24	436	172	63	273	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	41	43	157	38	60	25	459	0	66	287	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	408	186	195	420	145	229	50	611		108	1276	35
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.34	0.00	0.07	0.38	0.38
Sat Flow, veh/h	1179	804	844	1194	629	993	1619	1800	1525	1619	3398	95
Grp Volume(v), veh/h	1	0	84	157	0	98	25	459	0	66	144	151
Grp Sat Flow(s),veh/h/ln	1179	0	1648	1194	0	1621	1619	1800	1525	1619	1710	1783
Q Serve(g_s), s	0.0	0.0	1.5	4.6	0.0	1.8	0.6	8.4	0.0	1.5	2.1	2.1
Cycle Q Clear(g_c), s	1.9	0.0	1.5	6.1	0.0	1.8	0.6	8.4	0.0	1.5	2.1	2.1
Prop In Lane	1.00		0.51	1.00		0.61	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	408	0	381	420	0	375	50	611		108	642	669
V/C Ratio(X)	0.00	0.00	0.22	0.37	0.00	0.26	0.50	0.75		0.61	0.22	0.23
Avail Cap(c_a), veh/h	706	0	797	722	0	785	218	1113		239	1080	1126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	0.0	11.6	14.1	0.0	11.7	17.8	10.9	0.0	16.9	7.9	7.9
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.6	0.0	0.4	7.7	1.9	0.0	5.6	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.5	1.1	0.0	0.6	0.3	2.6	0.0	0.6	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.5	0.0	11.9	14.6	0.0	12.1	25.5	12.8	0.0	22.5	8.1	8.1
LnGrp LOS	B		B	B		B	C	B		C	A	A
Approach Vol, veh/h		85			255			484			361	
Approach Delay, s/veh		11.9			13.6			13.4			10.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	18.5		13.1	7.0	17.1		13.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.5	23.0		18.0				
Max Q Clear Time (g_c+I1), s	2.6	4.1		8.1	3.5	10.4		3.9				
Green Ext Time (p_c), s	0.0	1.5		0.8	0.0	2.2		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.5
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	63	0	83	217	635	0	0	353	196
Future Volume (veh/h)	0	0	0	63	0	83	217	635	0	0	353	196
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				66	0	87	228	668	0	0	372	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				302	0	269	427	1997	0	0	684	
Arrive On Green				0.18	0.00	0.18	0.26	0.58	0.00	0.00	0.20	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				66	0	87	228	668	0	0	372	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				1.6	0.0	2.5	6.0	5.1	0.0	0.0	4.9	0.0
Cycle Q Clear(g_c), s				1.6	0.0	2.5	6.0	5.1	0.0	0.0	4.9	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				302	0	269	427	1997	0	0	684	
V/C Ratio(X)				0.22	0.00	0.32	0.53	0.33	0.00	0.00	0.54	
Avail Cap(c_a), veh/h				343	0	305	431	1997	0	0	684	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.89	0.89	0.00	0.00	0.97	0.00
Uniform Delay (d), s/veh				17.6	0.0	18.0	15.8	5.4	0.0	0.0	18.0	0.0
Incr Delay (d2), s/veh				0.4	0.0	0.7	0.6	0.4	0.0	0.0	3.0	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	0.0	0.8	2.0	1.2	0.0	0.0	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				18.0	0.0	18.7	16.3	5.8	0.0	0.0	21.0	0.0
LnGrp LOS				B		B	B	A			C	
Approach Vol, veh/h					153			896			372	
Approach Delay, s/veh					18.4			8.5			21.0	
Approach LOS					B			A			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	9.2	16.0		14.8		35.2						
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0						
Max Green Setting (Gmax), s	13.3	* 10		10.0		28.0						
Max Q Clear Time (g_c+I1), s	8.0	6.9		4.5		7.1						
Green Ext Time (p_c), s	0.2	0.7		0.2		4.4						

Intersection Summary	
HCM 7th Control Delay, s/veh	12.8
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	285	236	106	634	301	66
Future Volume (veh/h)	285	236	106	634	301	66
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	300	248	112	667	317	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	340	321	169	2245	1400	301
Arrive On Green	0.21	0.21	0.10	0.66	0.50	0.50
Sat Flow, veh/h	1619	1525	1619	3510	2890	601
Grp Volume(v), veh/h	300	248	112	667	192	194
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1692
Q Serve(g_s), s	16.2	13.8	6.0	7.5	5.7	5.8
Cycle Q Clear(g_c), s	16.2	13.8	6.0	7.5	5.7	5.8
Prop In Lane	1.00	1.00	1.00			0.36
Lane Grp Cap(c), veh/h	340	321	169	2245	855	846
V/C Ratio(X)	0.88	0.77	0.66	0.30	0.22	0.23
Avail Cap(c_a), veh/h	522	492	221	2245	855	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.91	0.91	0.94	0.94
Uniform Delay (d), s/veh	34.5	33.5	38.8	6.6	12.7	12.7
Incr Delay (d2), s/veh	7.5	1.7	1.7	0.3	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	5.1	2.4	2.4	2.2	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	42.0	35.2	40.5	6.9	13.3	13.3
LnGrp LOS	D	D	D	A	B	B
Approach Vol, veh/h	548			779	386	
Approach Delay, s/veh	38.9			11.7	13.3	
Approach LOS	D			B	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.1	51.0			65.1	24.9
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	12.3	32.0			49.0	29.0
Max Q Clear Time (g_c+I1), s	18.0	7.8			9.5	18.2
Green Ext Time (p_c), s	0.0	2.2			5.0	0.8

Intersection Summary		
HCM 7th Control Delay, s/veh	20.8	
HCM 7th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	11	19	35	13	231	10	415	32	173	405	14
Future Volume (veh/h)	53	11	19	35	13	231	10	415	32	173	405	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	56	12	20	37	14	243	11	437	34	182	426	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	311	427	381	501	427	381	23	743	58	230	1208	42
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.01	0.23	0.23	0.14	0.36	0.36
Sat Flow, veh/h	1020	1710	1525	1252	1710	1525	1619	3216	249	1619	3370	118
Grp Volume(v), veh/h	56	12	20	37	14	243	11	232	239	182	216	225
Grp Sat Flow(s),veh/h/ln	1020	1710	1525	1252	1710	1525	1619	1710	1755	1619	1710	1779
Q Serve(g_s), s	1.9	0.2	0.4	0.8	0.2	5.1	0.2	4.3	4.3	3.9	3.3	3.3
Cycle Q Clear(g_c), s	6.9	0.2	0.4	1.2	0.2	5.1	0.2	4.3	4.3	3.9	3.3	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.07
Lane Grp Cap(c), veh/h	311	427	381	501	427	381	23	395	405	230	613	638
V/C Ratio(X)	0.18	0.03	0.05	0.07	0.03	0.64	0.47	0.59	0.59	0.79	0.35	0.35
Avail Cap(c_a), veh/h	570	861	768	819	861	768	475	861	883	475	861	895
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	10.1	10.2	10.7	10.2	12.0	17.5	12.2	12.2	14.8	8.4	8.4
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	1.8	13.9	1.4	1.4	6.0	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.1	0.2	0.1	1.5	0.2	1.2	1.3	1.5	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.4	10.2	10.3	10.7	10.2	13.8	31.4	13.6	13.6	20.9	8.8	8.8
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	A	A
Approach Vol, veh/h		88			294			482			623	
Approach Delay, s/veh		13.5			13.2			14.0			12.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.0	17.3		13.4	9.6	12.8		13.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	18.0		18.0	10.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	2.2	5.3		7.1	5.9	6.3		8.9				
Green Ext Time (p_c), s	0.0	2.0		1.3	0.2	1.9		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.1
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	112	32	43	176	129	19	114	16	151	149	87
Future Volume (veh/h)	110	112	32	43	176	129	19	114	16	151	149	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	116	118	34	45	185	136	20	120	17	159	157	92
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	535	819	228	622	598	416	560	906	126	620	638	354
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	962	2642	735	1123	1927	1341	1028	3015	420	1138	2121	1177
Grp Volume(v), veh/h	116	75	77	45	163	158	20	67	70	159	125	124
Grp Sat Flow(s),veh/h/ln	962	1710	1668	1123	1710	1559	1028	1710	1724	1138	1710	1588
Q Serve(g_s), s	2.4	0.7	0.8	0.7	1.7	1.8	0.3	0.7	0.7	2.7	1.3	1.4
Cycle Q Clear(g_c), s	4.2	0.7	0.8	1.5	1.7	1.8	1.7	0.7	0.7	3.4	1.3	1.4
Prop In Lane	1.00		0.44	1.00		0.86	1.00		0.24	1.00		0.74
Lane Grp Cap(c), veh/h	535	530	517	622	530	483	560	514	518	620	514	477
V/C Ratio(X)	0.22	0.14	0.15	0.07	0.31	0.33	0.04	0.13	0.13	0.26	0.24	0.26
Avail Cap(c_a), veh/h	986	1332	1299	1148	1332	1214	1051	1332	1343	1164	1332	1237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.7	5.8	5.8	6.3	6.1	6.1	6.8	5.9	5.9	7.1	6.1	6.1
Incr Delay (d2), s/veh	0.2	0.1	0.1	0.0	0.3	0.4	0.0	0.1	0.1	0.2	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.1	0.1	0.3	0.3	0.0	0.1	0.1	0.2	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.9	5.9	5.9	6.3	6.4	6.5	6.8	6.0	6.0	7.4	6.3	6.4
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		268			366			157			408	
Approach Delay, s/veh		6.8			6.4			6.1			6.8	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	11.4	11.7	11.4	11.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	3.7	6.2	5.4	3.8
Green Ext Time (p_c), s	0.5	1.1	1.5	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	6.6
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	71	0	1	326	1	0
Future Vol, veh/h	71	0	1	326	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	77	0	1	354	1	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	77	0	257	39
Stage 1	-	-	-	-	77	-
Stage 2	-	-	-	-	179	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1534	-	716	1031
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	840	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1534	-	715	1031
Mov Cap-2 Maneuver	-	-	-	-	715	-
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	839	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.02	10.04
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	715	-	-	1534	-
HCM Lane V/C Ratio	0.002	-	-	0.001	-
HCM Control Delay (s/veh)	10	-	-	7.3	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	334	3	4	326	2	4
Future Vol, veh/h	334	3	4	326	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	352	3	4	343	2	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	355	0	533	177
Stage 1	-	-	-	-	353	-
Stage 2	-	-	-	-	180	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1215	-	481	841
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	839	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1215	-	480	841
Mov Cap-2 Maneuver	-	-	-	-	558	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	836	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	10.05
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	719	-	-	1215	-
HCM Lane V/C Ratio	0.009	-	-	0.003	-
HCM Control Delay (s/veh)	10	-	-	8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	3	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	3	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	3	0	0	0	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	3	0	0	4	4	3	4	4	1
Stage 1	-	-	-	-	-	-	3	3	-	1	1	-
Stage 2	-	-	-	-	-	-	1	1	-	3	3	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1635	-	-	1632	-	-	1022	895	1086	1022	895	1089
Stage 1	-	-	-	-	-	-	1025	897	-	1027	899	-
Stage 2	-	-	-	-	-	-	1027	899	-	1025	897	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1635	-	-	1632	-	-	1022	895	1086	1022	895	1089
Mov Cap-2 Maneuver	-	-	-	-	-	-	1022	895	-	1022	895	-
Stage 1	-	-	-	-	-	-	1025	897	-	1027	899	-
Stage 2	-	-	-	-	-	-	1027	899	-	1025	897	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1635	-	-	1632	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	42	195	0	0	0
Future Vol, veh/h	0	42	195	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	46	212	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	212	0	-	0	258	212
Stage 1	-	-	-	-	212	-
Stage 2	-	-	-	-	46	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1370	-	-	-	736	833
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	982	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1370	-	-	-	736	833
Mov Cap-2 Maneuver	-	-	-	-	733	-
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	982	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1370	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	52	237	89	19	0
Future Vol, veh/h	0	52	237	89	19	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	0	150	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	57	258	97	21	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	354	0	-	0	314	258
Stage 1	-	-	-	-	258	-
Stage 2	-	-	-	-	57	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1216	-	-	-	683	786
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1216	-	-	-	683	786
Mov Cap-2 Maneuver	-	-	-	-	683	-
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	971	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	10.44
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1216	-	-	-	683	-
HCM Lane V/C Ratio	-	-	-	-	0.03	-
HCM Control Delay (s/veh)	0	-	-	-	10.4	0
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	0	0	55	0	0
Future Vol, veh/h	13	0	0	55	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	0	0	60	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	31	30	0	0	60	0
Stage 1	30	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	988	1050	-	-	1557	-
Stage 1	998	-	-	-	-	-
Stage 2	1027	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	988	1050	-	-	1557	-
Mov Cap-2 Maneuver	909	-	-	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	1027	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.02	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	909	1557	-
HCM Lane V/C Ratio	-	-	0.016	-	-
HCM Control Delay (s/veh)	-	-	9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	388	0	0	288
Future Vol, veh/h	0	0	388	0	0	288
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	422	0	0	313

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	578	211	0	0	422	0
Stage 1	422	-	-	-	-	-
Stage 2	157	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	451	801	-	-	1148	-
Stage 1	636	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	451	801	-	-	1148	-
Mov Cap-2 Maneuver	451	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	862	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1148	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	145	471	0	0	0
Future Vol, veh/h	0	145	471	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	153	496	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	496	0	-	0	648	496
Stage 1	-	-	-	-	496	-
Stage 2	-	-	-	-	153	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1078	-	-	-	438	578
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1078	-	-	-	438	578
Mov Cap-2 Maneuver	-	-	-	-	438	-
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	880	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1078	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	141	13	30	462	150	0	3	13	139	3	5
Future Volume (veh/h)	5	141	13	30	462	150	0	3	13	139	3	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1900	1800	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	5	148	14	32	486	158	0	3	14	153	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	468	679	64	700	755	675	0	57	268	1101	373	0
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.00	0.21	0.21	0.21	0.00	0.00
Sat Flow, veh/h	827	1619	153	1113	1800	1610	0	277	1291	2538	1800	0
Grp Volume(v), veh/h	5	0	162	32	486	158	0	0	17	153	0	0
Grp Sat Flow(s),veh/h/ln	827	0	1772	1113	1800	1610	0	0	1568	1269	1800	0
Q Serve(g_s), s	0.1	0.0	1.4	0.5	5.2	1.5	0.0	0.0	0.2	1.2	0.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	1.4	1.9	5.2	1.5	0.0	0.0	0.2	1.4	0.0	0.0
Prop In Lane	1.00		0.09	1.00		1.00	0.00		0.82	1.00		0.00
Lane Grp Cap(c), veh/h	468	0	744	700	755	675	0	0	325	1101	373	0
V/C Ratio(X)	0.01	0.00	0.22	0.05	0.64	0.23	0.00	0.00	0.05	0.14	0.00	0.00
Avail Cap(c_a), veh/h	961	0	1801	1364	1829	1636	0	0	1397	2837	1605	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.7	0.0	4.5	5.1	5.6	4.5	0.0	0.0	7.7	8.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.9	0.2	0.0	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.7	0.0	4.6	5.1	6.5	4.7	0.0	0.0	7.7	8.3	0.0	0.0
LnGrp LOS	A		A	A	A	A			A	A		
Approach Vol, veh/h		167			676			17			153	
Approach Delay, s/veh		4.7			6.0			7.7			8.3	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.5		14.6		9.5		14.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		21.5		24.5		21.5		24.5				
Max Q Clear Time (g_c+I1), s		2.2		7.3		3.4		7.2				
Green Ext Time (p_c), s		0.0		0.6		0.5		3.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	6.2
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	154	101	60	304	232	105	245	80	242	388	116
Future Volume (veh/h)	70	154	101	60	304	232	105	245	80	242	388	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	74	162	0	63	320	0	111	258	84	255	408	122
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	90	676		75	646		138	487	155	303	528	447
Arrive On Green	0.06	0.20	0.00	0.05	0.19	0.00	0.09	0.19	0.19	0.19	0.29	0.29
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	2552	812	1619	1800	1525
Grp Volume(v), veh/h	74	162	0	63	320	0	111	171	171	255	408	122
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1654	1619	1800	1525
Q Serve(g_s), s	2.4	2.1	0.0	2.0	4.4	0.0	3.6	4.8	4.9	8.0	11.0	3.3
Cycle Q Clear(g_c), s	2.4	2.1	0.0	2.0	4.4	0.0	3.6	4.8	4.9	8.0	11.0	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.49	1.00		1.00
Lane Grp Cap(c), veh/h	90	676		75	646		138	326	316	303	528	447
V/C Ratio(X)	0.83	0.24		0.84	0.50		0.81	0.52	0.54	0.84	0.77	0.27
Avail Cap(c_a), veh/h	336	2169		336	2169		397	1094	1058	520	1271	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	17.9	0.0	25.1	19.2	0.0	23.8	19.3	19.3	20.8	17.1	14.4
Incr Delay (d2), s/veh	7.0	0.2	0.0	9.0	0.6	0.0	4.1	1.3	1.4	2.4	2.5	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.7	0.0	0.9	1.5	0.0	1.3	1.7	1.7	2.7	3.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.8	18.1	0.0	34.0	19.8	0.0	27.9	20.6	20.8	23.2	19.6	14.7
LnGrp LOS	C	B		C	B		C	C	C	C	B	B
Approach Vol, veh/h		236			383			453			785	
Approach Delay, s/veh		22.4			22.2			22.5			20.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	15.9	8.5	22.1	6.9	15.4	13.9	16.7
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	11.0	33.6	13.0	37.4	11.0	33.6	17.0	* 34
Max Q Clear Time (g_c+I1), s	4.0	4.1	5.6	13.0	4.4	6.4	10.0	6.9
Green Ext Time (p_c), s	0.0	0.9	0.0	2.6	0.0	1.9	0.1	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	21.3
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	2	449	510	5
Future Vol, veh/h	2	2	2	449	510	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	2	2	473	537	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1016	539	542	0	-	0
Stage 1	539	-	-	-	-	-
Stage 2	477	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	266	546	1037	-	-	-
Stage 1	588	-	-	-	-	-
Stage 2	629	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	265	546	1037	-	-	-
Mov Cap-2 Maneuver	265	-	-	-	-	-
Stage 1	587	-	-	-	-	-
Stage 2	629	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	15.21	0.04	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	8	-	357	-	-
HCM Lane V/C Ratio	0.002	-	0.012	-	-
HCM Control Delay (s/veh)	8.5	0	15.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	432	3	3	519	0	2	0	4	3	0	3
Future Vol, veh/h	2	432	3	3	519	0	2	0	4	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	455	3	3	546	0	2	0	4	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	546	0	0	458	0	0	740	1013	229	784	1015	273
Stage 1	-	-	-	-	-	-	461	461	-	553	553	-
Stage 2	-	-	-	-	-	-	279	553	-	232	462	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1033	-	-	1114	-	-	309	241	780	287	240	731
Stage 1	-	-	-	-	-	-	556	569	-	490	518	-
Stage 2	-	-	-	-	-	-	709	518	-	756	568	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1033	-	-	1114	-	-	306	239	780	284	239	731
Mov Cap-2 Maneuver	-	-	-	-	-	-	306	239	-	284	239	-
Stage 1	-	-	-	-	-	-	554	568	-	489	516	-
Stage 2	-	-	-	-	-	-	704	516	-	750	567	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.07	12.09	13.95
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	514	16	-	-	21	-	-	409
HCM Lane V/C Ratio	0.012	0.002	-	-	0.003	-	-	0.015
HCM Control Delay (s/veh)	12.1	8.5	0	-	8.2	0	-	13.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	435	0	3	521	0	2	0	0	2	0	0
Future Vol, veh/h	3	435	0	3	521	0	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	458	0	3	548	0	2	0	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	548	0	0	458	0	0	745	1019	229	790	1019	274
Stage 1	-	-	-	-	-	-	464	464	-	555	555	-
Stage 2	-	-	-	-	-	-	281	555	-	235	464	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1031	-	-	1114	-	-	306	239	780	284	239	729
Stage 1	-	-	-	-	-	-	553	567	-	489	517	-
Stage 2	-	-	-	-	-	-	708	517	-	752	567	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1031	-	-	1114	-	-	304	237	780	282	237	729
Mov Cap-2 Maneuver	-	-	-	-	-	-	304	237	-	282	237	-
Stage 1	-	-	-	-	-	-	551	565	-	487	515	-
Stage 2	-	-	-	-	-	-	706	515	-	750	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.07	16.92	17.85
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	304	25	-	-	21	-	-	282
HCM Lane V/C Ratio	0.007	0.003	-	-	0.003	-	-	0.007
HCM Control Delay (s/veh)	16.9	8.5	0	-	8.2	0	-	17.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	434	2	2	517	0	2	0	0	2	0	5
Future Vol, veh/h	2	434	2	2	517	0	2	0	0	2	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	457	2	2	544	0	2	0	0	2	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	544	0	0	459	0	0	738	1011	229	781	1012	272
Stage 1	-	-	-	-	-	-	462	462	-	548	548	-
Stage 2	-	-	-	-	-	-	276	548	-	233	463	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1035	-	-	1113	-	-	310	242	779	288	241	732
Stage 1	-	-	-	-	-	-	554	568	-	493	520	-
Stage 2	-	-	-	-	-	-	712	520	-	755	567	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1035	-	-	1113	-	-	306	240	779	287	240	732
Mov Cap-2 Maneuver	-	-	-	-	-	-	306	240	-	287	240	-
Stage 1	-	-	-	-	-	-	553	567	-	492	519	-
Stage 2	-	-	-	-	-	-	705	519	-	753	566	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.05	16.85	12.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	306	16	-	-	14	-	-	507
HCM Lane V/C Ratio	0.007	0.002	-	-	0.002	-	-	0.015
HCM Control Delay (s/veh)	16.8	8.5	0	-	8.2	0	-	12.2
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	434	2	2	519	2	3	0	0	3	0	0
Future Vol, veh/h	2	434	2	2	519	2	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	457	2	2	546	2	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	548	0	0	459	0	0	739	1015	229	784	1015	274
Stage 1	-	-	-	-	-	-	462	462	-	552	552	-
Stage 2	-	-	-	-	-	-	277	553	-	233	463	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1031	-	-	1113	-	-	309	240	779	287	240	729
Stage 1	-	-	-	-	-	-	554	568	-	491	518	-
Stage 2	-	-	-	-	-	-	711	518	-	755	567	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1031	-	-	1113	-	-	308	239	779	286	239	729
Mov Cap-2 Maneuver	-	-	-	-	-	-	308	239	-	286	239	-
Stage 1	-	-	-	-	-	-	553	567	-	490	517	-
Stage 2	-	-	-	-	-	-	710	517	-	753	566	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.05	16.82	17.74
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	308	16	-	-	14	-	-	286
HCM Lane V/C Ratio	0.01	0.002	-	-	0.002	-	-	0.011
HCM Control Delay (s/veh)	16.8	8.5	0	-	8.2	0	-	17.7
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	422	18	20	499	0	23	0	15	2	2	0
Future Vol, veh/h	3	422	18	20	499	0	23	0	15	2	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	444	19	21	525	0	24	0	16	2	2	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	525	0	0	463	0	0	766	1027	232	796	1037	263
Stage 1	-	-	-	-	-	-	460	460	-	567	567	-
Stage 2	-	-	-	-	-	-	306	567	-	228	469	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1052	-	-	1109	-	-	296	236	777	281	233	742
Stage 1	-	-	-	-	-	-	556	569	-	480	510	-
Stage 2	-	-	-	-	-	-	685	510	-	759	564	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1052	-	-	1109	-	-	286	230	777	269	227	742
Mov Cap-2 Maneuver	-	-	-	-	-	-	286	230	-	269	227	-
Stage 1	-	-	-	-	-	-	554	567	-	470	499	-
Stage 2	-	-	-	-	-	-	667	499	-	741	562	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	0.48	15.56	19.88
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	381	23	-	-	139	-	-	246
HCM Lane V/C Ratio	0.105	0.003	-	-	0.019	-	-	0.017
HCM Control Delay (s/veh)	15.6	8.4	0	-	8.3	0.2	-	19.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	431	13	16	516	3	8
Future Vol, veh/h	431	13	16	516	3	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	454	14	17	543	3	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	467	0	766	234
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	305	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1105	-	343	774
Stage 1	-	-	-	-	608	-
Stage 2	-	-	-	-	727	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1105	-	337	774
Mov Cap-2 Maneuver	-	-	-	-	337	-
Stage 1	-	-	-	-	608	-
Stage 2	-	-	-	-	714	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.39	11.42
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	572	-	-	108	-
HCM Lane V/C Ratio	0.02	-	-	0.015	-
HCM Control Delay (s/veh)	11.4	-	-	8.3	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	412	23	24	499	25	22
Future Vol, veh/h	412	23	24	499	25	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	434	24	25	525	26	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	458	0	759	229
Stage 1	-	-	-	-	446	-
Stage 2	-	-	-	-	313	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1114	-	347	780
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	720	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1114	-	338	780
Mov Cap-2 Maneuver	-	-	-	-	338	-
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	701	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.57	13.78
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	460	-	-	165	-
HCM Lane V/C Ratio	0.108	-	-	0.023	-
HCM Control Delay (s/veh)	13.8	-	-	8.3	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	432	20	57	515	14	27
Future Vol, veh/h	432	20	57	515	14	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	455	21	60	542	15	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	476	0	856	238
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	391	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1097	-	301	770
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	659	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1097	-	281	770
Mov Cap-2 Maneuver	-	-	-	-	281	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	616	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.25	13.18
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	483	-	-	359	-
HCM Lane V/C Ratio	0.089	-	-	0.055	-
HCM Control Delay (s/veh)	13.2	-	-	8.5	0.4
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	457	11	25	584	7	18
Future Vol, veh/h	457	11	25	584	7	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	481	12	26	615	7	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	493	0	847	246
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	360	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1081	-	305	760
Stage 1	-	-	-	-	589	-
Stage 2	-	-	-	-	683	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1081	-	296	760
Mov Cap-2 Maneuver	-	-	-	-	296	-
Stage 1	-	-	-	-	589	-
Stage 2	-	-	-	-	663	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.56	12.17
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	528	-	-	148	-
HCM Lane V/C Ratio	0.05	-	-	0.024	-
HCM Control Delay (s/veh)	12.2	-	-	8.4	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	38	465	599	132	130	31
Future Vol, veh/h	38	465	599	132	130	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	40	489	631	139	137	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	769	0	-	0	1025	385
Stage 1	-	-	-	-	700	-
Stage 2	-	-	-	-	325	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	854	-	-	-	234	619
Stage 1	-	-	-	-	459	-
Stage 2	-	-	-	-	711	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	854	-	-	-	224	619
Mov Cap-2 Maneuver	-	-	-	-	340	-
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	711	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.71	0	22.51
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	854	-	-	-	372
HCM Lane V/C Ratio	0.047	-	-	-	0.455
HCM Control Delay (s/veh)	9.4	-	-	-	22.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	386	214	44	715	0	0	0	0	31	10	20
Future Volume (veh/h)	0	386	214	44	715	0	0	0	0	31	10	20
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	406	225	46	753	0				33	12	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	951	521	71	1997	0				91	33	58
Arrive On Green	0.00	0.50	0.50	0.10	1.00	0.00				0.06	0.06	0.06
Sat Flow, veh/h	0	2000	1051	1457	3159	0				1457	529	925
Grp Volume(v), veh/h	0	325	306	46	753	0				33	0	33
Grp Sat Flow(s),veh/h/ln	0	1539	1431	1457	1539	0				1457	0	1454
Q Serve(g_s), s	0.0	6.1	6.2	1.4	0.0	0.0				1.0	0.0	1.0
Cycle Q Clear(g_c), s	0.0	6.1	6.2	1.4	0.0	0.0				1.0	0.0	1.0
Prop In Lane	0.00		0.73	1.00		0.00				1.00		0.64
Lane Grp Cap(c), veh/h	0	763	709	71	1997	0				91	0	91
V/C Ratio(X)	0.00	0.43	0.43	0.65	0.38	0.00				0.36	0.00	0.36
Avail Cap(c_a), veh/h	0	763	709	165	1997	0				162	0	162
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.95	0.95	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.3	7.3	19.9	0.0	0.0				20.2	0.0	20.2
Incr Delay (d2), s/veh	0.0	1.7	1.9	3.5	0.5	0.0				0.9	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.3	1.3	0.4	0.1	0.0				0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	9.0	9.2	23.5	0.5	0.0				21.1	0.0	21.1
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		631			799						66	
Approach Delay, s/veh		9.1			1.8						21.1	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.9	28.3		9.8		35.2
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0
Max Green Setting (Gmax), s	5.1	17.2		5.0		27.0
Max Q Clear Time (g_c+I1), s	3.4	8.2		3.0		2.0
Green Ext Time (p_c), s	0.0	1.5		0.0		2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	5.7
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	402	0	0	481	42	267	0	76	0	0	0
Future Volume (veh/h)	21	402	0	0	481	42	267	0	76	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	22	423	0	0	506	44	281	0	80			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	179	1675	0	0	939	419	342	0	304			
Arrive On Green	0.22	0.98	0.00	0.00	0.27	0.27	0.20	0.00	0.20			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	22	423	0	0	506	44	281	0	80			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.5	0.2	0.0	0.0	5.7	1.0	7.1	0.0	2.0			
Cycle Q Clear(g_c), s	0.5	0.2	0.0	0.0	5.7	1.0	7.1	0.0	2.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	179	1675	0	0	939	419	342	0	304			
V/C Ratio(X)	0.12	0.25	0.00	0.00	0.54	0.11	0.82	0.00	0.26			
Avail Cap(c_a), veh/h	180	1675	0	0	939	419	343	0	305			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.96	0.96	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.8	0.2	0.0	0.0	13.9	12.2	17.3	0.0	15.2			
Incr Delay (d2), s/veh	0.3	0.3	0.0	0.0	2.2	0.5	14.8	0.0	0.5			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.0	0.0	1.8	0.3	3.8	0.0	0.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.1	0.6	0.0	0.0	16.1	12.7	32.1	0.0	15.7			
LnGrp LOS	B	A			B	B	C		B			
Approach Vol, veh/h		445			550			361				
Approach Delay, s/veh		1.4			15.8			28.4				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		28.0			9.7	18.4		17.0				
Change Period (Y+Rc), s		6.0			4.7	6.0		8.0				
Max Green Setting (Gmax), s		22.0			5.0	12.3		9.0				
Max Q Clear Time (g_c+I1), s		2.2			2.5	7.7		9.1				
Green Ext Time (p_c), s		2.2			0.0	1.3		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			14.4									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	0	18	13	0	3	28	431	8	1	495	23
Future Vol, veh/h	24	0	18	13	0	3	28	431	8	1	495	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	25	0	19	14	0	3	29	454	8	1	521	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1048	1056	273	775	1060	454	545	0	0	462	0	0
Stage 1	535	535	-	513	513	-	-	-	-	-	-	-
Stage 2	513	521	-	263	547	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	196	227	731	304	226	610	1034	-	-	1110	-	-
Stage 1	502	527	-	548	539	-	-	-	-	-	-	-
Stage 2	548	535	-	725	521	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	189	220	731	287	219	610	1034	-	-	1110	-	-
Mov Cap-2 Maneuver	189	220	-	287	219	-	-	-	-	-	-	-
Stage 1	501	527	-	532	524	-	-	-	-	-	-	-
Stage 2	530	520	-	706	520	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	20.43	16.91	0.51	0.02
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1034	-	-	277	319	1110	-	-
HCM Lane V/C Ratio	0.029	-	-	0.159	0.053	0.001	-	-
HCM Control Delay (s/veh)	8.6	-	-	20.4	16.9	8.2	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	183	0	0	0	90	430	0	0	523	9
Future Vol, veh/h	3	0	183	0	0	0	90	430	0	0	523	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	0	193	0	0	0	95	453	0	0	551	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	971	1197	280	917	1202	226	560	0	0	453	0	0
Stage 1	555	555	-	642	642	-	-	-	-	-	-	-
Stage 2	416	642	-	275	560	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	210	187	723	230	186	783	1021	-	-	1119	-	-
Stage 1	488	516	-	434	472	-	-	-	-	-	-	-
Stage 2	590	472	-	713	514	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	191	170	723	153	169	783	1021	-	-	1119	-	-
Mov Cap-2 Maneuver	191	170	-	153	169	-	-	-	-	-	-	-
Stage 1	488	516	-	394	428	-	-	-	-	-	-	-
Stage 2	535	428	-	523	514	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.98	0	1.54	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1021	-	-	191	723	-	1119	-	-
HCM Lane V/C Ratio	0.093	-	-	0.017	0.266	-	-	-	-
HCM Control Delay (s/veh)	8.9	-	-	24.2	11.8	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	1.1	-	0	-	-

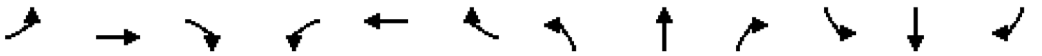
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	575	19	98	527	20	8	0	52	5	0	7
Future Vol, veh/h	10	575	19	98	527	20	8	0	52	5	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	605	20	103	555	21	8	0	55	5	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	576	0	0	625	0	0	1120	1418	313	1095	1418	288
Stage 1	-	-	-	-	-	-	636	636	-	772	772	-
Stage 2	-	-	-	-	-	-	484	782	-	324	646	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1008	-	-	966	-	-	164	138	689	171	138	715
Stage 1	-	-	-	-	-	-	437	475	-	363	412	-
Stage 2	-	-	-	-	-	-	538	408	-	668	470	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1008	-	-	966	-	-	143	122	689	139	122	715
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	122	-	139	122	-
Stage 1	-	-	-	-	-	-	433	470	-	324	368	-
Stage 2	-	-	-	-	-	-	476	364	-	609	465	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.14	1.39	14.14	19.43
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	457	1008	-	-	966	-	-	262
HCM Lane V/C Ratio	0.138	0.01	-	-	0.107	-	-	0.048
HCM Control Delay (s/veh)	14.1	8.6	-	-	9.2	-	-	19.4
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.5	0	-	-	0.4	-	-	0.2



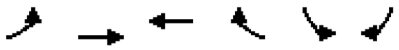
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	625	20	58	559	108	18	3	74	143	6	18
Future Volume (veh/h)	19	625	20	58	559	108	18	3	74	143	6	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	20	658	21	61	588	114	19	3	78	155	0	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	34	1301	42	100	1763	336	119	132	112	1063	0	482
Arrive On Green	0.02	0.38	0.38	0.06	0.43	0.43	0.07	0.07	0.07	0.32	0.00	0.32
Sat Flow, veh/h	1619	3383	108	1619	4144	790	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	20	332	347	61	463	239	19	3	78	155	0	19
Grp Sat Flow(s),veh/h/ln	1619	1710	1781	1619	1638	1658	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	1.3	16.2	16.2	4.0	10.3	10.6	1.2	0.2	5.5	3.6	0.0	0.9
Cycle Q Clear(g_c), s	1.3	16.2	16.2	4.0	10.3	10.6	1.2	0.2	5.5	3.6	0.0	0.9
Prop In Lane	1.00		0.06	1.00		0.48	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	658	685	100	1394	705	119	132	112	1063	0	482
V/C Ratio(X)	0.59	0.51	0.51	0.61	0.33	0.34	0.16	0.02	0.70	0.15	0.00	0.04
Avail Cap(c_a), veh/h	111	681	709	156	1394	705	274	305	258	1063	0	482
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.0	25.7	25.7	50.0	21.0	21.1	47.5	47.0	49.5	26.8	0.0	25.9
Incr Delay (d2), s/veh	15.5	0.6	0.6	5.9	0.6	1.3	0.6	0.1	7.6	0.3	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	6.4	6.7	1.8	4.0	4.3	0.5	0.1	2.3	1.5	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.6	26.3	26.3	55.9	21.6	22.4	48.1	47.1	57.1	27.1	0.0	26.1
LnGrp LOS	E	C	C	E	C	C	D	D	E	C		C
Approach Vol, veh/h		699			763			100			174	
Approach Delay, s/veh		27.5			24.6			55.1			27.0	
Approach LOS		C			C			E			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.2	46.5		39.0	6.8	51.0		12.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	43.5		34.5	7.5	46.5		18.5				
Max Q Clear Time (g_c+I1), s	6.0	18.2		5.6	3.3	12.6		7.5				
Green Ext Time (p_c), s	0.0	4.0		0.6	0.0	5.0		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh	27.8	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	396	444	0	372	355
Future Volume (veh/h)	0	396	444	0	372	355
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	417	467	0	392	374
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1736	1736		910	488
Arrive On Green	0.00	0.51	0.51	0.00	0.31	0.31
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	417	467	0	392	374
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	4.4	5.1	0.0	6.9	13.9
Cycle Q Clear(g_c), s	0.0	4.4	5.1	0.0	6.9	13.9
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1736	1736		910	488
V/C Ratio(X)	0.00	0.24	0.27		0.43	0.77
Avail Cap(c_a), veh/h	0	1736	1736		955	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.0	9.1	0.0	18.0	20.4
Incr Delay (d2), s/veh	0.0	0.3	0.4	0.0	0.4	6.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.4	1.6	0.0	2.3	5.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	9.3	9.5	0.0	18.3	27.2
LnGrp LOS		A	A		B	C
Approach Vol, veh/h		417	467		766	
Approach Delay, s/veh		9.3	9.5		22.7	
Approach LOS		A	A		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	39.0	26.0	39.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	32.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	6.4	15.9	7.1
Green Ext Time (p_c), s	2.2	1.8	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	15.6
HCM 7th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	387	0	0	563	108	325	112	191	41	0	269
Future Volume (veh/h)	173	387	0	0	563	108	325	112	191	41	0	269
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	182	407	0	0	593	114	230	275	201	43	0	283
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	330	2363	0	0	1069	202	406	452	766	0	0	0
Arrive On Green	0.11	0.48	0.00	0.00	0.26	0.26	0.25	0.25	0.25	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4312	785	1619	1800	3051		0	
Grp Volume(v), veh/h	182	407	0	0	466	241	230	275	201		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1659	1619	1800	1525			
Q Serve(g_s), s	2.6	2.1	0.0	0.0	5.5	5.6	5.6	6.0	2.4			
Cycle Q Clear(g_c), s	2.6	2.1	0.0	0.0	5.5	5.6	5.6	6.0	2.4			
Prop In Lane	1.00		0.00	0.00		0.47	1.00		1.00			
Lane Grp Cap(c), veh/h	330	2363	0	0	843	427	406	452	766			
V/C Ratio(X)	0.55	0.17	0.00	0.00	0.55	0.56	0.57	0.61	0.26			
Avail Cap(c_a), veh/h	330	4831	0	0	2489	1260	832	925	1568			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	18.8	6.6	0.0	0.0	14.4	14.4	14.6	14.8	13.4			
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.0	0.4	0.9	1.5	1.6	0.2			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.8	0.5	0.0	0.0	1.7	1.8	1.7	2.1	0.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.5	6.6	0.0	0.0	14.8	15.3	16.1	16.4	13.7			
LnGrp LOS	C	A			B	B	B	B	B			
Approach Vol, veh/h		589			707			706				
Approach Delay, s/veh		10.9			15.0			15.5				
Approach LOS		B			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		27.5			10.0	17.5		17.2				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		23.0				
Max Q Clear Time (g_c+I1), s		4.1			4.6	7.6		8.0				
Green Ext Time (p_c), s		2.4			0.0	3.9		3.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	14.0
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	51	262	28	18	54	97	373	27	31	418	33
Future Volume (veh/h)	106	51	262	28	18	54	97	373	27	31	418	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	112	54	0	29	19	57	102	393	28	33	440	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	138	268		55	39	116	240	660	560	61	582	493
Arrive On Green	0.09	0.15	0.00	0.03	0.10	0.10	0.08	0.37	0.37	0.04	0.32	0.32
Sat Flow, veh/h	1619	1800	1525	1619	396	1189	2956	1800	1525	1619	1800	1525
Grp Volume(v), veh/h	112	54	0	29	0	76	102	393	28	33	440	35
Grp Sat Flow(s),veh/h/ln	1619	1800	1525	1619	0	1586	1478	1800	1525	1619	1800	1525
Q Serve(g_s), s	3.0	1.1	0.0	0.8	0.0	2.0	1.4	7.7	0.5	0.9	9.6	0.7
Cycle Q Clear(g_c), s	3.0	1.1	0.0	0.8	0.0	2.0	1.4	7.7	0.5	0.9	9.6	0.7
Prop In Lane	1.00		1.00	1.00		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	268		55	0	155	240	660	560	61	582	493
V/C Ratio(X)	0.81	0.20		0.53	0.00	0.49	0.42	0.60	0.05	0.54	0.76	0.07
Avail Cap(c_a), veh/h	185	742		185	0	654	339	2639	2237	185	2639	2237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	16.3	0.0	20.7	0.0	18.7	19.1	11.2	8.9	20.6	13.2	10.2
Incr Delay (d2), s/veh	17.8	0.4	0.0	7.6	0.0	2.4	1.2	0.9	0.0	7.2	2.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.4	0.0	0.4	0.0	0.7	0.4	2.1	0.1	0.4	2.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.4	16.7	0.0	28.4	0.0	21.0	20.3	12.1	8.9	27.8	15.3	10.3
LnGrp LOS	D	B		C		C	C	B	A	C	B	B
Approach Vol, veh/h		166			105			523			508	
Approach Delay, s/veh		30.7			23.1			13.5			15.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	20.5	6.0	11.0	8.0	18.6	8.2	8.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.6	64.0	5.0	18.0	5.0	64.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	2.9	9.7	2.8	3.1	3.4	11.6	5.0	4.0
Green Ext Time (p_c), s	0.0	2.3	0.0	0.1	0.0	2.6	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	17.3
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	4	443	29	6	436
Future Vol, veh/h	17	4	443	29	6	436
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	4	466	31	6	459

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	938	466	0	0	497	0
Stage 1	466	-	-	-	-	-
Stage 2	472	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	296	601	-	-	1077	-
Stage 1	636	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	294	601	-	-	1077	-
Mov Cap-2 Maneuver	294	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	627	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	16.87	0	0.11
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	325	24	-
HCM Lane V/C Ratio	-	-	0.068	0.006	-
HCM Control Delay (s/veh)	-	-	16.9	8.4	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	53	0	4	0	170	87	12	127	0
Future Vol, veh/h	0	0	0	53	0	4	0	170	87	12	127	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	56	0	4	0	179	92	13	134	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	338	429	134	384	384	225	134	0	0	271	0	0
Stage 1	159	159	-	225	225	-	-	-	-	-	-	-
Stage 2	179	271	-	159	159	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	620	521	921	578	553	820	1463	-	-	1305	-	-
Stage 1	848	770	-	782	721	-	-	-	-	-	-	-
Stage 2	828	689	-	848	770	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	611	516	921	573	548	820	1463	-	-	1305	-	-
Mov Cap-2 Maneuver	611	516	-	573	548	-	-	-	-	-	-	-
Stage 1	840	763	-	782	721	-	-	-	-	-	-	-
Stage 2	823	689	-	840	763	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	11.86	0	0.67
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1463	-	-	-	585	1305	-	-
HCM Lane V/C Ratio	-	-	-	-	0.103	0.01	-	-
HCM Control Delay (s/veh)	0	-	-	0	11.9	7.8	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0	-	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	34	2	24	50	19	5	72	42	22	57	30
Future Vol, veh/h	43	34	2	24	50	19	5	72	42	22	57	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	36	2	25	53	20	5	76	44	23	60	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	235	253	76	233	246	98	92	0	0	120	0	0
Stage 1	122	122	-	108	108	-	-	-	-	-	-	-
Stage 2	113	131	-	124	138	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	724	654	991	726	659	964	1516	-	-	1480	-	-
Stage 1	887	799	-	902	809	-	-	-	-	-	-	-
Stage 2	897	792	-	885	786	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	640	642	991	672	647	964	1516	-	-	1480	-	-
Mov Cap-2 Maneuver	640	642	-	672	647	-	-	-	-	-	-	-
Stage 1	873	786	-	899	807	-	-	-	-	-	-	-
Stage 2	818	789	-	829	774	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.39	10.97	0.31	1.51
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1516	-	-	646	701	1480	-	-
HCM Lane V/C Ratio	0.003	-	-	0.129	0.14	0.016	-	-
HCM Control Delay (s/veh)	7.4	-	-	11.4	11	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.5	0	-	-

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	2	65	0	0	0	0	114	22	15	52	0
Future Vol, veh/h	6	2	65	0	0	0	0	114	22	15	52	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	2	68	0	0	0	0	120	23	16	55	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.5	8.7	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	84%	0%	3%	0%	100%
Vol Right, %	16%	0%	97%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	136	6	67	15	52
LT Vol	0	6	0	15	0
Through Vol	114	0	2	0	52
RT Vol	22	0	65	0	0
Lane Flow Rate	143	6	71	16	55
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.183	0.01	0.085	0.023	0.072
Departure Headway (Hd)	4.591	5.526	4.343	5.21	4.709
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	773	652	830	680	752
Service Time	2.669	3.226	2.043	2.998	2.496
HCM Lane V/C Ratio	0.185	0.009	0.086	0.024	0.073
HCM Control Delay, s/veh	8.7	8.3	7.4	8.1	7.9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.7	0	0.3	0.1	0.2

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	46	15	22	53	62
Future Vol, veh/h	30	46	15	22	53	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	32	48	16	23	56	65
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7.3	7.9	7.7
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	53	62	30	46	15	22
LT Vol	53	0	0	0	15	0
Through Vol	0	0	30	0	0	22
RT Vol	0	62	0	46	0	0
Lane Flow Rate	56	65	32	48	16	23
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.081	0.072	0.042	0.054	0.024	0.031
Departure Headway (Hd)	5.199	3.998	4.731	4.029	5.358	4.856
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	682	883	746	873	672	742
Service Time	2.982	1.78	2.53	1.828	3.058	2.556
HCM Lane V/C Ratio	0.082	0.074	0.043	0.055	0.024	0.031
HCM Control Delay, s/veh	8.4	7.1	7.7	7.1	8.2	7.7
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.2	0.1	0.2	0.1	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	282	154	267	284	6	174	41	206	24	57	31
Future Volume (veh/h)	23	282	154	267	284	6	174	41	206	24	57	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	24	297	162	281	299	6	183	43	217	25	60	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	46	482	256	341	1390	28	418	441	374	452	536	274
Arrive On Green	0.03	0.22	0.22	0.21	0.41	0.41	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1619	2157	1147	1619	3429	69	1184	1800	1525	1312	2190	1119
Grp Volume(v), veh/h	24	234	225	281	149	156	183	43	217	25	46	47
Grp Sat Flow(s),veh/h/ln	1619	1710	1594	1619	1710	1788	1184	1800	1525	1312	1710	1599
Q Serve(g_s), s	0.7	5.7	5.9	7.7	2.6	2.6	6.6	0.9	5.8	0.7	1.0	1.1
Cycle Q Clear(g_c), s	0.7	5.7	5.9	7.7	2.6	2.6	7.7	0.9	5.8	1.6	1.0	1.1
Prop In Lane	1.00		0.72	1.00		0.04	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	46	382	356	341	693	725	418	441	374	452	419	392
V/C Ratio(X)	0.52	0.61	0.63	0.82	0.21	0.22	0.44	0.10	0.58	0.06	0.11	0.12
Avail Cap(c_a), veh/h	234	1459	1360	506	1746	1826	1174	1590	1348	1290	1511	1412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	16.2	16.3	17.5	9.0	9.0	16.6	13.6	15.4	14.2	13.6	13.6
Incr Delay (d2), s/veh	8.6	1.6	1.9	6.9	0.2	0.1	0.7	0.1	1.4	0.1	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	1.8	2.9	0.7	0.7	1.6	0.3	1.9	0.2	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.9	17.8	18.2	24.4	9.1	9.1	17.3	13.7	16.9	14.2	13.7	13.8
LnGrp LOS	C	B	B	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		483			586			443			118	
Approach Delay, s/veh		18.6			16.5			16.7			13.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.3	16.2		16.0	5.8	24.6		16.0				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	4.5	39.6		41.0	6.7	47.4		41.0				
Max Q Clear Time (g_c+I1), s	9.7	7.9		9.7	2.7	4.6		3.6				
Green Ext Time (p_c), s	0.4	2.4		1.7	0.0	1.6		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	17.0
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	472	78	106	506	8	64	3	97	12	5	12
Future Volume (veh/h)	10	472	78	106	506	8	64	3	97	12	5	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	11	497	82	112	533	8	67	3	102	13	5	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	517	1290	212	498	1513	23	418	252	214	431	62	161
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	786	2940	483	759	3449	52	1268	1800	1525	1285	442	1150
Grp Volume(v), veh/h	11	288	291	112	264	277	67	3	102	13	0	18
Grp Sat Flow(s),veh/h/ln	786	1710	1713	759	1710	1791	1268	1800	1525	1285	0	1593
Q Serve(g_s), s	0.3	3.2	3.3	3.3	2.9	2.9	1.4	0.0	1.8	0.3	0.0	0.3
Cycle Q Clear(g_c), s	3.2	3.2	3.3	6.6	2.9	2.9	1.7	0.0	1.8	0.3	0.0	0.3
Prop In Lane	1.00		0.28	1.00		0.03	1.00		1.00	1.00		0.72
Lane Grp Cap(c), veh/h	517	750	752	498	750	786	418	252	214	431	0	223
V/C Ratio(X)	0.02	0.38	0.39	0.22	0.35	0.35	0.16	0.01	0.48	0.03	0.00	0.08
Avail Cap(c_a), veh/h	1192	2220	2224	1151	2220	2325	1841	2274	1927	1946	0	2101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.4	5.4	5.4	7.6	5.3	5.3	11.4	10.6	11.3	10.7	0.0	10.7
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.2	0.3	0.3	0.2	0.0	1.6	0.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.3	0.3	0.3	0.3	0.0	0.5	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.4	5.7	5.7	7.9	5.6	5.6	11.6	10.6	12.9	10.7	0.0	10.8
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		590			653			172			31	
Approach Delay, s/veh		5.7			6.0			12.4			10.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	18.3	10.2	18.3	10.2
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	37.0	36.0	37.0	* 38
Max Q Clear Time (g_c+I1), s	5.3	3.8	8.6	2.3
Green Ext Time (p_c), s	3.4	0.6	3.9	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.7
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	610	93	49	616	6	97	0	48	7	2	6
Future Volume (veh/h)	2	610	93	49	616	6	97	0	48	7	2	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	2	642	98	52	648	6	102	0	51	7	2	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	528	1374	209	493	1603	15	478	0	210	398	79	210
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.14	0.00	0.14	0.14	0.14	0.14
Sat Flow, veh/h	708	2975	453	653	3472	32	1373	0	1525	1027	570	1525
Grp Volume(v), veh/h	2	369	371	52	319	335	102	0	51	9	0	6
Grp Sat Flow(s),veh/h/ln	708	1710	1718	653	1710	1794	1373	0	1525	1597	0	1525
Q Serve(g_s), s	0.0	3.7	3.7	1.5	3.1	3.1	1.6	0.0	0.7	0.0	0.0	0.1
Cycle Q Clear(g_c), s	3.1	3.7	3.7	5.2	3.1	3.1	1.7	0.0	0.7	0.1	0.0	0.1
Prop In Lane	1.00		0.26	1.00		0.02	1.00		1.00	0.78		1.00
Lane Grp Cap(c), veh/h	528	790	793	493	790	828	478	0	210	476	0	210
V/C Ratio(X)	0.00	0.47	0.47	0.11	0.40	0.40	0.21	0.00	0.24	0.02	0.00	0.03
Avail Cap(c_a), veh/h	938	1780	1789	872	1780	1868	2144	0	2077	2241	0	2077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.5	4.6	4.6	6.4	4.4	4.4	10.0	0.0	9.6	9.3	0.0	9.3
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.1	0.3	0.3	0.2	0.0	0.6	0.0	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.1	0.4	0.4	0.4	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.5	5.0	5.0	6.5	4.8	4.8	10.2	0.0	10.2	9.3	0.0	9.4
LnGrp LOS	A	A	A	A	A	A	B		B	A		A
Approach Vol, veh/h		742			706			153			15	
Approach Delay, s/veh		5.0			4.9			10.2			9.4	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.9	8.0	16.9	8.0
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	26.0	34.0	26.0	34.0
Max Q Clear Time (g_c+I1), s	5.7	3.7	7.2	2.1
Green Ext Time (p_c), s	4.1	0.7	4.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.5
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	479	46	18	441	140	43	32	17	199	41	210
Future Volume (veh/h)	140	479	46	18	441	140	43	32	17	199	41	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	147	504	48	19	464	147	45	34	18	209	43	221
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	303	757	72	207	677	213	127	82	44	382	60	308
Arrive On Green	0.10	0.24	0.24	0.11	0.26	0.26	0.07	0.07	0.07	0.22	0.22	0.22
Sat Flow, veh/h	1714	3156	300	1810	2560	805	1810	1169	619	1714	269	1382
Grp Volume(v), veh/h	147	272	280	19	309	302	45	0	52	209	0	264
Grp Sat Flow(s),veh/h/ln	1714	1710	1746	1810	1710	1655	1810	0	1789	1714	0	1651
Q Serve(g_s), s	4.2	7.9	8.0	0.5	8.9	9.0	1.3	0.0	1.5	5.9	0.0	8.1
Cycle Q Clear(g_c), s	4.2	7.9	8.0	0.5	8.9	9.0	1.3	0.0	1.5	5.9	0.0	8.1
Prop In Lane	1.00		0.17	1.00		0.49	1.00		0.35	1.00		0.84
Lane Grp Cap(c), veh/h	303	410	419	207	452	438	127	0	126	382	0	368
V/C Ratio(X)	0.48	0.66	0.67	0.09	0.68	0.69	0.35	0.00	0.41	0.55	0.00	0.72
Avail Cap(c_a), veh/h	340	893	912	207	856	828	165	0	163	842	0	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.8	18.9	18.9	21.8	18.1	18.2	24.4	0.0	24.5	18.9	0.0	19.8
Incr Delay (d2), s/veh	1.2	1.9	1.8	0.2	1.8	2.0	1.7	0.0	2.2	1.2	0.0	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.0	3.1	0.2	3.4	3.3	0.6	0.0	0.7	2.3	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.0	20.7	20.8	22.0	20.0	20.1	26.0	0.0	26.6	20.1	0.0	22.4
LnGrp LOS	C	C	C	C	B	C	C		C	C		C
Approach Vol, veh/h		699			630			97			473	
Approach Delay, s/veh		20.8			20.1			26.3			21.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	18.3		8.5	10.0	19.1		17.3				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.6	* 29		5.0	6.7	27.5		27.0				
Max Q Clear Time (g_c+I1), s	12.5	10.0		3.5	6.2	11.0		10.1				
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	3.5		2.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	21.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	463	197	104	400	187	80
Future Volume (veh/h)	463	197	104	400	187	80
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	487	207	109	421	197	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	809	342	152	1946	292	275
Arrive On Green	0.35	0.35	0.09	0.57	0.18	0.18
Sat Flow, veh/h	2432	990	1619	3510	1619	1525
Grp Volume(v), veh/h	355	339	109	421	197	84
Grp Sat Flow(s),veh/h/ln	1710	1622	1619	1710	1619	1525
Q Serve(g_s), s	5.9	6.0	2.3	2.1	3.9	1.7
Cycle Q Clear(g_c), s	5.9	6.0	2.3	2.1	3.9	1.7
Prop In Lane		0.61	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	591	560	152	1946	292	275
V/C Ratio(X)	0.60	0.61	0.72	0.22	0.67	0.31
Avail Cap(c_a), veh/h	1162	1103	359	3477	1213	1142
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	9.4	15.3	3.7	13.3	12.3
Incr Delay (d2), s/veh	1.0	1.1	6.2	0.1	2.7	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.6	0.9	0.3	1.3	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.4	10.5	21.5	3.7	16.0	13.0
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	694			530	281	
Approach Delay, s/veh	10.4			7.4	15.1	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.8	16.6		10.4		24.3
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	7.3	* 24		26.0		35.3
Max Q Clear Time (g_c+I1), s	4.3	8.0		5.9		4.1
Green Ext Time (p_c), s	0.1	4.0		0.8		3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.2
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	64	72	246	43	87	45	401	261	100	497	5
Future Volume (veh/h)	9	64	72	246	43	87	45	401	261	100	497	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	9	67	76	259	45	92	47	422	0	105	523	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	471	261	296	468	179	366	79	523		130	1116	11
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.05	0.29	0.00	0.08	0.32	0.32
Sat Flow, veh/h	1138	770	873	1132	527	1078	1619	1800	1525	1619	3471	33
Grp Volume(v), veh/h	9	0	143	259	0	137	47	422	0	105	258	270
Grp Sat Flow(s),veh/h/ln	1138	0	1643	1132	0	1606	1619	1800	1525	1619	1710	1794
Q Serve(g_s), s	0.3	0.0	2.9	10.0	0.0	2.9	1.3	10.1	0.0	3.0	5.6	5.6
Cycle Q Clear(g_c), s	3.1	0.0	2.9	12.9	0.0	2.9	1.3	10.1	0.0	3.0	5.6	5.6
Prop In Lane	1.00		0.53	1.00		0.67	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	471	0	557	468	0	545	79	523		130	550	577
V/C Ratio(X)	0.02	0.00	0.26	0.55	0.00	0.25	0.59	0.81		0.81	0.47	0.47
Avail Cap(c_a), veh/h	576	0	710	573	0	694	212	739		254	746	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	0.0	11.1	15.8	0.0	11.1	21.7	15.3	0.0	21.0	12.6	12.6
Incr Delay (d2), s/veh	0.0	0.0	0.2	1.0	0.0	0.2	6.9	4.5	0.0	11.3	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.9	2.3	0.0	0.9	0.6	4.0	0.0	1.4	1.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.2	0.0	11.4	16.8	0.0	11.3	28.6	19.8	0.0	32.4	13.2	13.2
LnGrp LOS	B		B	B		B	C	B		C	B	B
Approach Vol, veh/h		152			396			469			633	
Approach Delay, s/veh		11.4			14.9			20.7			16.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	19.5		20.3	8.2	18.0		20.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.1	20.3		20.1	7.3	19.1		20.1				
Max Q Clear Time (g_c+I1), s	3.3	7.6		14.9	5.0	12.1		5.1				
Green Ext Time (p_c), s	0.0	2.4		0.9	0.0	1.4		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	16.8
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	187	0	129	340	693	0	0	587	360
Future Volume (veh/h)	0	0	0	187	0	129	340	693	0	0	587	360
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				197	0	136	358	729	0	0	618	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				285	0	253	510	2168	0	0	750	
Arrive On Green				0.17	0.00	0.17	0.31	0.63	0.00	0.00	0.22	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				197	0	136	358	729	0	0	618	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				6.5	0.0	4.9	11.7	5.9	0.0	0.0	10.3	0.0
Cycle Q Clear(g_c), s				6.5	0.0	4.9	11.7	5.9	0.0	0.0	10.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				285	0	253	510	2168	0	0	750	
V/C Ratio(X)				0.69	0.00	0.54	0.70	0.34	0.00	0.00	0.82	
Avail Cap(c_a), veh/h				286	0	254	510	2168	0	0	821	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.89	0.89	0.00	0.00	0.86	0.00
Uniform Delay (d), s/veh				23.6	0.0	22.9	18.1	5.1	0.0	0.0	22.3	0.0
Incr Delay (d2), s/veh				6.9	0.0	2.2	3.3	0.4	0.0	0.0	8.7	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.0	0.0	1.8	4.3	1.5	0.0	0.0	4.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				30.5	0.0	25.1	21.4	5.5	0.0	0.0	31.0	0.0
LnGrp LOS				C		C	C	A			C	
Approach Vol, veh/h					333			1087			618	
Approach Delay, s/veh					28.3			10.7			31.0	
Approach LOS					C			B			C	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	4.9	19.2		16.0		44.0			
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0			
Max Green Setting (Gmax), s	8.9	* 14		10.0		38.0			
Max Q Clear Time (g_c+I1), s	3.7	12.3		8.5		7.9			
Green Ext Time (p_c), s	0.3	0.8		0.2		5.4			

Intersection Summary	
HCM 7th Control Delay, s/veh	19.7
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	229	320	81	828	730	84
Future Volume (veh/h)	229	320	81	828	730	84
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	241	337	85	872	768	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	396	373	158	2128	1460	167
Arrive On Green	0.24	0.24	0.10	0.62	0.47	0.47
Sat Flow, veh/h	1619	1525	1619	3510	3182	354
Grp Volume(v), veh/h	241	337	85	872	425	431
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1736
Q Serve(g_s), s	11.9	19.3	4.5	11.6	15.7	15.7
Cycle Q Clear(g_c), s	11.9	19.3	4.5	11.6	15.7	15.7
Prop In Lane	1.00	1.00	1.00			0.20
Lane Grp Cap(c), veh/h	396	373	158	2128	807	820
V/C Ratio(X)	0.61	0.90	0.54	0.41	0.53	0.53
Avail Cap(c_a), veh/h	522	492	221	2128	807	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.74	0.74	0.71	0.71
Uniform Delay (d), s/veh	30.2	33.0	38.7	8.6	16.7	16.7
Incr Delay (d2), s/veh	0.6	14.3	0.8	0.4	1.7	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	8.4	1.8	3.8	6.1	6.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	30.7	47.3	39.4	9.1	18.4	18.4
LnGrp LOS	C	D	D	A	B	B
Approach Vol, veh/h	578			957	856	
Approach Delay, s/veh	40.4			11.8	18.4	
Approach LOS	D			B	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.5	48.5			62.0	28.0
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	12.3	32.0			49.0	29.0
Max Q Clear Time (g_c+I1), s	6.5	17.7			13.6	21.3
Green Ext Time (p_c), s	0.0	4.6			7.0	0.7

Intersection Summary		
HCM 7th Control Delay, s/veh	21.1	
HCM 7th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	21	29	84	21	327	21	454	69	348	688	42
Future Volume (veh/h)	91	21	29	84	21	327	21	454	69	348	688	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	96	22	31	88	22	344	22	478	73	366	724	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	216	521	465	478	521	465	42	638	97	409	1446	88
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.03	0.21	0.21	0.25	0.44	0.44
Sat Flow, veh/h	923	1710	1525	1228	1710	1525	1619	2976	452	1619	3275	199
Grp Volume(v), veh/h	96	22	31	88	22	344	22	274	277	366	378	390
Grp Sat Flow(s),veh/h/ln	923	1710	1525	1228	1710	1525	1619	1710	1719	1619	1710	1764
Q Serve(g_s), s	6.0	0.5	0.9	3.2	0.5	12.0	0.8	8.8	8.9	12.9	9.4	9.4
Cycle Q Clear(g_c), s	18.0	0.5	0.9	4.1	0.5	12.0	0.8	8.8	8.9	12.9	9.4	9.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		0.11
Lane Grp Cap(c), veh/h	216	521	465	478	521	465	42	366	368	409	755	779
V/C Ratio(X)	0.44	0.04	0.07	0.18	0.04	0.74	0.53	0.75	0.75	0.89	0.50	0.50
Avail Cap(c_a), veh/h	216	521	465	478	521	465	288	521	523	425	755	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	14.5	14.6	16.0	14.5	18.5	28.4	21.7	21.8	21.3	11.8	11.8
Incr Delay (d2), s/veh	1.4	0.0	0.1	0.2	0.0	6.2	10.1	3.6	3.8	20.4	0.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.2	0.3	0.9	0.2	4.6	0.4	3.4	3.5	6.6	3.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.0	14.5	14.7	16.2	14.5	24.7	38.5	25.3	25.6	41.7	12.4	12.3
LnGrp LOS	C	B	B	B	B	C	D	C	C	D	B	B
Approach Vol, veh/h		149			454			573			1134	
Approach Delay, s/veh		23.2			22.6			25.9			21.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	30.6		22.5	19.4	17.2		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	23.0		18.0	15.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	12.8	11.4		14.0	14.9	10.9		20.0				
Green Ext Time (p_c), s	0.0	3.6		1.0	0.1	1.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	23.1
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	236	31	48	210	102	34	209	36	194	193	213
Future Volume (veh/h)	137	236	31	48	210	102	34	209	36	194	193	213
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	144	248	33	51	221	107	36	220	38	204	203	224
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	485	1002	132	510	747	349	468	1077	183	564	630	562
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	956	3038	400	998	2263	1057	873	2923	497	1019	1710	1525
Grp Volume(v), veh/h	144	138	143	51	165	163	36	127	131	204	203	224
Grp Sat Flow(s),veh/h/ln	956	1710	1728	998	1710	1610	873	1710	1711	1019	1710	1525
Q Serve(g_s), s	3.9	1.8	1.8	1.2	2.1	2.3	0.9	1.5	1.6	5.1	2.5	3.2
Cycle Q Clear(g_c), s	6.2	1.8	1.8	3.0	2.1	2.3	4.2	1.5	1.6	6.7	2.5	3.2
Prop In Lane	1.00		0.23	1.00		0.66	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	485	564	570	510	564	531	468	630	630	564	630	562
V/C Ratio(X)	0.30	0.25	0.25	0.10	0.29	0.31	0.08	0.20	0.21	0.36	0.32	0.40
Avail Cap(c_a), veh/h	746	1032	1043	783	1032	971	673	1032	1032	803	1032	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.8	7.3	7.3	8.4	7.4	7.5	8.5	6.4	6.4	8.7	6.8	7.0
Incr Delay (d2), s/veh	0.3	0.2	0.2	0.1	0.3	0.3	0.1	0.2	0.2	0.4	0.3	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.4	0.4	0.2	0.5	0.5	0.1	0.3	0.3	0.6	0.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.1	7.5	7.5	8.5	7.7	7.8	8.6	6.6	6.6	9.1	7.0	7.4
LnGrp LOS	B	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		425			379			294			631	
Approach Delay, s/veh		8.4			7.8			6.8			7.9	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.5	14.3	15.5	14.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	6.2	8.2	8.7	5.0
Green Ext Time (p_c), s	1.1	1.7	2.3	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	7.8
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	403	0	1	146	1	0
Future Vol, veh/h	403	0	1	146	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	438	0	1	159	1	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	438	0	520	219
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	82	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1133	-	491	791
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	938	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1133	-	491	791
Mov Cap-2 Maneuver	-	-	-	-	491	-
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	937	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.06	12.36
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	491	-	-	1133	-
HCM Lane V/C Ratio	0.002	-	-	0.001	-
HCM Control Delay (s/veh)	12.4	-	-	8.2	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	495	0	15	547	4	18
Future Vol, veh/h	495	0	15	547	4	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	521	0	16	576	4	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	521	0	841	261
Stage 1	-	-	-	-	521	-
Stage 2	-	-	-	-	319	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1056	-	308	744
Stage 1	-	-	-	-	566	-
Stage 2	-	-	-	-	715	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1056	-	303	744
Mov Cap-2 Maneuver	-	-	-	-	422	-
Stage 1	-	-	-	-	566	-
Stage 2	-	-	-	-	704	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.23	10.71
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	653	-	-	1056	-
HCM Lane V/C Ratio	0.035	-	-	0.015	-
HCM Control Delay (s/veh)	10.7	-	-	8.5	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	0	0	4	0	0	0	0	0	0	0
Future Vol, veh/h	0	1	0	0	4	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1	0	0	4	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	4	0	0	1	0	0	5	5	1	5	5	4
Stage 1	-	-	-	-	-	-	1	1	-	4	4	-
Stage 2	-	-	-	-	-	-	4	4	-	1	1	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1630	-	-	1635	-	-	1020	894	1089	1020	894	1085
Stage 1	-	-	-	-	-	-	1027	899	-	1023	896	-
Stage 2	-	-	-	-	-	-	1023	896	-	1027	899	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1630	-	-	1635	-	-	1020	894	1089	1020	894	1085
Mov Cap-2 Maneuver	-	-	-	-	-	-	1020	894	-	1020	894	-
Stage 1	-	-	-	-	-	-	1027	899	-	1023	896	-
Stage 2	-	-	-	-	-	-	1023	896	-	1027	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1630	-	-	1635	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	240	87	0	0	0
Future Vol, veh/h	0	240	87	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	261	95	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	95	0	-	0	355	95
Stage 1	-	-	-	-	95	-
Stage 2	-	-	-	-	261	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1512	-	-	-	647	968
Stage 1	-	-	-	-	934	-
Stage 2	-	-	-	-	787	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1512	-	-	-	647	968
Mov Cap-2 Maneuver	-	-	-	-	677	-
Stage 1	-	-	-	-	934	-
Stage 2	-	-	-	-	787	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1512	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	293	106	40	110	0
Future Vol, veh/h	0	293	106	40	110	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	0	150	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	318	115	43	120	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	159	0	-	0	434	115
Stage 1	-	-	-	-	115	-
Stage 2	-	-	-	-	318	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1433	-	-	-	583	943
Stage 1	-	-	-	-	915	-
Stage 2	-	-	-	-	742	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1433	-	-	-	583	943
Mov Cap-2 Maneuver	-	-	-	-	583	-
Stage 1	-	-	-	-	915	-
Stage 2	-	-	-	-	742	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.76
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1433	-	-	-	583	-
HCM Lane V/C Ratio	-	-	-	-	0.205	-
HCM Control Delay (s/veh)	0	-	-	-	12.8	0
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.8	-

Intersection	
Int Delay, s/veh	6.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	73	0	0	25	0	0
Future Vol, veh/h	73	0	0	25	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	79	0	0	27	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	15	14	0	0	27	0
Stage 1	14	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1009	1072	-	-	1600	-
Stage 1	1014	-	-	-	-	-
Stage 2	1027	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1009	1072	-	-	1600	-
Mov Cap-2 Maneuver	925	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	1027	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.26	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	925	1600	-
HCM Lane V/C Ratio	-	-	0.086	-	-
HCM Control Delay (s/veh)	-	-	9.3	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	321	0	0	501
Future Vol, veh/h	0	0	321	0	0	501
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	349	0	0	545

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	621	174	0	0	349	0
Stage 1	349	-	-	-	-	-
Stage 2	272	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	424	845	-	-	1221	-
Stage 1	691	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	424	845	-	-	1221	-
Mov Cap-2 Maneuver	424	-	-	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	755	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1221	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	333	147	0	0	0
Future Vol, veh/h	0	333	147	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	351	155	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	155	0	-	0	505	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	351	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1438	-	-	-	530	896
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	717	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1438	-	-	-	530	896
Mov Cap-2 Maneuver	-	-	-	-	530	-
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	717	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1438	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	256	0	3	187	186	0	2	13	172	2	6
Future Volume (veh/h)	6	256	0	3	187	186	0	2	13	172	2	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	6	269	0	3	197	196	0	2	14	188	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	547	518	0	530	518	439	0	49	346	1359	458	0
Arrive On Green	0.29	0.29	0.00	0.29	0.29	0.29	0.00	0.25	0.25	0.25	0.00	0.00
Sat Flow, veh/h	901	1800	0	1009	1800	1525	0	194	1361	2540	1800	0
Grp Volume(v), veh/h	6	269	0	3	197	196	0	0	16	188	0	0
Grp Sat Flow(s),veh/h/ln	901	1800	0	1009	1800	1525	0	0	1555	1270	1800	0
Q Serve(g_s), s	0.1	2.5	0.0	0.0	1.7	2.1	0.0	0.0	0.2	1.2	0.0	0.0
Cycle Q Clear(g_c), s	1.8	2.5	0.0	2.5	1.7	2.1	0.0	0.0	0.2	1.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.87	1.00		0.00
Lane Grp Cap(c), veh/h	547	518	0	530	518	439	0	0	396	1359	458	0
V/C Ratio(X)	0.01	0.52	0.00	0.01	0.38	0.45	0.00	0.00	0.04	0.14	0.00	0.00
Avail Cap(c_a), veh/h	1113	1649	0	1164	1649	1397	0	0	1424	3040	1649	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.3	5.9	0.0	6.9	5.6	5.7	0.0	0.0	5.5	6.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.3	6.7	0.0	6.9	6.1	6.4	0.0	0.0	5.6	6.1	0.0	0.0
LnGrp LOS	A	A		A	A	A			A	A		
Approach Vol, veh/h		275			396			16			188	
Approach Delay, s/veh		6.7			6.3			5.6			6.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.5		10.2		9.5		10.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		2.2		4.5		3.3		4.5				
Green Ext Time (p_c), s		0.0		1.0		0.6		1.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	6.3
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	196	185	40	134	261	172	416	50	157	201	83
Future Volume (veh/h)	107	196	185	40	134	261	172	416	50	157	201	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	113	206	0	42	141	0	181	438	53	165	212	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	140	827		56	650		222	667	80	204	371	314
Arrive On Green	0.09	0.24	0.00	0.03	0.19	0.00	0.14	0.22	0.22	0.13	0.21	0.21
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	3073	370	1619	1800	1525
Grp Volume(v), veh/h	113	206	0	42	141	0	181	243	248	165	212	87
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1733	1619	1800	1525
Q Serve(g_s), s	3.6	2.6	0.0	1.4	1.8	0.0	5.7	6.8	6.9	5.2	5.6	2.5
Cycle Q Clear(g_c), s	3.6	2.6	0.0	1.4	1.8	0.0	5.7	6.8	6.9	5.2	5.6	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	140	827		56	650		222	371	376	204	371	314
V/C Ratio(X)	0.81	0.25		0.74	0.22		0.81	0.65	0.66	0.81	0.57	0.28
Avail Cap(c_a), veh/h	338	2183		338	2183		400	1101	1116	523	1279	1084
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	16.1	0.0	25.2	18.0	0.0	22.1	18.8	18.8	22.4	18.8	17.6
Incr Delay (d2), s/veh	4.1	0.2	0.0	7.0	0.2	0.0	2.7	2.0	2.0	2.9	1.4	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.8	0.0	0.6	0.6	0.0	2.0	2.4	2.4	1.8	2.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.7	16.3	0.0	32.2	18.2	0.0	24.8	20.7	20.8	25.2	20.2	18.1
LnGrp LOS	C	B		C	B		C	C	C	C	C	B
Approach Vol, veh/h		319			183			672			464	
Approach Delay, s/veh		20.3			21.4			21.9			21.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	18.1	11.2	17.4	8.6	15.4	10.6	18.0
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	11.8	33.6	13.0	37.4	11.0	33.6	17.0	* 34
Max Q Clear Time (g_c+I1), s	3.4	4.6	7.7	7.6	5.6	3.8	7.2	8.9
Green Ext Time (p_c), s	0.0	1.2	0.1	1.3	0.0	0.8	0.1	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	21.4
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	0	0	543	322	8
Future Vol, veh/h	18	0	0	543	322	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	19	0	0	572	339	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	915	343	347	0	-	0
Stage 1	343	-	-	-	-	-
Stage 2	572	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	305	704	1223	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	569	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	305	704	1223	-	-	-
Mov Cap-2 Maneuver	305	-	-	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	569	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	17.57	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1223	-	305	-	-
HCM Lane V/C Ratio	-	-	0.062	-	-
HCM Control Delay (s/veh)	0	-	17.6	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	339	0	2	380	0	3	0	5	3	0	0
Future Vol, veh/h	3	339	0	2	380	0	3	0	5	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	357	0	2	400	0	3	0	5	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	400	0	0	357	0	0	567	767	178	589	767	200
Stage 1	-	-	-	-	-	-	363	363	-	404	404	-
Stage 2	-	-	-	-	-	-	204	404	-	185	363	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1170	-	-	1213	-	-	410	335	840	396	335	814
Stage 1	-	-	-	-	-	-	634	628	-	600	602	-
Stage 2	-	-	-	-	-	-	784	602	-	805	628	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1170	-	-	1213	-	-	408	333	840	392	333	814
Mov Cap-2 Maneuver	-	-	-	-	-	-	408	333	-	392	333	-
Stage 1	-	-	-	-	-	-	632	626	-	598	601	-
Stage 2	-	-	-	-	-	-	783	601	-	798	626	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.06	11.07	14.27
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	602	32	-	-	19	-	-	392
HCM Lane V/C Ratio	0.014	0.003	-	-	0.002	-	-	0.008
HCM Control Delay (s/veh)	11.1	8.1	0	-	8	0	-	14.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	342	1	2	380	0	3	0	0	4	0	0
Future Vol, veh/h	2	342	1	2	380	0	3	0	0	4	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	360	1	2	400	0	3	0	0	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	400	0	0	361	0	0	569	769	181	588	769	200
Stage 1	-	-	-	-	-	-	365	365	-	404	404	-
Stage 2	-	-	-	-	-	-	204	404	-	184	365	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1170	-	-	1209	-	-	409	334	837	396	334	814
Stage 1	-	-	-	-	-	-	632	627	-	600	602	-
Stage 2	-	-	-	-	-	-	784	602	-	806	627	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1170	-	-	1209	-	-	408	333	837	395	332	814
Mov Cap-2 Maneuver	-	-	-	-	-	-	408	333	-	395	332	-
Stage 1	-	-	-	-	-	-	631	626	-	598	601	-
Stage 2	-	-	-	-	-	-	783	601	-	804	625	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.06	13.9	14.22
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	408	21	-	-	19	-	-	395
HCM Lane V/C Ratio	0.008	0.002	-	-	0.002	-	-	0.011
HCM Control Delay (s/veh)	13.9	8.1	0	-	8	0	-	14.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	339	3	3	377	2	3	0	0	4	0	0
Future Vol, veh/h	3	339	3	3	377	2	3	0	0	4	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	357	3	3	397	2	3	0	0	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	399	0	0	360	0	0	569	770	180	589	771	199
Stage 1	-	-	-	-	-	-	365	365	-	404	404	-
Stage 2	-	-	-	-	-	-	205	405	-	185	366	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1171	-	-	1210	-	-	409	333	838	396	333	814
Stage 1	-	-	-	-	-	-	632	627	-	600	602	-
Stage 2	-	-	-	-	-	-	784	602	-	805	626	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1171	-	-	1210	-	-	407	332	838	394	331	814
Mov Cap-2 Maneuver	-	-	-	-	-	-	407	332	-	394	331	-
Stage 1	-	-	-	-	-	-	630	625	-	598	601	-
Stage 2	-	-	-	-	-	-	781	600	-	803	624	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.09	13.92	14.24
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	407	31	-	-	28	-	-	394
HCM Lane V/C Ratio	0.008	0.003	-	-	0.003	-	-	0.011
HCM Control Delay (s/veh)	13.9	8.1	0	-	8	0	-	14.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	354	0	2	370	0	3	0	0	3	0	0
Future Vol, veh/h	3	354	0	2	370	0	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	373	0	2	389	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	389	0	0	373	0	0	578	773	186	586	773	195
Stage 1	-	-	-	-	-	-	379	379	-	394	394	-
Stage 2	-	-	-	-	-	-	199	394	-	193	379	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1180	-	-	1197	-	-	403	332	830	398	332	820
Stage 1	-	-	-	-	-	-	620	618	-	608	609	-
Stage 2	-	-	-	-	-	-	790	609	-	797	618	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1180	-	-	1197	-	-	401	331	830	396	331	820
Mov Cap-2 Maneuver	-	-	-	-	-	-	401	331	-	396	331	-
Stage 1	-	-	-	-	-	-	618	616	-	607	608	-
Stage 2	-	-	-	-	-	-	788	608	-	794	616	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.06	14.04	14.17
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	401	30	-	-	19	-	-	396
HCM Lane V/C Ratio	0.008	0.003	-	-	0.002	-	-	0.008
HCM Control Delay (s/veh)	14	8.1	0	-	8	0	-	14.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	339	7	5	367	0	12	0	13	3	0	0
Future Vol, veh/h	3	339	7	5	367	0	12	0	13	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	357	7	5	386	0	13	0	14	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	386	0	0	364	0	0	571	764	182	582	767	193
Stage 1	-	-	-	-	-	-	367	367	-	397	397	-
Stage 2	-	-	-	-	-	-	204	397	-	185	371	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1183	-	-	1206	-	-	408	336	836	401	335	822
Stage 1	-	-	-	-	-	-	631	626	-	606	607	-
Stage 2	-	-	-	-	-	-	785	607	-	805	623	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1183	-	-	1206	-	-	405	334	836	391	332	822
Mov Cap-2 Maneuver	-	-	-	-	-	-	405	334	-	391	332	-
Stage 1	-	-	-	-	-	-	629	624	-	603	604	-
Stage 2	-	-	-	-	-	-	781	604	-	789	621	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.15	11.83	14.28
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	553	30	-	-	48	-	-	391
HCM Lane V/C Ratio	0.048	0.003	-	-	0.004	-	-	0.008
HCM Control Delay (s/veh)	11.8	8.1	0	-	8	0	-	14.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	352	11	16	360	11	18
Future Vol, veh/h	352	11	16	360	11	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	371	12	17	379	12	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	382	0	599	191
Stage 1	-	-	-	-	376	-
Stage 2	-	-	-	-	223	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1187	-	437	825
Stage 1	-	-	-	-	670	-
Stage 2	-	-	-	-	799	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1187	-	430	825
Mov Cap-2 Maneuver	-	-	-	-	430	-
Stage 1	-	-	-	-	670	-
Stage 2	-	-	-	-	786	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.46	11.19
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	612	-	-	153	-
HCM Lane V/C Ratio	0.05	-	-	0.014	-
HCM Control Delay (s/veh)	11.2	-	-	8.1	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	337	34	20	360	16	15
Future Vol, veh/h	337	34	20	360	16	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	355	36	21	379	17	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	391	0	604	195
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	232	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1179	-	434	819
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	791	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1179	-	426	819
Mov Cap-2 Maneuver	-	-	-	-	426	-
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	775	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.56	11.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	555	-	-	189	-
HCM Lane V/C Ratio	0.059	-	-	0.018	-
HCM Control Delay (s/veh)	11.9	-	-	8.1	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	343	9	11	391	9	35
Future Vol, veh/h	343	9	11	391	9	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	361	9	12	412	9	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	371	0	595	185
Stage 1	-	-	-	-	366	-
Stage 2	-	-	-	-	229	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1199	-	440	832
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	793	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1199	-	436	832
Mov Cap-2 Maneuver	-	-	-	-	436	-
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	785	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.3	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	701	-	-	99	-
HCM Lane V/C Ratio	0.066	-	-	0.01	-
HCM Control Delay (s/veh)	10.5	-	-	8	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	355	9	9	417	5	25
Future Vol, veh/h	355	9	9	417	5	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	374	9	9	439	5	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	383	0	617	192
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	238	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1186	-	427	824
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1186	-	423	824
Mov Cap-2 Maneuver	-	-	-	-	423	-
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	778	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.24	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	711	-	-	76	-
HCM Lane V/C Ratio	0.044	-	-	0.008	-
HCM Control Delay (s/veh)	10.3	-	-	8.1	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

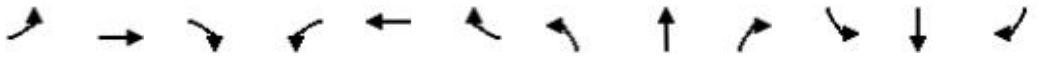
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	382	405	91	106	26
Future Vol, veh/h	24	382	405	91	106	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	402	426	96	112	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	522	0	-	0	726	261
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	252	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1055	-	-	-	364	744
Stage 1	-	-	-	-	598	-
Stage 2	-	-	-	-	773	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1055	-	-	-	355	744
Mov Cap-2 Maneuver	-	-	-	-	459	-
Stage 1	-	-	-	-	584	-
Stage 2	-	-	-	-	773	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.5	0	15.04
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1055	-	-	-	497
HCM Lane V/C Ratio	0.024	-	-	-	0.28
HCM Control Delay (s/veh)	8.5	-	-	-	15
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	288	207	58	481	0	0	0	0	26	4	14
Future Volume (veh/h)	0	288	207	58	481	0	0	0	0	26	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	303	218	61	506	0				23	10	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	836	586	85	1976	0				72	29	43
Arrive On Green	0.00	0.48	0.48	0.06	0.64	0.00				0.05	0.05	0.05
Sat Flow, veh/h	0	1810	1212	1457	3159	0				1457	585	877
Grp Volume(v), veh/h	0	269	252	61	506	0				23	0	25
Grp Sat Flow(s),veh/h/ln	0	1539	1402	1457	1539	0				1457	0	1462
Q Serve(g_s), s	0.0	5.1	5.3	1.9	3.3	0.0				0.7	0.0	0.8
Cycle Q Clear(g_c), s	0.0	5.1	5.3	1.9	3.3	0.0				0.7	0.0	0.8
Prop In Lane	0.00		0.86	1.00		0.00				1.00		0.60
Lane Grp Cap(c), veh/h	0	744	678	85	1976	0				72	0	72
V/C Ratio(X)	0.00	0.36	0.37	0.72	0.26	0.00				0.32	0.00	0.35
Avail Cap(c_a), veh/h	0	744	678	164	1976	0				155	0	156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.99	0.99	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.6	7.6	21.7	3.6	0.0				21.6	0.0	21.6
Incr Delay (d2), s/veh	0.0	1.4	1.6	4.1	0.3	0.0				0.9	0.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	1.1	0.6	0.3	0.0				0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	9.0	9.2	25.9	3.9	0.0				22.5	0.0	22.6
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		521			567						48	
Approach Delay, s/veh		9.1			6.3						22.6	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.4	28.7		10.8		36.2
Change Period (Y+Rc), s	4.7	6.0		8.5		6.0
Max Green Setting (Gmax), s	5.3	17.0		5.0		27.0
Max Q Clear Time (g_c+I1), s	3.9	7.3		2.8		5.3
Green Ext Time (p_c), s	0.0	1.2		0.0		1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	8.3
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	299	0	0	335	33	198	0	61	0	0	0
Future Volume (veh/h)	21	299	0	0	335	33	198	0	61	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	22	315	0	0	353	35	208	0	64			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	198	1745	0	0	926	413	282	0	251			
Arrive On Green	0.12	0.51	0.00	0.00	0.27	0.27	0.16	0.00	0.16			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	22	315	0	0	353	35	208	0	64			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.5	2.0	0.0	0.0	3.4	0.7	4.6	0.0	1.5			
Cycle Q Clear(g_c), s	0.5	2.0	0.0	0.0	3.4	0.7	4.6	0.0	1.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	198	1745	0	0	926	413	282	0	251			
V/C Ratio(X)	0.11	0.18	0.00	0.00	0.38	0.08	0.74	0.00	0.25			
Avail Cap(c_a), veh/h	202	1745	0	0	926	413	386	0	343			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.6	5.3	0.0	0.0	11.9	10.9	15.9	0.0	14.6			
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.0	1.2	0.4	4.8	0.0	0.5			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.0	0.0	1.0	0.2	1.9	0.0	0.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.9	5.5	0.0	0.0	13.1	11.3	20.6	0.0	15.1			
LnGrp LOS	B	A			B	B	C		B			
Approach Vol, veh/h		337			388			272				
Approach Delay, s/veh		6.2			12.9			19.3				
Approach LOS		A			B			B				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		26.4			9.6	16.8		13.6				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		18.0			5.0	8.3		9.0				
Max Q Clear Time (g_c+I1), s		4.0			2.5	5.4		6.6				
Green Ext Time (p_c), s		1.4			0.0	0.6		0.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			12.4									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	3	28	1	0	0	30	539	11	7	298	30
Future Vol, veh/h	15	3	28	1	0	0	30	539	11	7	298	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	16	3	29	1	0	0	32	567	12	7	314	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	975	986	173	804	991	567	345	0	0	579	0	0
Stage 1	344	344	-	631	631	-	-	-	-	-	-	-
Stage 2	631	642	-	173	360	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	221	250	847	290	248	527	1225	-	-	1005	-	-
Stage 1	650	640	-	473	478	-	-	-	-	-	-	-
Stage 2	473	472	-	818	630	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	213	241	847	268	240	527	1225	-	-	1005	-	-
Mov Cap-2 Maneuver	213	241	-	268	240	-	-	-	-	-	-	-
Stage 1	645	635	-	461	465	-	-	-	-	-	-	-
Stage 2	461	460	-	779	625	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	15.32	18.5	0.41	0.18
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1225	-	-	397	268	1005	-	-
HCM Lane V/C Ratio	0.026	-	-	0.122	0.004	0.007	-	-
HCM Control Delay (s/veh)	8	-	-	15.3	18.5	8.6	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	0	134	0	0	0	81	559	0	0	329	13
Future Vol, veh/h	22	0	134	0	0	0	81	559	0	0	329	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	0	141	0	0	0	85	588	0	0	346	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	818	1112	180	932	1119	294	360	0	0	588	0	0
Stage 1	353	353	-	759	759	-	-	-	-	-	-	-
Stage 2	465	759	-	173	360	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	271	210	838	224	209	708	1210	-	-	997	-	-
Stage 1	642	634	-	369	418	-	-	-	-	-	-	-
Stage 2	552	418	-	818	630	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	252	196	838	173	194	708	1210	-	-	997	-	-
Mov Cap-2 Maneuver	252	196	-	173	194	-	-	-	-	-	-	-
Stage 1	642	634	-	343	388	-	-	-	-	-	-	-
Stage 2	513	388	-	680	630	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.65	0	1.04	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1210	-	-	252	838	-	997	-	-
HCM Lane V/C Ratio	0.07	-	-	0.092	0.168	-	-	-	-
HCM Control Delay (s/veh)	8.2	-	-	20.7	10.2	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.6	-	0	-	-

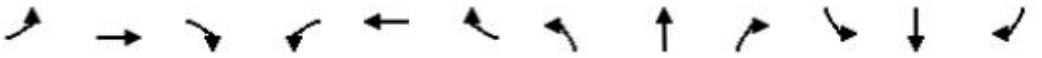
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	437	14	61	638	24	8	0	98	15	0	10
Future Vol, veh/h	1	437	14	61	638	24	8	0	98	15	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	460	15	64	672	25	8	0	103	16	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	697	0	0	475	0	0	934	1295	237	1045	1289	348
Stage 1	-	-	-	-	-	-	469	469	-	813	813	-
Stage 2	-	-	-	-	-	-	464	825	-	232	477	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	909	-	-	1098	-	-	224	164	770	186	165	654
Stage 1	-	-	-	-	-	-	549	564	-	343	395	-
Stage 2	-	-	-	-	-	-	553	390	-	756	560	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	909	-	-	1098	-	-	207	154	770	151	155	654
Mov Cap-2 Maneuver	-	-	-	-	-	-	207	154	-	151	155	-
Stage 1	-	-	-	-	-	-	548	563	-	323	372	-
Stage 2	-	-	-	-	-	-	512	367	-	654	559	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.02	0.72	11.82	23.72
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	639	909	-	-	1098	-	-	218
HCM Lane V/C Ratio	0.175	0.001	-	-	0.058	-	-	0.12
HCM Control Delay (s/veh)	11.8	9	-	-	8.5	-	-	23.7
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.2	-	-	0.4



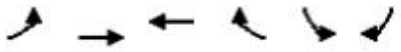
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	531	14	59	712	107	8	3	54	142	6	20
Future Volume (veh/h)	18	531	14	59	712	107	8	3	54	142	6	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	19	559	15	62	749	113	8	3	57	153	0	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	32	1306	35	101	1837	275	119	132	112	1064	0	482
Arrive On Green	0.02	0.38	0.38	0.06	0.43	0.43	0.07	0.07	0.07	0.32	0.00	0.32
Sat Flow, veh/h	1619	3402	91	1619	4314	646	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	19	281	293	62	567	295	8	3	57	153	0	21
Grp Sat Flow(s),veh/h/ln	1619	1710	1784	1619	1638	1684	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	1.3	13.2	13.2	4.1	13.1	13.3	0.5	0.2	3.9	3.6	0.0	1.0
Cycle Q Clear(g_c), s	1.3	13.2	13.2	4.1	13.1	13.3	0.5	0.2	3.9	3.6	0.0	1.0
Prop In Lane	1.00		0.05	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	32	656	685	101	1395	717	119	132	112	1064	0	482
V/C Ratio(X)	0.59	0.43	0.43	0.62	0.41	0.41	0.07	0.02	0.51	0.14	0.00	0.04
Avail Cap(c_a), veh/h	111	681	711	156	1395	717	274	305	258	1064	0	482
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.0	24.8	24.8	49.9	21.8	21.8	47.1	47.0	48.7	26.8	0.0	25.9
Incr Delay (d2), s/veh	15.6	0.4	0.4	6.0	0.9	1.7	0.2	0.1	3.6	0.3	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.2	5.5	1.8	5.1	5.5	0.2	0.1	1.6	1.5	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.6	25.2	25.2	56.0	22.6	23.6	47.4	47.0	52.3	27.0	0.0	26.1
LnGrp LOS	E	C	C	E	C	C	D	D	D	C		C
Approach Vol, veh/h		593			924			68			174	
Approach Delay, s/veh		26.6			25.2			51.5			26.9	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	46.4		39.0	6.7	51.0		12.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	43.5		34.5	7.5	46.5		18.5				
Max Q Clear Time (g_c+I1), s	6.1	15.2		5.6	3.3	15.3		5.9				
Green Ext Time (p_c), s	0.0	3.4		0.6	0.0	6.3		0.1				

Intersection Summary		
HCM 7th Control Delay, s/veh		26.9
HCM 7th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.



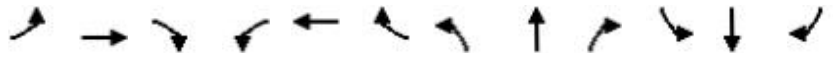
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	344	563	0	197	357
Future Volume (veh/h)	0	344	563	0	197	357
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	362	593	0	207	376
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1736	1736		910	488
Arrive On Green	0.00	0.51	0.51	0.00	0.31	0.31
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	362	593	0	207	376
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	3.8	6.7	0.0	3.4	14.0
Cycle Q Clear(g_c), s	0.0	3.8	6.7	0.0	3.4	14.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1736	1736		910	488
V/C Ratio(X)	0.00	0.21	0.34		0.23	0.77
Avail Cap(c_a), veh/h	0	1736	1736		955	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.8	9.5	0.0	16.8	20.4
Incr Delay (d2), s/veh	0.0	0.3	0.5	0.0	0.2	7.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	2.2	0.0	1.1	5.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	9.1	10.1	0.0	16.9	27.4
LnGrp LOS		A	B		B	C
Approach Vol, veh/h		362	593		583	
Approach Delay, s/veh		9.1	10.1		23.7	
Approach LOS		A	B		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	39.0	26.0	39.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	32.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	5.8	16.0	8.7
Green Ext Time (p_c), s	1.9	1.3	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	15.0
HCM 7th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	226	0	0	417	38	434	78	217	7	0	220
Future Volume (veh/h)	85	226	0	0	417	38	434	78	217	7	0	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	89	238	0	0	439	40	516	0	228	7	0	232
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	355	2160	0	0	902	81	858	0	809	0	0	0
Arrive On Green	0.12	0.44	0.00	0.00	0.20	0.20	0.27	0.00	0.27	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4751	413	3238	0	3051		0	
Grp Volume(v), veh/h	89	238	0	0	312	167	516	0	228		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1726	1619	0	1525			
Q Serve(g_s), s	1.1	1.2	0.0	0.0	3.4	3.5	5.7	0.0	2.4			
Cycle Q Clear(g_c), s	1.1	1.2	0.0	0.0	3.4	3.5	5.7	0.0	2.4			
Prop In Lane	1.00		0.00	0.00		0.24	1.00		1.00			
Lane Grp Cap(c), veh/h	355	2160	0	0	644	339	858	0	809			
V/C Ratio(X)	0.25	0.11	0.00	0.00	0.48	0.49	0.60	0.00	0.28			
Avail Cap(c_a), veh/h	364	5321	0	0	2741	1444	1833	0	1727			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	16.2	6.7	0.0	0.0	14.5	14.5	13.1	0.0	11.9			
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.4	0.8	0.8	0.0	0.2			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.3	0.3	0.0	0.0	1.1	1.2	1.5	0.0	0.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.5	6.7	0.0	0.0	14.9	15.3	13.9	0.0	12.1			
LnGrp LOS	B	A			B	B	B		B			
Approach Vol, veh/h		327			479			744				
Approach Delay, s/veh		9.4			15.1			13.3				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		23.9			9.9	14.0		16.8				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		23.0				
Max Q Clear Time (g_c+I1), s		3.2			3.1	5.5		7.7				
Green Ext Time (p_c), s		1.3			0.0	2.5		3.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.0
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	10	75	30	53	55	293	450	13	18	293	89
Future Volume (veh/h)	14	10	75	30	53	55	293	450	13	18	293	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	15	11	0	32	56	58	308	474	14	19	308	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	31	179		61	96	99	486	685	581	39	432	366
Arrive On Green	0.02	0.10	0.00	0.04	0.12	0.12	0.16	0.38	0.38	0.02	0.24	0.24
Sat Flow, veh/h	1619	1800	1525	1619	810	839	2956	1800	1525	1619	1800	1525
Grp Volume(v), veh/h	15	11	0	32	0	114	308	474	14	19	308	94
Grp Sat Flow(s),veh/h/ln	1619	1800	1525	1619	0	1649	1478	1800	1525	1619	1800	1525
Q Serve(g_s), s	0.4	0.2	0.0	0.8	0.0	2.6	3.8	8.7	0.2	0.5	6.2	2.0
Cycle Q Clear(g_c), s	0.4	0.2	0.0	0.8	0.0	2.6	3.8	8.7	0.2	0.5	6.2	2.0
Prop In Lane	1.00		1.00	1.00		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	179		61	0	195	486	685	581	39	432	366
V/C Ratio(X)	0.48	0.06		0.53	0.00	0.59	0.63	0.69	0.02	0.49	0.71	0.26
Avail Cap(c_a), veh/h	206	825		206	0	756	1581	1558	1321	206	825	699
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	16.0	0.0	18.6	0.0	16.4	15.3	10.2	7.6	18.9	13.7	12.1
Incr Delay (d2), s/veh	11.1	0.1	0.0	6.9	0.0	2.8	1.4	1.3	0.0	9.4	2.2	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.0	0.4	0.0	0.9	1.0	2.1	0.1	0.2	1.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.2	16.2	0.0	25.5	0.0	19.2	16.7	11.5	7.6	28.3	15.9	12.4
LnGrp LOS	C	B		C		B	B	B	A	C	B	B
Approach Vol, veh/h		26			146			796			421	
Approach Delay, s/veh		24.2			20.6			13.4			15.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	19.4	6.0	8.4	11.0	13.9	5.3	9.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	34.0	5.0	18.0	21.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	2.5	10.7	2.8	2.2	5.8	8.2	2.4	4.6
Green Ext Time (p_c), s	0.0	2.6	0.0	0.0	0.9	1.3	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	6	452	16	5	365
Future Vol, veh/h	21	6	452	16	5	365
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	6	476	17	5	384

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	871	476	0	0	493	0
Stage 1	476	-	-	-	-	-
Stage 2	395	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	324	593	-	-	1081	-
Stage 1	629	-	-	-	-	-
Stage 2	685	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	322	593	-	-	1081	-
Mov Cap-2 Maneuver	322	-	-	-	-	-
Stage 1	629	-	-	-	-	-
Stage 2	681	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	15.9	0	0.11
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	359	24	-
HCM Lane V/C Ratio	-	-	0.079	0.005	-
HCM Control Delay (s/veh)	-	-	15.9	8.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	3	77	0	0	1	67	64	0	140	0
Future Vol, veh/h	0	0	3	77	0	0	1	67	64	0	140	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	3	81	0	0	1	71	67	0	147	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	220	287	147	254	254	104	147	0	0	138	0	0
Stage 1	147	147	-	106	106	-	-	-	-	-	-	-
Stage 2	73	140	-	147	147	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	740	626	905	704	653	956	1447	-	-	1458	-	-
Stage 1	860	779	-	904	811	-	-	-	-	-	-	-
Stage 2	942	785	-	860	779	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	740	625	905	701	653	956	1447	-	-	1458	-	-
Mov Cap-2 Maneuver	740	625	-	701	653	-	-	-	-	-	-	-
Stage 1	860	779	-	903	811	-	-	-	-	-	-	-
Stage 2	941	784	-	857	779	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.99	10.81	0.06	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	12	-	-	905	701	1458	-	-
HCM Lane V/C Ratio	0.001	-	-	0.003	0.116	-	-	-
HCM Control Delay (s/veh)	7.5	0	-	9	10.8	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	-	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	26	7	42	25	16	3	47	19	20	84	17
Future Vol, veh/h	18	26	7	42	25	16	3	47	19	20	84	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	27	7	44	26	17	3	49	20	21	88	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	208	215	97	210	214	59	106	0	0	69	0	0
Stage 1	139	139	-	66	66	-	-	-	-	-	-	-
Stage 2	69	76	-	144	148	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	753	686	964	752	687	1012	1497	-	-	1544	-	-
Stage 1	868	785	-	950	844	-	-	-	-	-	-	-
Stage 2	946	836	-	863	778	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	701	675	964	705	676	1012	1497	-	-	1544	-	-
Mov Cap-2 Maneuver	701	675	-	705	676	-	-	-	-	-	-	-
Stage 1	857	774	-	948	842	-	-	-	-	-	-	-
Stage 2	899	834	-	815	768	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.45	10.53	0.32	1.22
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1497	-	-	714	739	1544	-	-
HCM Lane V/C Ratio	0.002	-	-	0.075	0.118	0.014	-	-
HCM Control Delay (s/veh)	7.4	-	-	10.5	10.5	7.4	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.4	0	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	81	0	0	0	0	67	20	22	42	0
Future Vol, veh/h	8	0	81	0	0	0	0	67	20	22	42	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	0	85	0	0	0	0	71	21	23	44	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.5	8.3	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	77%	0%	0%	0%	100%
Vol Right, %	23%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	87	8	81	22	42
LT Vol	0	8	0	22	0
Through Vol	67	0	0	0	42
RT Vol	20	0	81	0	0
Lane Flow Rate	92	8	85	23	44
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.116	0.013	0.099	0.034	0.058
Departure Headway (Hd)	4.575	5.395	4.192	5.211	4.71
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	774	667	860	681	752
Service Time	2.659	3.095	1.892	2.991	2.489
HCM Lane V/C Ratio	0.119	0.012	0.099	0.034	0.059
HCM Control Delay, s/veh	8.3	8.2	7.4	8.2	7.8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0	0.3	0.1	0.2

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	46	8	15	28	49
Future Vol, veh/h	10	46	8	15	28	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	48	8	16	29	52
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7	7.7	7.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	28	49	10	46	8	15
LT Vol	28	0	0	0	8	0
Through Vol	0	0	10	0	0	15
RT Vol	0	49	0	46	0	0
Lane Flow Rate	29	52	11	48	8	16
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.042	0.056	0.014	0.053	0.012	0.02
Departure Headway (Hd)	5.138	3.937	4.653	3.952	5.171	4.671
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	694	904	765	899	688	761
Service Time	2.887	1.686	2.409	1.708	2.932	2.431
HCM Lane V/C Ratio	0.042	0.058	0.014	0.053	0.012	0.021
HCM Control Delay, s/veh	8.1	6.9	7.5	6.9	8	7.5
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0	0.2	0	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	279	141	158	222	5	127	25	196	17	43	11
Future Volume (veh/h)	13	279	141	158	222	5	127	25	196	17	43	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	14	294	148	166	234	5	134	26	206	18	45	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	175	534	262	208	768	16	446	385	326	471	576	148
Arrive On Green	0.11	0.24	0.24	0.13	0.22	0.22	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1619	2223	1091	1619	3424	73	1224	1800	1525	1333	2695	691
Grp Volume(v), veh/h	14	224	218	166	117	122	134	26	206	18	28	29
Grp Sat Flow(s),veh/h/ln	1619	1710	1604	1619	1710	1787	1224	1800	1525	1333	1710	1676
Q Serve(g_s), s	0.3	4.1	4.3	3.6	2.0	2.0	3.5	0.4	4.4	0.4	0.5	0.5
Cycle Q Clear(g_c), s	0.3	4.1	4.3	3.6	2.0	2.0	4.0	0.4	4.4	0.8	0.5	0.5
Prop In Lane	1.00		0.68	1.00		0.04	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	175	411	385	208	383	401	446	385	326	471	365	358
V/C Ratio(X)	0.08	0.55	0.56	0.80	0.30	0.31	0.30	0.07	0.63	0.04	0.08	0.08
Avail Cap(c_a), veh/h	227	1773	1663	413	1970	2059	1523	1968	1668	1643	1869	1832
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	11.9	11.9	15.1	11.5	11.5	12.8	11.2	12.8	11.5	11.2	11.2
Incr Delay (d2), s/veh	0.2	1.1	1.3	6.9	0.4	0.4	0.4	0.1	2.0	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.0	1.0	1.3	0.6	0.6	0.8	0.1	1.3	0.1	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.5	13.0	13.2	22.0	12.0	12.0	13.2	11.3	14.8	11.5	11.3	11.3
LnGrp LOS	B	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		456			405			366			75	
Approach Delay, s/veh		13.1			16.1			13.9			11.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	14.4		12.2	9.7	13.8		12.2				
Change Period (Y+Rc), s	4.5	5.8		4.6	5.8	* 5.8		4.6				
Max Green Setting (Gmax), s	9.1	37.0		39.0	5.0	* 41		39.0				
Max Q Clear Time (g_c+I1), s	5.6	6.3		6.4	2.3	4.0		2.8				
Green Ext Time (p_c), s	0.1	2.3		1.3	0.0	1.2		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	14.2
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	463	45	59	373	20	75	5	107	30	4	14
Future Volume (veh/h)	22	463	45	59	373	20	75	5	107	30	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	23	487	47	62	393	21	79	5	113	32	4	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	560	1337	129	507	1401	75	433	273	231	446	50	189
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	884	3152	303	791	3302	176	1267	1800	1525	1283	332	1244
Grp Volume(v), veh/h	23	263	271	62	203	211	79	5	113	32	0	19
Grp Sat Flow(s),veh/h/ln	884	1710	1745	791	1710	1768	1267	1800	1525	1283	0	1576
Q Serve(g_s), s	0.5	3.0	3.0	1.6	2.2	2.2	1.6	0.1	1.9	0.6	0.0	0.3
Cycle Q Clear(g_c), s	2.7	3.0	3.0	4.6	2.2	2.2	1.9	0.1	1.9	0.7	0.0	0.3
Prop In Lane	1.00		0.17	1.00		0.10	1.00		1.00	1.00		0.79
Lane Grp Cap(c), veh/h	560	725	740	507	725	750	433	273	231	446	0	239
V/C Ratio(X)	0.04	0.36	0.37	0.12	0.28	0.28	0.18	0.02	0.49	0.07	0.00	0.08
Avail Cap(c_a), veh/h	1248	2056	2098	1122	2056	2126	1764	2164	1834	1866	0	1984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.2	5.5	5.5	7.1	5.3	5.3	11.1	10.2	11.0	10.5	0.0	10.3
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.2	0.2	0.2	0.0	1.6	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.1	0.3	0.3	0.3	0.0	0.6	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.2	5.8	5.9	7.2	5.5	5.5	11.3	10.2	12.6	10.6	0.0	10.4
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		557			476			197			51	
Approach Delay, s/veh		5.9			5.8			12.0			10.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.8	10.5	17.8	10.5
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	34.0	34.0	34.0	* 36
Max Q Clear Time (g_c+I1), s	5.0	3.9	6.6	2.7
Green Ext Time (p_c), s	3.1	0.6	2.6	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	7.0
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	489	106	25	482	12	75	6	30	4	0	1
Future Volume (veh/h)	9	489	106	25	482	12	75	6	30	4	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	9	515	112	26	507	13	79	6	32	4	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	599	1294	280	550	1577	40	443	11	178	481	0	178
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.12	0.12	0.12	0.12	0.00	0.12
Sat Flow, veh/h	801	2796	605	726	3407	87	1295	98	1525	1532	0	1525
Grp Volume(v), veh/h	9	314	313	26	254	266	85	0	32	4	0	1
Grp Sat Flow(s),veh/h/ln	801	1710	1691	726	1710	1784	1394	0	1525	1532	0	1525
Q Serve(g_s), s	0.2	2.9	2.9	0.6	2.2	2.2	1.3	0.0	0.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.4	2.9	2.9	3.5	2.2	2.2	1.4	0.0	0.4	0.0	0.0	0.0
Prop In Lane	1.00		0.36	1.00		0.05	0.93		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	599	791	783	550	791	826	455	0	178	481	0	178
V/C Ratio(X)	0.02	0.40	0.40	0.05	0.32	0.32	0.19	0.00	0.18	0.01	0.00	0.01
Avail Cap(c_a), veh/h	1003	1655	1637	917	1655	1727	2162	0	2054	2151	0	2054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.8	4.2	4.2	5.4	4.0	4.0	9.9	0.0	9.5	9.3	0.0	9.3
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.2	0.2	0.2	0.0	0.5	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.2	0.3	0.3	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.8	4.5	4.5	5.4	4.3	4.3	10.1	0.0	10.0	9.3	0.0	9.3
LnGrp LOS	A	A	A	A	A	A	B		A	A		A
Approach Vol, veh/h		636			546			117			5	
Approach Delay, s/veh		4.5			4.3			10.0			9.3	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.4	7.4	16.4	7.4
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	23.0	32.0	23.0	32.0
Max Q Clear Time (g_c+I1), s	4.9	3.4	5.5	2.0
Green Ext Time (p_c), s	3.3	0.5	3.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.0
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	347	33	25	303	119	55	37	25	173	55	182
Future Volume (veh/h)	142	347	33	25	303	119	55	37	25	173	55	182
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	149	365	35	26	319	125	58	39	26	182	58	192
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	327	640	61	188	516	198	150	88	59	371	84	278
Arrive On Green	0.11	0.20	0.20	0.10	0.21	0.21	0.08	0.08	0.08	0.22	0.22	0.22
Sat Flow, veh/h	1714	3155	301	1810	2415	928	1810	1063	709	1714	387	1282
Grp Volume(v), veh/h	149	197	203	26	224	220	58	0	65	182	0	250
Grp Sat Flow(s),veh/h/ln	1714	1710	1746	1810	1710	1633	1810	0	1772	1714	0	1669
Q Serve(g_s), s	4.0	5.1	5.2	0.6	5.8	6.0	1.5	0.0	1.7	4.6	0.0	6.8
Cycle Q Clear(g_c), s	4.0	5.1	5.2	0.6	5.8	6.0	1.5	0.0	1.7	4.6	0.0	6.8
Prop In Lane	1.00		0.17	1.00		0.57	1.00		0.40	1.00		0.77
Lane Grp Cap(c), veh/h	327	347	354	188	365	349	150	0	146	371	0	362
V/C Ratio(X)	0.46	0.57	0.57	0.14	0.61	0.63	0.39	0.00	0.44	0.49	0.00	0.69
Avail Cap(c_a), veh/h	337	882	900	195	892	852	184	0	180	870	0	847
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.4	17.7	17.7	20.1	17.5	17.6	21.4	0.0	21.5	16.9	0.0	17.8
Incr Delay (d2), s/veh	1.0	1.5	1.5	0.3	1.7	1.9	1.6	0.0	2.1	1.0	0.0	2.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.9	2.0	0.3	2.2	2.2	0.6	0.0	0.7	1.7	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.4	19.1	19.2	20.4	19.2	19.5	23.1	0.0	23.6	17.9	0.0	20.2
LnGrp LOS	C	B	B	C	B	B	C		C	B		C
Approach Vol, veh/h		549			470			123			432	
Approach Delay, s/veh		19.5			19.4			23.4			19.2	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	15.1		8.7	9.7	15.1		15.8				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.3	* 25		5.0	5.5	25.7		25.0				
Max Q Clear Time (g_c+I1), s	2.6	7.2		3.7	6.0	8.0		8.8				
Green Ext Time (p_c), s	0.0	2.2		0.0	0.0	2.5		1.9				

Intersection Summary	
HCM 7th Control Delay, s/veh	19.7
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	350	140	54	291	141	65
Future Volume (veh/h)	350	140	54	291	141	65
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	368	147	57	306	148	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	864	340	102	1953	232	219
Arrive On Green	0.36	0.36	0.06	0.57	0.14	0.14
Sat Flow, veh/h	2487	943	1619	3510	1619	1525
Grp Volume(v), veh/h	261	254	57	306	148	68
Grp Sat Flow(s),veh/h/ln	1710	1630	1619	1710	1619	1525
Q Serve(g_s), s	3.5	3.6	1.0	1.3	2.6	1.2
Cycle Q Clear(g_c), s	3.5	3.6	1.0	1.3	2.6	1.2
Prop In Lane		0.58	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	617	588	102	1953	232	219
V/C Ratio(X)	0.42	0.43	0.56	0.16	0.64	0.31
Avail Cap(c_a), veh/h	1375	1311	361	3962	1381	1302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.4	7.4	13.9	3.1	12.3	11.7
Incr Delay (d2), s/veh	0.5	0.5	4.8	0.0	2.9	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.8	0.4	0.1	0.9	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.8	7.9	18.6	3.1	15.2	12.5
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h	515			363	216	
Approach Delay, s/veh	7.8			5.6	14.4	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.4	15.6		8.5		22.0
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	5.8	* 25		26.0		35.3
Max Q Clear Time (g_c+I1), s	3.0	5.6		4.6		3.3
Green Ext Time (p_c), s	0.0	3.0		0.6		2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	8.4
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



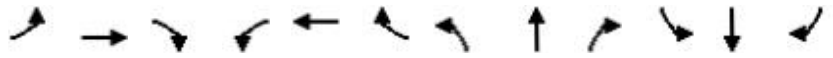
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	42	45	157	37	61	27	463	183	66	293	8
Future Volume (veh/h)	1	42	45	157	37	61	27	463	183	66	293	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	44	47	165	39	64	28	487	0	69	308	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	404	191	204	415	147	242	54	630		109	1307	34
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.03	0.35	0.00	0.07	0.38	0.38
Sat Flow, veh/h	1174	796	851	1187	613	1006	1619	1800	1525	1619	3406	88
Grp Volume(v), veh/h	1	0	91	165	0	103	28	487	0	69	154	162
Grp Sat Flow(s),veh/h/ln	1174	0	1647	1187	0	1619	1619	1800	1525	1619	1710	1784
Q Serve(g_s), s	0.0	0.0	1.8	5.1	0.0	2.0	0.7	9.5	0.0	1.6	2.4	2.4
Cycle Q Clear(g_c), s	2.1	0.0	1.8	6.9	0.0	2.0	0.7	9.5	0.0	1.6	2.4	2.4
Prop In Lane	1.00		0.52	1.00		0.62	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	404	0	395	415	0	389	54	630		109	656	684
V/C Ratio(X)	0.00	0.00	0.23	0.40	0.00	0.26	0.52	0.77		0.63	0.24	0.24
Avail Cap(c_a), veh/h	659	0	753	672	0	740	206	1051		226	1020	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	0.0	12.0	14.8	0.0	12.1	18.7	11.4	0.0	17.9	8.2	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.6	0.0	0.4	7.4	2.1	0.0	6.0	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.6	1.2	0.0	0.6	0.3	3.0	0.0	0.7	0.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.0	0.0	12.3	15.4	0.0	12.5	26.1	13.5	0.0	23.9	8.4	8.4
LnGrp LOS	B		B	B		B	C	B		C	A	A
Approach Vol, veh/h		92			268			515			385	
Approach Delay, s/veh		12.3			14.3			14.2			11.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	19.6		14.0	7.1	18.3		14.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.3	23.5		18.0	5.5	23.0		18.0				
Max Q Clear Time (g_c+I1), s	12.7	4.4		8.9	3.6	11.5		4.1				
Green Ext Time (p_c), s	0.0	1.6		0.8	0.0	2.3		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.1
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	76	0	83	261	681	0	0	386	199
Future Volume (veh/h)	0	0	0	76	0	83	261	681	0	0	386	199
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				80	0	87	275	717	0	0	406	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				309	0	275	420	1982	0	0	684	
Arrive On Green				0.18	0.00	0.18	0.26	0.58	0.00	0.00	0.20	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				80	0	87	275	717	0	0	406	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				2.0	0.0	2.5	7.6	5.6	0.0	0.0	5.4	0.0
Cycle Q Clear(g_c), s				2.0	0.0	2.5	7.6	5.6	0.0	0.0	5.4	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				309	0	275	420	1982	0	0	684	
V/C Ratio(X)				0.26	0.00	0.32	0.65	0.36	0.00	0.00	0.59	
Avail Cap(c_a), veh/h				343	0	305	431	1982	0	0	684	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.87	0.87	0.00	0.00	0.97	0.00
Uniform Delay (d), s/veh				17.6	0.0	17.8	16.5	5.6	0.0	0.0	18.2	0.0
Incr Delay (d2), s/veh				0.4	0.0	0.7	2.3	0.4	0.0	0.0	3.7	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.7	0.0	0.8	2.6	1.4	0.0	0.0	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				18.1	0.0	18.5	18.8	6.0	0.0	0.0	21.8	0.0
LnGrp LOS				B		B	B	A			C	
Approach Vol, veh/h					167			992			406	
Approach Delay, s/veh					18.3			9.6			21.8	
Approach LOS					B			A			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.0	16.0		15.0		35.0
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0
Max Green Setting (Gmax), s	13.3	* 10		10.0		28.0
Max Q Clear Time (g_c+I1), s	19.6	7.4		4.5		7.6
Green Ext Time (p_c), s	0.2	0.6		0.3		4.8

Intersection Summary	
HCM 7th Control Delay, s/veh	13.7
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	291	254	125	733	339	66
Future Volume (veh/h)	291	254	125	733	339	66
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	306	267	132	772	357	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	347	327	173	2232	1413	270
Arrive On Green	0.21	0.21	0.11	0.65	0.49	0.49
Sat Flow, veh/h	1619	1525	1619	3510	2954	548
Grp Volume(v), veh/h	306	267	132	772	212	214
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1701
Q Serve(g_s), s	16.5	15.0	7.1	9.1	6.4	6.6
Cycle Q Clear(g_c), s	16.5	15.0	7.1	9.1	6.4	6.6
Prop In Lane	1.00	1.00	1.00			0.32
Lane Grp Cap(c), veh/h	347	327	173	2232	844	839
V/C Ratio(X)	0.88	0.82	0.76	0.35	0.25	0.26
Avail Cap(c_a), veh/h	522	492	221	2232	844	839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.82	0.82	0.92	0.92
Uniform Delay (d), s/veh	34.3	33.7	39.1	7.0	13.2	13.2
Incr Delay (d2), s/veh	8.1	3.8	6.6	0.3	0.7	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	5.8	3.1	2.9	2.5	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	42.4	37.5	45.7	7.4	13.8	13.9
LnGrp LOS	D	D	D	A	B	B
Approach Vol, veh/h	573			904	426	
Approach Delay, s/veh	40.1			13.0	13.9	
Approach LOS	D			B	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.3	50.4			64.7	25.3
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	12.3	32.0			49.0	29.0
Max Q Clear Time (g_c+I1), s	9.1	8.6			11.1	18.5
Green Ext Time (p_c), s	0.0	2.4			6.0	0.8

Intersection Summary		
HCM 7th Control Delay, s/veh	21.3	
HCM 7th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	11	21	36	13	262	10	487	33	196	473	15
Future Volume (veh/h)	59	11	21	36	13	262	10	487	33	196	473	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	62	12	22	38	14	276	11	513	35	206	498	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	284	464	414	500	464	414	23	788	54	257	1309	42
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.01	0.24	0.24	0.16	0.39	0.39
Sat Flow, veh/h	990	1710	1525	1249	1710	1525	1619	3249	221	1619	3382	109
Grp Volume(v), veh/h	62	12	22	38	14	276	11	269	279	206	252	262
Grp Sat Flow(s),veh/h/ln	990	1710	1525	1249	1710	1525	1619	1710	1760	1619	1710	1780
Q Serve(g_s), s	2.5	0.2	0.4	1.0	0.2	6.6	0.3	5.8	5.9	5.1	4.4	4.4
Cycle Q Clear(g_c), s	9.1	0.2	0.4	1.4	0.2	6.6	0.3	5.8	5.9	5.1	4.4	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		0.06
Lane Grp Cap(c), veh/h	284	464	414	500	464	414	23	414	427	257	662	689
V/C Ratio(X)	0.22	0.03	0.05	0.08	0.03	0.67	0.47	0.65	0.65	0.80	0.38	0.38
Avail Cap(c_a), veh/h	448	747	666	707	747	666	412	747	769	412	747	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	11.0	11.1	11.6	11.0	13.4	20.2	14.0	14.1	16.7	9.1	9.1
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.1	0.0	1.9	14.2	1.7	1.7	5.7	0.4	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.1	0.2	0.1	2.1	0.2	1.8	1.9	1.9	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.8	11.0	11.2	11.7	11.1	15.2	34.3	15.8	15.7	22.4	9.4	9.4
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	A	A
Approach Vol, veh/h		96			328			559			720	
Approach Delay, s/veh		15.4			14.6			16.1			13.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	20.4		15.7	11.0	14.5		15.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	18.0		18.0	10.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	2.3	6.4		8.6	7.1	7.9		11.1				
Green Ext Time (p_c), s	0.0	2.3		1.3	0.2	2.1		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	14.5
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	120	35	44	195	154	22	127	17	175	170	103
Future Volume (veh/h)	130	120	35	44	195	154	22	127	17	175	170	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	137	126	37	46	205	162	23	134	18	184	179	108
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	508	886	252	613	627	471	524	961	127	596	662	380
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	923	2629	746	1112	1861	1397	993	3036	401	1123	2093	1201
Grp Volume(v), veh/h	137	80	83	46	187	180	23	75	77	184	145	142
Grp Sat Flow(s),veh/h/ln	923	1710	1666	1112	1710	1548	993	1710	1728	1123	1710	1584
Q Serve(g_s), s	3.4	0.8	0.9	0.8	2.1	2.3	0.5	0.8	0.8	3.6	1.6	1.8
Cycle Q Clear(g_c), s	5.7	0.8	0.9	1.7	2.1	2.3	2.2	0.8	0.8	4.5	1.6	1.8
Prop In Lane	1.00		0.45	1.00		0.90	1.00		0.23	1.00		0.76
Lane Grp Cap(c), veh/h	508	576	562	613	576	522	524	541	547	596	541	501
V/C Ratio(X)	0.27	0.14	0.15	0.07	0.33	0.34	0.04	0.14	0.14	0.31	0.27	0.28
Avail Cap(c_a), veh/h	836	1185	1154	1009	1185	1073	898	1185	1197	1019	1185	1097
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.6	6.0	6.0	6.6	6.4	6.5	7.5	6.3	6.4	8.0	6.6	6.7
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.1	0.3	0.4	0.0	0.1	0.1	0.3	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	0.2	0.1	0.5	0.4	0.0	0.1	0.1	0.4	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.9	6.1	6.1	6.6	6.7	6.8	7.5	6.5	6.5	8.2	6.9	7.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		300			413			175			471	
Approach Delay, s/veh		7.4			6.8			6.6			7.4	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	12.7	13.3	12.7	13.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	4.2	7.7	6.5	4.3
Green Ext Time (p_c), s	0.6	1.2	1.7	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.1
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	93	0	1	428	1	0
Future Vol, veh/h	93	0	1	428	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	101	0	1	465	1	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	101	0	336	51
Stage 1	-	-	-	-	101	-
Stage 2	-	-	-	-	235	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1504	-	639	1013
Stage 1	-	-	-	-	918	-
Stage 2	-	-	-	-	788	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1504	-	639	1013
Mov Cap-2 Maneuver	-	-	-	-	639	-
Stage 1	-	-	-	-	918	-
Stage 2	-	-	-	-	788	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.02	10.65
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	639	-	-	1504	-
HCM Lane V/C Ratio	0.002	-	-	0.001	-
HCM Control Delay (s/veh)	10.6	-	-	7.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	290	4	4	221	2	4
Future Vol, veh/h	290	4	4	221	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	305	4	4	233	2	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	309	0	432	155
Stage 1	-	-	-	-	307	-
Stage 2	-	-	-	-	125	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1262	-	557	870
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	893	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1262	-	555	870
Mov Cap-2 Maneuver	-	-	-	-	610	-
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.14	9.77
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	762	-	-	1262	-
HCM Lane V/C Ratio	0.008	-	-	0.003	-
HCM Control Delay (s/veh)	9.8	-	-	7.9	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	4	0	0	1	0	0	0	0	0	0	0
Future Vol, veh/h	0	4	0	0	1	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	4	0	0	1	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	4	0	0	5	5	4	5	5	1
Stage 1	-	-	-	-	-	-	4	4	-	1	1	-
Stage 2	-	-	-	-	-	-	1	1	-	4	4	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1635	-	-	1630	-	-	1020	894	1085	1020	894	1089
Stage 1	-	-	-	-	-	-	1023	896	-	1027	899	-
Stage 2	-	-	-	-	-	-	1027	899	-	1023	896	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1635	-	-	1630	-	-	1020	894	1085	1020	894	1089
Mov Cap-2 Maneuver	-	-	-	-	-	-	1020	894	-	1020	894	-
Stage 1	-	-	-	-	-	-	1023	896	-	1027	899	-
Stage 2	-	-	-	-	-	-	1027	899	-	1023	896	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1635	-	-	1630	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	56	255	0	0	0
Future Vol, veh/h	0	56	255	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	61	277	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	277	0	-	0	338	277
Stage 1	-	-	-	-	277	-
Stage 2	-	-	-	-	61	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1297	-	-	-	662	766
Stage 1	-	-	-	-	774	-
Stage 2	-	-	-	-	967	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1297	-	-	-	662	766
Mov Cap-2 Maneuver	-	-	-	-	679	-
Stage 1	-	-	-	-	774	-
Stage 2	-	-	-	-	967	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1297	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	68	311	117	25	0
Future Vol, veh/h	0	68	311	117	25	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	0	150	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	74	338	127	27	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	465	0	-	0	412	338
Stage 1	-	-	-	-	338	-
Stage 2	-	-	-	-	74	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1107	-	-	-	600	709
Stage 1	-	-	-	-	727	-
Stage 2	-	-	-	-	954	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1107	-	-	-	600	709
Mov Cap-2 Maneuver	-	-	-	-	600	-
Stage 1	-	-	-	-	727	-
Stage 2	-	-	-	-	954	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.28
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1107	-	-	-	600	-
HCM Lane V/C Ratio	-	-	-	-	0.045	-
HCM Control Delay (s/veh)	0	-	-	-	11.3	0
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	0	0	73	0	0
Future Vol, veh/h	17	0	0	73	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	0	0	79	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	41	40	0	0	79	0
Stage 1	40	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	976	1037	-	-	1532	-
Stage 1	988	-	-	-	-	-
Stage 2	1027	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	976	1037	-	-	1532	-
Mov Cap-2 Maneuver	900	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	1027	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.09	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	900	1532	-
HCM Lane V/C Ratio	-	-	0.021	-	-
HCM Control Delay (s/veh)	-	-	9.1	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	478	0	0	357
Future Vol, veh/h	0	0	478	0	0	357
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	520	0	0	388

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	714	260	0	0	520	0
Stage 1	520	-	-	-	-	-
Stage 2	194	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	371	745	-	-	1057	-
Stage 1	567	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	371	745	-	-	1057	-
Mov Cap-2 Maneuver	371	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1057	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	202	664	0	0	0
Future Vol, veh/h	0	202	664	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	213	699	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	699	0	-	0	912	699
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	213	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	907	-	-	-	307	443
Stage 1	-	-	-	-	497	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	907	-	-	-	307	443
Mov Cap-2 Maneuver	-	-	-	-	307	-
Stage 1	-	-	-	-	497	-
Stage 2	-	-	-	-	828	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	907	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	183	20	30	639	178	0	2	15	167	2	6
Future Volume (veh/h)	6	183	20	30	639	178	0	2	15	167	2	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1900	1800	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	6	193	21	32	673	187	0	2	16	183	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	401	808	88	719	911	815	0	30	243	930	317	0
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.00	0.18	0.18	0.18	0.00	0.00
Sat Flow, veh/h	695	1595	174	1061	1800	1610	0	172	1379	2535	1800	0
Grp Volume(v), veh/h	6	0	214	32	673	187	0	0	18	183	0	0
Grp Sat Flow(s),veh/h/ln	695	0	1769	1061	1800	1610	0	0	1552	1268	1800	0
Q Serve(g_s), s	0.2	0.0	1.9	0.5	8.4	1.8	0.0	0.0	0.3	1.8	0.0	0.0
Cycle Q Clear(g_c), s	8.6	0.0	1.9	2.4	8.4	1.8	0.0	0.0	0.3	2.1	0.0	0.0
Prop In Lane	1.00		0.10	1.00		1.00	0.00		0.89	1.00		0.00
Lane Grp Cap(c), veh/h	401	0	896	719	911	815	0	0	274	930	317	0
V/C Ratio(X)	0.01	0.00	0.24	0.04	0.74	0.23	0.00	0.00	0.07	0.20	0.00	0.00
Avail Cap(c_a), veh/h	650	0	1528	1098	1555	1391	0	0	1176	2405	1365	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.9	0.0	3.9	4.6	5.5	3.9	0.0	0.0	9.7	10.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	1.2	0.1	0.0	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.9	0.0	4.1	4.6	6.7	4.1	0.0	0.0	9.8	10.7	0.0	0.0
LnGrp LOS	A		A	A	A	A			A	B		
Approach Vol, veh/h		220			892			18			183	
Approach Delay, s/veh		4.2			6.1			9.8			10.7	
Approach LOS		A			A			A			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.5		18.9		9.5		18.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		21.5		24.5		21.5		24.5				
Max Q Clear Time (g_c+I1), s		2.3		10.6		4.1		10.4				
Green Ext Time (p_c), s		0.0		0.8		0.6		4.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			6.5									
HCM 7th LOS			A									

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	152	192	50	237	218	230	265	70	267	479	137
Future Volume (veh/h)	78	152	192	50	237	218	230	265	70	267	479	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	82	160	0	53	249	0	242	279	74	281	504	144
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	102	573		64	493		280	825	215	320	598	506
Arrive On Green	0.06	0.17	0.00	0.04	0.14	0.00	0.17	0.31	0.31	0.20	0.33	0.33
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	2685	699	1619	1800	1525
Grp Volume(v), veh/h	82	160	0	53	249	0	242	176	177	281	504	144
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1674	1619	1800	1525
Q Serve(g_s), s	3.5	2.8	0.0	2.3	4.7	0.0	10.1	5.5	5.7	11.7	18.0	4.8
Cycle Q Clear(g_c), s	3.5	2.8	0.0	2.3	4.7	0.0	10.1	5.5	5.7	11.7	18.0	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	102	573		64	493		280	525	514	320	598	506
V/C Ratio(X)	0.81	0.28		0.83	0.51		0.86	0.33	0.34	0.88	0.84	0.28
Avail Cap(c_a), veh/h	257	1656		257	1656		303	835	818	397	970	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	25.2	0.0	33.1	27.4	0.0	27.9	18.6	18.6	27.0	21.5	17.1
Incr Delay (d2), s/veh	5.5	0.3	0.0	9.9	0.8	0.0	19.5	0.4	0.4	14.8	3.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.1	0.0	1.0	1.8	0.0	5.0	1.9	2.0	5.3	7.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.6	25.5	0.0	43.0	28.2	0.0	47.5	18.9	19.0	41.8	25.3	17.4
LnGrp LOS	D	C		D	C		D	B	B	D	C	B
Approach Vol, veh/h		242			302			595			929	
Approach Delay, s/veh		29.6			30.8			30.6			29.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	17.0	16.0	29.6	8.4	15.4	17.7	27.9
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	11.0	33.6	13.0	37.4	11.0	33.6	17.0	* 34
Max Q Clear Time (g_c+I1), s	4.3	4.8	12.1	20.0	5.5	6.7	13.7	7.7
Green Ext Time (p_c), s	0.0	0.9	0.0	3.0	0.0	1.4	0.1	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	3	3	488	586	17
Future Vol, veh/h	9	3	3	488	586	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	3	3	514	617	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1146	626	635	0	-	0
Stage 1	626	-	-	-	-	-
Stage 2	520	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	222	488	958	-	-	-
Stage 1	537	-	-	-	-	-
Stage 2	601	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	221	488	958	-	-	-
Mov Cap-2 Maneuver	221	-	-	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	601	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	19.76	0.05	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	11	-	256	-	-
HCM Lane V/C Ratio	0.003	-	0.049	-	-
HCM Control Delay (s/veh)	8.8	0	19.8	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	452	3	4	531	0	2	0	4	4	0	4
Future Vol, veh/h	3	452	3	4	531	0	2	0	4	4	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	476	3	4	559	0	2	0	4	4	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	559	0	0	479	0	0	772	1051	239	812	1053	279
Stage 1	-	-	-	-	-	-	484	484	-	567	567	-
Stage 2	-	-	-	-	-	-	288	567	-	244	485	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1022	-	-	1094	-	-	293	229	768	274	228	724
Stage 1	-	-	-	-	-	-	538	556	-	480	510	-
Stage 2	-	-	-	-	-	-	701	510	-	743	555	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1022	-	-	1094	-	-	289	227	768	270	226	724
Mov Cap-2 Maneuver	-	-	-	-	-	-	289	227	-	270	226	-
Stage 1	-	-	-	-	-	-	536	554	-	478	508	-
Stage 2	-	-	-	-	-	-	694	508	-	737	553	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.1	12.37	14.34
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	495	23	-	-	27	-	-	394
HCM Lane V/C Ratio	0.013	0.003	-	-	0.004	-	-	0.021
HCM Control Delay (s/veh)	12.4	8.5	0	-	8.3	0	-	14.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	455	0	2	533	0	3	0	0	3	0	0
Future Vol, veh/h	2	455	0	2	533	0	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	479	0	2	561	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	561	0	0	479	0	0	768	1048	239	809	1048	281
Stage 1	-	-	-	-	-	-	483	483	-	565	565	-
Stage 2	-	-	-	-	-	-	285	565	-	244	483	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1020	-	-	1094	-	-	295	230	768	275	230	723
Stage 1	-	-	-	-	-	-	539	556	-	482	511	-
Stage 2	-	-	-	-	-	-	704	511	-	744	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1020	-	-	1094	-	-	293	228	768	274	228	723
Mov Cap-2 Maneuver	-	-	-	-	-	-	293	228	-	274	228	-
Stage 1	-	-	-	-	-	-	537	555	-	481	510	-
Stage 2	-	-	-	-	-	-	703	510	-	742	555	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.05	17.4	18.29
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	293	16	-	-	13	-	-	274
HCM Lane V/C Ratio	0.011	0.002	-	-	0.002	-	-	0.012
HCM Control Delay (s/veh)	17.4	8.5	0	-	8.3	0	-	18.3
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	454	1	2	529	0	3	0	0	3	0	6
Future Vol, veh/h	2	454	1	2	529	0	3	0	0	3	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	478	1	2	557	0	3	0	0	3	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	557	0	0	479	0	0	765	1044	239	804	1044	278
Stage 1	-	-	-	-	-	-	483	483	-	561	561	-
Stage 2	-	-	-	-	-	-	283	561	-	243	483	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1024	-	-	1094	-	-	296	231	768	278	231	725
Stage 1	-	-	-	-	-	-	539	556	-	485	513	-
Stage 2	-	-	-	-	-	-	706	513	-	745	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1024	-	-	1094	-	-	292	230	768	276	230	725
Mov Cap-2 Maneuver	-	-	-	-	-	-	292	230	-	276	230	-
Stage 1	-	-	-	-	-	-	538	555	-	483	512	-
Stage 2	-	-	-	-	-	-	698	512	-	743	555	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.05	17.46	12.81
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	292	16	-	-	14	-	-	470
HCM Lane V/C Ratio	0.011	0.002	-	-	0.002	-	-	0.02
HCM Control Delay (s/veh)	17.5	8.5	0	-	8.3	0	-	12.8
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	454	2	2	531	2	4	0	0	4	0	0
Future Vol, veh/h	2	454	2	2	531	2	4	0	0	4	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	478	2	2	559	2	4	0	0	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	561	0	0	480	0	0	767	1048	240	807	1048	281
Stage 1	-	-	-	-	-	-	483	483	-	564	564	-
Stage 2	-	-	-	-	-	-	284	565	-	243	484	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1020	-	-	1093	-	-	295	230	767	276	230	723
Stage 1	-	-	-	-	-	-	539	556	-	482	512	-
Stage 2	-	-	-	-	-	-	705	511	-	745	555	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1020	-	-	1093	-	-	294	228	767	275	228	723
Mov Cap-2 Maneuver	-	-	-	-	-	-	294	228	-	275	228	-
Stage 1	-	-	-	-	-	-	537	555	-	481	510	-
Stage 2	-	-	-	-	-	-	704	510	-	743	554	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.05	17.43	18.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	294	16	-	-	13	-	-	275
HCM Lane V/C Ratio	0.014	0.002	-	-	0.002	-	-	0.015
HCM Control Delay (s/veh)	17.4	8.5	0	-	8.3	0	-	18.3
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	444	20	22	517	0	26	0	17	3	2	0
Future Vol, veh/h	3	444	20	22	517	0	26	0	17	3	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	467	21	23	544	0	27	0	18	3	2	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	544	0	0	488	0	0	804	1075	244	831	1085	272
Stage 1	-	-	-	-	-	-	484	484	-	591	591	-
Stage 2	-	-	-	-	-	-	319	591	-	240	495	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1035	-	-	1085	-	-	278	221	762	266	218	732
Stage 1	-	-	-	-	-	-	538	555	-	465	498	-
Stage 2	-	-	-	-	-	-	672	498	-	748	549	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1035	-	-	1085	-	-	267	215	762	252	212	732
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	215	-	252	212	-
Stage 1	-	-	-	-	-	-	536	553	-	454	485	-
Stage 2	-	-	-	-	-	-	652	485	-	728	547	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	0.53	16.45	20.71
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	360	22	-	-	147	-	-	234
HCM Lane V/C Ratio	0.126	0.003	-	-	0.021	-	-	0.022
HCM Control Delay (s/veh)	16.4	8.5	0	-	8.4	0.2	-	20.7
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	455	13	18	531	4	9
Future Vol, veh/h	455	13	18	531	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	479	14	19	559	4	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	493	0	803	246
Stage 1	-	-	-	-	486	-
Stage 2	-	-	-	-	317	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1081	-	325	760
Stage 1	-	-	-	-	590	-
Stage 2	-	-	-	-	717	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1081	-	318	760
Mov Cap-2 Maneuver	-	-	-	-	318	-
Stage 1	-	-	-	-	590	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.43	11.94
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	533	-	-	118	-
HCM Lane V/C Ratio	0.026	-	-	0.018	-
HCM Control Delay (s/veh)	11.9	-	-	8.4	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	434	26	26	517	28	24
Future Vol, veh/h	434	26	26	517	28	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	457	27	27	544	29	25

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	484	0	797	242
Stage 1	-	-	-	-	471	-
Stage 2	-	-	-	-	327	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1089	-	328	765
Stage 1	-	-	-	-	601	-
Stage 2	-	-	-	-	709	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1089	-	318	765
Mov Cap-2 Maneuver	-	-	-	-	318	-
Stage 1	-	-	-	-	601	-
Stage 2	-	-	-	-	688	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.62	14.45
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	436	-	-	172	-
HCM Lane V/C Ratio	0.126	-	-	0.025	-
HCM Control Delay (s/veh)	14.5	-	-	8.4	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	454	23	59	533	17	27
Future Vol, veh/h	454	23	59	533	17	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	478	24	62	561	18	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	502	0	895	251
Stage 1	-	-	-	-	490	-
Stage 2	-	-	-	-	405	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1073	-	284	755
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	648	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1073	-	265	755
Mov Cap-2 Maneuver	-	-	-	-	265	-
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	604	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.29	14.14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	440	-	-	359	-
HCM Lane V/C Ratio	0.105	-	-	0.058	-
HCM Control Delay (s/veh)	14.1	-	-	8.6	0.5
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	482	13	25	599	8	19
Future Vol, veh/h	482	13	25	599	8	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	507	14	26	631	8	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	521	0	882	261
Stage 1	-	-	-	-	514	-
Stage 2	-	-	-	-	368	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1056	-	289	744
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	676	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1056	-	281	744
Mov Cap-2 Maneuver	-	-	-	-	281	-
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	656	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.57	12.64
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	500	-	-	144	-
HCM Lane V/C Ratio	0.057	-	-	0.025	-
HCM Control Delay (s/veh)	12.6	-	-	8.5	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

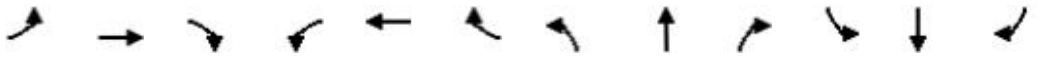
Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	45	485	615	138	145	39
Future Vol, veh/h	45	485	615	138	145	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	47	511	647	145	153	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	793	0	-	0	1070	396
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	350	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	837	-	-	-	219	609
Stage 1	-	-	-	-	448	-
Stage 2	-	-	-	-	690	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	837	-	-	-	207	609
Mov Cap-2 Maneuver	-	-	-	-	325	-
Stage 1	-	-	-	-	423	-
Stage 2	-	-	-	-	690	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.81	0	25.97
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	837	-	-	-	361
HCM Lane V/C Ratio	0.057	-	-	-	0.537
HCM Control Delay (s/veh)	9.6	-	-	-	26
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	416	220	47	739	0	0	0	0	33	12	23
Future Volume (veh/h)	0	416	220	47	739	0	0	0	0	33	12	23
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	438	232	49	778	0				24	28	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	951	499	74	1979	0				99	110	94
Arrive On Green	0.00	0.49	0.49	0.10	1.00	0.00				0.07	0.07	0.07
Sat Flow, veh/h	0	2032	1024	1457	3159	0				1457	1620	1373
Grp Volume(v), veh/h	0	345	325	49	778	0				24	28	24
Grp Sat Flow(s),veh/h/ln	0	1539	1436	1457	1539	0				1457	1620	1373
Q Serve(g_s), s	0.0	6.7	6.8	1.5	0.0	0.0				0.7	0.7	0.7
Cycle Q Clear(g_c), s	0.0	6.7	6.8	1.5	0.0	0.0				0.7	0.7	0.7
Prop In Lane	0.00		0.71	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	750	700	74	1979	0				99	110	94
V/C Ratio(X)	0.00	0.46	0.46	0.66	0.39	0.00				0.24	0.25	0.26
Avail Cap(c_a), veh/h	0	750	700	165	1979	0				162	180	153
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.95	0.95	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	7.6	7.6	19.8	0.0	0.0				19.9	19.9	19.9
Incr Delay (d2), s/veh	0.0	2.0	2.2	3.5	0.6	0.0				0.5	0.4	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.5	1.4	0.4	0.2	0.0				0.2	0.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	9.6	9.8	23.4	0.6	0.0				20.3	20.3	20.4
LnGrp LOS		A	A	C	A					C	C	C
Approach Vol, veh/h		670			827						76	
Approach Delay, s/veh		9.7			1.9						20.4	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.0	27.9		10.1		34.9
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0
Max Green Setting (Gmax), s	5.1	17.2		5.0		27.0
Max Q Clear Time (g_c+I1), s	3.5	8.8		2.7		2.0
Green Ext Time (p_c), s	0.0	1.5		0.0		3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	6.1
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	432	0	0	494	50	270	0	91	0	0	0
Future Volume (veh/h)	23	432	0	0	494	50	270	0	91	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	24	455	0	0	520	53	284	0	96			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	179	1672	0	0	936	417	343	0	305			
Arrive On Green	0.22	0.98	0.00	0.00	0.27	0.27	0.20	0.00	0.20			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	24	455	0	0	520	53	284	0	96			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.5	0.2	0.0	0.0	5.9	1.2	7.1	0.0	2.4			
Cycle Q Clear(g_c), s	0.5	0.2	0.0	0.0	5.9	1.2	7.1	0.0	2.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	179	1672	0	0	936	417	343	0	305			
V/C Ratio(X)	0.13	0.27	0.00	0.00	0.56	0.13	0.83	0.00	0.31			
Avail Cap(c_a), veh/h	180	1672	0	0	936	417	343	0	305			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.95	0.95	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.8	0.3	0.0	0.0	14.0	12.3	17.3	0.0	15.4			
Incr Delay (d2), s/veh	0.3	0.4	0.0	0.0	2.4	0.6	15.4	0.0	0.6			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.0	0.0	1.9	0.4	3.9	0.0	0.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.1	0.6	0.0	0.0	16.4	12.9	32.7	0.0	16.0			
LnGrp LOS	B	A			B	B	C		B			
Approach Vol, veh/h		479			573			380				
Approach Delay, s/veh		1.4			16.1			28.5				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		28.0			9.7	18.3		17.0				
Change Period (Y+Rc), s		6.0			4.7	6.0		8.0				
Max Green Setting (Gmax), s		22.0			5.0	12.3		9.0				
Max Q Clear Time (g_c+I1), s		2.2			2.5	7.9		9.1				
Green Ext Time (p_c), s		2.4			0.0	1.3		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			14.5									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	0	23	16	0	4	34	470	6	4	571	22
Future Vol, veh/h	23	0	23	16	0	4	34	470	6	4	571	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	24	0	24	17	0	4	36	495	6	4	601	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1187	1194	312	875	1199	495	624	0	0	501	0	0
Stage 1	621	621	-	566	566	-	-	-	-	-	-	-
Stage 2	566	573	-	309	633	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	156	188	690	259	187	579	967	-	-	1074	-	-
Stage 1	446	482	-	512	510	-	-	-	-	-	-	-
Stage 2	512	507	-	682	477	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	149	181	690	240	179	579	967	-	-	1074	-	-
Mov Cap-2 Maneuver	149	181	-	240	179	-	-	-	-	-	-	-
Stage 1	445	481	-	493	492	-	-	-	-	-	-	-
Stage 2	490	488	-	655	475	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	23.32	19.37	0.59	0.06
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	967	-	-	245	271	1074	-	-
HCM Lane V/C Ratio	0.037	-	-	0.198	0.078	0.004	-	-
HCM Control Delay (s/veh)	8.9	-	-	23.3	19.4	8.4	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.3	0	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	0	115	0	0	0	97	460	0	0	612	27
Future Vol, veh/h	12	0	115	0	0	0	97	460	0	0	612	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	0	121	0	0	0	102	484	0	0	644	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1105	1347	336	1011	1361	242	673	0	0	484	0	0
Stage 1	658	658	-	688	688	-	-	-	-	-	-	-
Stage 2	446	688	-	322	673	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	168	153	665	197	150	765	928	-	-	1089	-	-
Stage 1	424	464	-	407	450	-	-	-	-	-	-	-
Stage 2	566	450	-	670	457	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	149	136	665	143	133	765	928	-	-	1089	-	-
Mov Cap-2 Maneuver	149	136	-	143	133	-	-	-	-	-	-	-
Stage 1	424	464	-	362	400	-	-	-	-	-	-	-
Stage 2	504	400	-	548	457	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.47	0	1.63	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	928	-	-	149	665	-	1089	-	-
HCM Lane V/C Ratio	0.11	-	-	0.085	0.182	-	-	-	-
HCM Control Delay (s/veh)	9.4	-	-	31.3	11.6	0	0	-	-
HCM Lane LOS	A	-	-	D	B	A	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.3	0.7	-	0	-	-

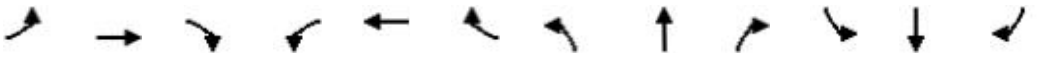
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	703	19	113	649	24	8	0	60	5	0	8
Future Vol, veh/h	9	703	19	113	649	24	8	0	60	5	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	740	20	119	683	25	8	0	63	5	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	708	0	0	760	0	0	1348	1715	380	1323	1713	354
Stage 1	-	-	-	-	-	-	769	769	-	934	934	-
Stage 2	-	-	-	-	-	-	579	946	-	389	779	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	900	-	-	861	-	-	111	91	624	116	91	648
Stage 1	-	-	-	-	-	-	364	413	-	290	347	-
Stage 2	-	-	-	-	-	-	473	343	-	612	409	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	900	-	-	861	-	-	94	78	624	89	78	648
Mov Cap-2 Maneuver	-	-	-	-	-	-	94	78	-	89	78	-
Stage 1	-	-	-	-	-	-	361	409	-	250	299	-
Stage 2	-	-	-	-	-	-	402	295	-	544	405	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.11	1.42	16.88	25.43
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	374	900	-	-	861	-	-	190
HCM Lane V/C Ratio	0.191	0.011	-	-	0.138	-	-	0.072
HCM Control Delay (s/veh)	16.9	9	-	-	9.9	-	-	25.4
HCM Lane LOS	C	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.7	0	-	-	0.5	-	-	0.2



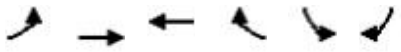
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	780	19	70	695	125	18	1	88	170	4	17
Future Volume (veh/h)	17	780	19	70	695	125	18	1	88	170	4	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	18	821	20	74	732	132	19	1	93	182	0	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	31	1287	31	106	1774	317	129	144	122	1057	0	479
Arrive On Green	0.02	0.38	0.38	0.07	0.42	0.42	0.08	0.08	0.08	0.31	0.00	0.31
Sat Flow, veh/h	1619	3412	83	1619	4193	749	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	18	411	430	74	570	294	19	1	93	182	0	18
Grp Sat Flow(s),veh/h/ln	1619	1710	1785	1619	1638	1665	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	1.2	21.7	21.7	4.9	13.4	13.6	1.2	0.1	6.6	4.3	0.0	0.9
Cycle Q Clear(g_c), s	1.2	21.7	21.7	4.9	13.4	13.6	1.2	0.1	6.6	4.3	0.0	0.9
Prop In Lane	1.00		0.05	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	645	673	106	1386	705	129	144	122	1057	0	479
V/C Ratio(X)	0.58	0.64	0.64	0.70	0.41	0.42	0.15	0.01	0.76	0.17	0.00	0.04
Avail Cap(c_a), veh/h	111	677	707	155	1386	705	273	303	257	1057	0	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.4	28.1	28.1	50.3	22.1	22.2	47.1	46.6	49.5	27.3	0.0	26.2
Incr Delay (d2), s/veh	15.8	1.9	1.8	8.1	0.9	1.8	0.5	0.0	9.5	0.4	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	8.8	9.2	2.2	5.2	5.5	0.5	0.0	2.8	1.8	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.2	29.9	29.9	58.4	23.0	24.0	47.6	46.6	59.1	27.7	0.0	26.3
LnGrp LOS	E	C	C	E	C	C	D	D	E	C		C
Approach Vol, veh/h		859			938			113			200	
Approach Delay, s/veh		30.7			26.1			57.0			27.6	
Approach LOS		C			C			E			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	45.9		39.0	6.6	51.0		13.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	43.5		34.5	7.5	46.5		18.5				
Max Q Clear Time (g_c+I1), s	6.9	23.7		6.3	3.2	15.6		8.6				
Green Ext Time (p_c), s	0.0	4.9		0.7	0.0	6.3		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	29.8
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



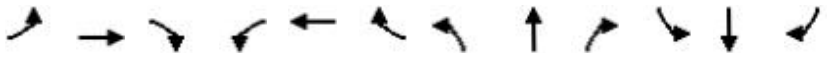
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	532	526	0	423	416
Future Volume (veh/h)	0	532	526	0	423	416
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	560	554	0	445	438
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1735	1735		911	489
Arrive On Green	0.00	0.51	0.51	0.00	0.31	0.31
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	560	554	0	445	438
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	6.3	6.2	0.0	8.0	17.2
Cycle Q Clear(g_c), s	0.0	6.3	6.2	0.0	8.0	17.2
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1735	1735		911	489
V/C Ratio(X)	0.00	0.32	0.32		0.49	0.90
Avail Cap(c_a), veh/h	0	1735	1735		955	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.4	9.4	0.0	18.3	21.5
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.0	0.5	18.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.1	2.0	0.0	2.6	8.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	9.9	9.9	0.0	18.8	39.5
LnGrp LOS		A	A		B	D
Approach Vol, veh/h		560	554		883	
Approach Delay, s/veh		9.9	9.9		29.1	
Approach LOS		A	A		C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	39.0	26.0	39.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	32.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	8.3	19.2	8.2
Green Ext Time (p_c), s	3.1	0.9	3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	18.4
HCM 7th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	485	0	0	699	117	367	109	217	43	0	309
Future Volume (veh/h)	206	485	0	0	699	117	367	109	217	43	0	309
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	217	511	0	0	736	123	251	305	228	45	0	325
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	302	2424	0	0	1229	203	424	471	799	0	0	0
Arrive On Green	0.10	0.49	0.00	0.00	0.29	0.29	0.26	0.26	0.26	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4408	703	1619	1800	3051		0	
Grp Volume(v), veh/h	217	511	0	0	566	293	251	305	228		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1673	1619	1800	1525			
Q Serve(g_s), s	3.5	2.9	0.0	0.0	7.3	7.4	6.6	7.4	2.9			
Cycle Q Clear(g_c), s	3.5	2.9	0.0	0.0	7.3	7.4	6.6	7.4	2.9			
Prop In Lane	1.00		0.00	0.00		0.42	1.00		1.00			
Lane Grp Cap(c), veh/h	302	2424	0	0	948	484	424	471	799			
V/C Ratio(X)	0.72	0.21	0.00	0.00	0.60	0.60	0.59	0.65	0.29			
Avail Cap(c_a), veh/h	302	4411	0	0	2272	1161	760	845	1432			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	21.3	7.0	0.0	0.0	15.0	15.0	15.8	16.1	14.4			
Incr Delay (d2), s/veh	7.6	0.0	0.0	0.0	0.5	0.9	1.6	1.8	0.2			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.4	0.7	0.0	0.0	2.3	2.5	2.1	2.6	0.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.0	7.1	0.0	0.0	15.4	15.9	17.4	17.9	14.7			
LnGrp LOS	C	A			B	B	B	B	B			
Approach Vol, veh/h		728			859			784				
Approach Delay, s/veh		13.6			15.6			16.8				
Approach LOS		B			B			B				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		30.2			10.0	20.2		18.8				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		23.0				
Max Q Clear Time (g_c+I1), s		4.9			5.5	9.4		9.4				
Green Ext Time (p_c), s		3.0			0.0	4.8		3.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.4
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	68	353	29	24	59	133	379	28	34	424	40
Future Volume (veh/h)	126	68	353	29	24	59	133	379	28	34	424	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	133	72	0	31	25	62	140	399	29	36	446	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	164	296		57	45	112	266	671	568	65	581	492
Arrive On Green	0.10	0.16	0.00	0.04	0.10	0.10	0.09	0.37	0.37	0.04	0.32	0.32
Sat Flow, veh/h	1619	1800	1525	1619	458	1137	2956	1800	1525	1619	1800	1525
Grp Volume(v), veh/h	133	72	0	31	0	87	140	399	29	36	446	42
Grp Sat Flow(s),veh/h/ln	1619	1800	1525	1619	0	1595	1478	1800	1525	1619	1800	1525
Q Serve(g_s), s	3.7	1.6	0.0	0.9	0.0	2.4	2.1	8.3	0.6	1.0	10.4	0.9
Cycle Q Clear(g_c), s	3.7	1.6	0.0	0.9	0.0	2.4	2.1	8.3	0.6	1.0	10.4	0.9
Prop In Lane	1.00		1.00	1.00		0.71	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	296		57	0	157	266	671	568	65	581	492
V/C Ratio(X)	0.81	0.24		0.54	0.00	0.55	0.53	0.59	0.05	0.56	0.77	0.09
Avail Cap(c_a), veh/h	174	698		174	0	618	318	2481	2103	174	2481	2103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	16.9	0.0	22.0	0.0	20.0	20.2	11.7	9.3	21.9	14.2	11.0
Incr Delay (d2), s/veh	23.2	0.4	0.0	7.6	0.0	3.0	1.6	0.8	0.0	7.3	2.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.6	0.0	0.4	0.0	0.9	0.6	2.4	0.2	0.4	3.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.7	17.3	0.0	29.7	0.0	23.0	21.8	12.6	9.4	29.1	16.3	11.0
LnGrp LOS	D	B		C		C	C	B	A	C	B	B
Approach Vol, veh/h		205			118			568			524	
Approach Delay, s/veh		34.4			24.7			14.7			16.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	21.8	6.1	12.1	8.7	19.5	9.2	9.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	64.0	5.0	18.0	5.0	64.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	13.0	10.3	2.9	3.6	4.1	12.4	5.7	4.4
Green Ext Time (p_c), s	0.0	2.4	0.0	0.2	0.0	2.6	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	19.2
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	5	468	33	6	449
Future Vol, veh/h	18	5	468	33	6	449
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	19	5	493	35	6	473

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	978	493	0	0	527	0
Stage 1	493	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	280	580	-	-	1050	-
Stage 1	618	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	278	580	-	-	1050	-
Mov Cap-2 Maneuver	278	-	-	-	-	-
Stage 1	618	-	-	-	-	-
Stage 2	618	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	17.45	0	0.11
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	313	24	-
HCM Lane V/C Ratio	-	-	0.077	0.006	-
HCM Control Delay (s/veh)	-	-	17.4	8.4	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	66	0	4	0	184	104	12	134	0
Future Vol, veh/h	0	0	0	66	0	4	0	184	104	12	134	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	69	0	4	0	194	109	13	141	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	360	469	141	415	415	248	141	0	0	303	0	0
Stage 1	166	166	-	248	248	-	-	-	-	-	-	-
Stage 2	194	303	-	166	166	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	599	495	912	552	531	795	1454	-	-	1269	-	-
Stage 1	840	765	-	760	705	-	-	-	-	-	-	-
Stage 2	813	667	-	840	765	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	590	490	912	546	526	795	1454	-	-	1269	-	-
Mov Cap-2 Maneuver	590	490	-	546	526	-	-	-	-	-	-	-
Stage 1	832	757	-	760	705	-	-	-	-	-	-	-
Stage 2	808	667	-	832	757	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	12.46	0	0.65
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1454	-	-	-	556	1269	-	-
HCM Lane V/C Ratio	-	-	-	-	0.133	0.01	-	-
HCM Control Delay (s/veh)	0	-	-	0	12.5	7.9	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0	-	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	44	4	27	60	19	7	77	48	22	61	30
Future Vol, veh/h	43	44	4	27	60	19	7	77	48	22	61	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	46	4	28	63	20	7	81	51	23	64	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	254	273	80	255	263	106	96	0	0	132	0	0
Stage 1	126	126	-	121	121	-	-	-	-	-	-	-
Stage 2	127	146	-	134	142	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	704	638	986	703	645	953	1511	-	-	1466	-	-
Stage 1	882	795	-	888	799	-	-	-	-	-	-	-
Stage 2	881	780	-	875	783	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	609	625	986	635	632	953	1511	-	-	1466	-	-
Mov Cap-2 Maneuver	609	625	-	635	632	-	-	-	-	-	-	-
Stage 1	868	783	-	884	796	-	-	-	-	-	-	-
Stage 2	790	776	-	806	771	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.78	11.4	0.39	1.46
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1511	-	-	627	674	1466	-	-
HCM Lane V/C Ratio	0.005	-	-	0.153	0.166	0.016	-	-
HCM Control Delay (s/veh)	7.4	-	-	11.8	11.4	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.6	0	-	-

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	4	68	0	0	0	0	119	23	15	53	0
Future Vol, veh/h	7	4	68	0	0	0	0	119	23	15	53	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	4	72	0	0	0	0	125	24	16	56	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.6	8.8	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	84%	0%	6%	0%	100%
Vol Right, %	16%	0%	94%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	142	7	72	15	53
LT Vol	0	7	0	15	0
Through Vol	119	0	4	0	53
RT Vol	23	0	68	0	0
Lane Flow Rate	149	7	76	16	56
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.191	0.011	0.092	0.023	0.073
Departure Headway (Hd)	4.602	5.543	4.378	5.224	4.723
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	770	650	823	677	748
Service Time	2.686	3.243	2.078	3.019	2.518
HCM Lane V/C Ratio	0.194	0.011	0.092	0.024	0.075
HCM Control Delay, s/veh	8.8	8.3	7.5	8.1	7.9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.7	0	0.3	0.1	0.2

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	36	47	15	30	58	63
Future Vol, veh/h	36	47	15	30	58	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	38	49	16	32	61	66
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7.4	7.9	7.9
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	63	36	47	15	30
LT Vol	58	0	0	0	15	0
Through Vol	0	0	36	0	0	30
RT Vol	0	63	0	47	0	0
Lane Flow Rate	61	66	38	49	16	32
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.09	0.074	0.051	0.057	0.024	0.043
Departure Headway (Hd)	5.325	4.024	4.855	4.153	5.384	4.882
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	677	874	742	867	669	737
Service Time	3.025	1.824	2.559	1.856	3.087	2.586
HCM Lane V/C Ratio	0.09	0.076	0.051	0.057	0.024	0.043
HCM Control Delay, s/veh	8.6	7.2	7.8	7.1	8.2	7.8
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.2	0.2	0.2	0.1	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	283	182	286	276	8	196	51	222	24	69	31
Future Volume (veh/h)	22	283	182	286	276	8	196	51	222	24	69	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	23	298	192	301	291	8	206	54	234	25	73	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	44	460	288	355	1429	39	419	476	403	453	617	263
Arrive On Green	0.03	0.23	0.23	0.22	0.42	0.42	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1619	2017	1265	1619	3400	93	1171	1800	1525	1299	2336	995
Grp Volume(v), veh/h	23	251	239	301	146	153	206	54	234	25	52	54
Grp Sat Flow(s),veh/h/ln	1619	1710	1572	1619	1710	1783	1171	1800	1525	1299	1710	1621
Q Serve(g_s), s	0.7	6.9	7.1	9.2	2.8	2.8	8.4	1.2	6.9	0.8	1.2	1.3
Cycle Q Clear(g_c), s	0.7	6.9	7.1	9.2	2.8	2.8	9.7	1.2	6.9	1.9	1.2	1.3
Prop In Lane	1.00		0.80	1.00		0.05	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	44	390	358	355	718	749	419	476	403	453	452	428
V/C Ratio(X)	0.52	0.65	0.67	0.85	0.20	0.20	0.49	0.11	0.58	0.06	0.12	0.13
Avail Cap(c_a), veh/h	210	1311	1205	454	1569	1636	1039	1429	1211	1141	1357	1286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	18.1	18.2	19.3	9.5	9.5	18.2	14.4	16.5	15.2	14.4	14.5
Incr Delay (d2), s/veh	9.2	1.8	2.1	11.3	0.1	0.1	0.9	0.1	1.3	0.1	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.3	2.2	3.9	0.8	0.8	2.1	0.4	2.3	0.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.0	19.9	20.3	30.6	9.6	9.6	19.0	14.5	17.8	15.2	14.5	14.6
LnGrp LOS	C	B	C	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		513			600			494			131	
Approach Delay, s/veh		20.7			20.2			18.0			14.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.8	17.6		18.2	5.9	27.5		18.2				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	14.5	39.6		41.0	6.7	47.4		41.0				
Max Q Clear Time (g_c+I1), s	11.2	9.1		11.7	2.7	4.8		3.9				
Green Ext Time (p_c), s	0.3	2.6		2.0	0.0	1.6		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	19.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	510	93	114	539	13	76	3	104	15	6	13
Future Volume (veh/h)	11	510	93	114	539	13	76	3	104	15	6	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	12	537	98	120	567	14	80	3	109	16	6	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	507	1337	243	482	1578	39	402	254	215	417	68	158
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	757	2890	525	720	3411	84	1265	1800	1525	1285	480	1119
Grp Volume(v), veh/h	12	317	318	120	284	297	80	3	109	16	0	20
Grp Sat Flow(s),veh/h/ln	757	1710	1705	720	1710	1785	1265	1800	1525	1285	0	1599
Q Serve(g_s), s	0.3	3.7	3.7	4.0	3.2	3.2	1.8	0.0	2.0	0.3	0.0	0.3
Cycle Q Clear(g_c), s	3.6	3.7	3.7	7.7	3.2	3.2	2.1	0.0	2.0	0.4	0.0	0.3
Prop In Lane	1.00		0.31	1.00		0.05	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	507	791	789	482	791	826	402	254	215	417	0	225
V/C Ratio(X)	0.02	0.40	0.40	0.25	0.36	0.36	0.20	0.01	0.51	0.04	0.00	0.09
Avail Cap(c_a), veh/h	1082	2090	2084	1029	2090	2181	1729	2140	1814	1832	0	1985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.4	5.4	5.4	7.9	5.2	5.2	12.2	11.2	12.0	11.4	0.0	11.3
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.3	0.3	0.3	0.2	0.0	1.8	0.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.5	0.3	0.4	0.4	0.4	0.0	0.6	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.4	5.7	5.7	8.2	5.5	5.5	12.5	11.2	13.9	11.4	0.0	11.5
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		647			701			192			36	
Approach Delay, s/veh		5.7			6.0			13.3			11.4	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	19.8	10.5	19.8	10.5
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	37.0	36.0	37.0	* 38
Max Q Clear Time (g_c+I1), s	5.7	4.1	9.7	2.4
Green Ext Time (p_c), s	3.8	0.6	4.3	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	619	100	56	620	6	105	0	55	9	3	8
Future Volume (veh/h)	3	619	100	56	620	6	105	0	55	9	3	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	3	652	105	59	653	6	111	0	58	9	3	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	522	1382	222	483	1627	15	477	0	219	386	90	219
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.14	0.00	0.14	0.14	0.14	0.14
Sat Flow, veh/h	705	2950	474	643	3472	32	1375	0	1525	983	626	1525
Grp Volume(v), veh/h	3	378	379	59	322	337	111	0	58	12	0	8
Grp Sat Flow(s),veh/h/ln	705	1710	1715	643	1710	1794	1375	0	1525	1609	0	1525
Q Serve(g_s), s	0.1	3.9	3.9	1.8	3.2	3.2	1.8	0.0	0.9	0.0	0.0	0.1
Cycle Q Clear(g_c), s	3.2	3.9	3.9	5.7	3.2	3.2	1.9	0.0	0.9	0.1	0.0	0.1
Prop In Lane	1.00		0.28	1.00		0.02	1.00		1.00	0.75		1.00
Lane Grp Cap(c), veh/h	522	801	803	483	801	841	477	0	219	476	0	219
V/C Ratio(X)	0.01	0.47	0.47	0.12	0.40	0.40	0.23	0.00	0.26	0.03	0.00	0.04
Avail Cap(c_a), veh/h	903	1724	1729	830	1724	1809	2075	0	2011	2181	0	2011
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.6	4.7	4.7	6.6	4.5	4.5	10.3	0.0	9.8	9.5	0.0	9.5
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.1	0.3	0.3	0.2	0.0	0.6	0.0	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.1	0.4	0.5	0.4	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.6	5.1	5.1	6.7	4.8	4.8	10.5	0.0	10.5	9.5	0.0	9.6
LnGrp LOS	A	A	A	A	A	A	B		B	A		A
Approach Vol, veh/h		760			718			169			20	
Approach Delay, s/veh		5.1			5.0			10.5			9.6	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.5	8.3	17.5	8.3
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	26.0	34.0	26.0	34.0
Max Q Clear Time (g_c+I1), s	5.9	3.9	7.7	2.1
Green Ext Time (p_c), s	4.2	0.8	4.4	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.6
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	480	49	21	442	151	46	39	18	218	44	230
Future Volume (veh/h)	154	480	49	21	442	151	46	39	18	218	44	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	162	505	52	22	465	159	48	41	19	229	46	242
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	311	740	76	229	660	224	128	87	40	403	62	326
Arrive On Green	0.11	0.24	0.24	0.13	0.26	0.26	0.07	0.07	0.07	0.23	0.23	0.23
Sat Flow, veh/h	1714	3131	321	1810	2506	851	1810	1228	569	1714	264	1387
Grp Volume(v), veh/h	162	275	282	22	316	308	48	0	60	229	0	288
Grp Sat Flow(s),veh/h/ln	1714	1710	1742	1810	1710	1647	1810	0	1798	1714	0	1650
Q Serve(g_s), s	4.9	8.6	8.6	0.6	9.8	9.9	1.5	0.0	1.9	6.9	0.0	9.5
Cycle Q Clear(g_c), s	4.9	8.6	8.6	0.6	9.8	9.9	1.5	0.0	1.9	6.9	0.0	9.5
Prop In Lane	1.00		0.18	1.00		0.52	1.00		0.32	1.00		0.84
Lane Grp Cap(c), veh/h	311	404	412	229	451	434	128	0	127	403	0	388
V/C Ratio(X)	0.52	0.68	0.68	0.10	0.70	0.71	0.38	0.00	0.47	0.57	0.00	0.74
Avail Cap(c_a), veh/h	319	838	854	229	803	774	155	0	154	791	0	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.2	20.3	20.4	22.6	19.5	19.5	26.0	0.0	26.1	19.8	0.0	20.8
Incr Delay (d2), s/veh	1.4	2.0	2.0	0.2	2.0	2.2	1.8	0.0	2.7	1.3	0.0	2.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.4	3.4	0.3	3.8	3.7	0.7	0.0	0.9	2.7	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.6	22.4	22.4	22.8	21.5	21.7	27.8	0.0	28.9	21.0	0.0	23.6
LnGrp LOS	C	C	C	C	C	C	C		C	C		C
Approach Vol, veh/h		719			646			108			517	
Approach Delay, s/veh		22.4			21.6			28.4			22.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	18.9		8.7	10.9	20.0		18.8				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.0	* 29		5.0	6.7	27.5		27.0				
Max Q Clear Time (g_c+I1), s	12.6	10.6		3.9	6.9	11.9		11.5				
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	3.5		2.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	22.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	464	208	112	401	195	89
Future Volume (veh/h)	464	208	112	401	195	89
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	488	219	118	422	205	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	797	356	156	1947	303	285
Arrive On Green	0.35	0.35	0.10	0.57	0.19	0.19
Sat Flow, veh/h	2389	1026	1619	3510	1619	1525
Grp Volume(v), veh/h	362	345	118	422	205	94
Grp Sat Flow(s),veh/h/ln	1710	1615	1619	1710	1619	1525
Q Serve(g_s), s	6.3	6.3	2.5	2.2	4.2	1.9
Cycle Q Clear(g_c), s	6.3	6.3	2.5	2.2	4.2	1.9
Prop In Lane		0.64	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	593	560	156	1947	303	285
V/C Ratio(X)	0.61	0.62	0.75	0.22	0.68	0.33
Avail Cap(c_a), veh/h	1131	1068	349	3383	1179	1111
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.7	9.7	15.7	3.8	13.5	12.6
Incr Delay (d2), s/veh	1.0	1.1	7.2	0.1	2.6	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.8	1.1	0.3	1.4	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.7	10.8	22.9	3.8	16.2	13.2
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	707			540	299	
Approach Delay, s/veh	10.7			8.0	15.2	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.9	17.0		10.8		24.9
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	7.5	* 24		26.0		35.3
Max Q Clear Time (g_c+I1), s	4.5	8.3		6.2		4.2
Green Ext Time (p_c), s	0.1	4.0		0.8		3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.7
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	67	78	260	47	91	50	427	276	107	530	5
Future Volume (veh/h)	10	67	78	260	47	91	50	427	276	107	530	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	11	71	82	274	49	96	53	449	0	113	558	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	465	267	308	460	190	373	84	535		140	1153	10
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.05	0.30	0.00	0.09	0.33	0.33
Sat Flow, veh/h	1130	762	880	1122	544	1065	1619	1800	1525	1619	3473	31
Grp Volume(v), veh/h	11	0	153	274	0	145	53	449	0	113	275	288
Grp Sat Flow(s),veh/h/ln	1130	0	1642	1122	0	1608	1619	1800	1525	1619	1710	1794
Q Serve(g_s), s	0.4	0.0	3.4	11.8	0.0	3.3	1.6	11.8	0.0	3.5	6.5	6.5
Cycle Q Clear(g_c), s	3.6	0.0	3.4	15.1	0.0	3.3	1.6	11.8	0.0	3.5	6.5	6.5
Prop In Lane	1.00		0.54	1.00		0.66	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	465	0	574	460	0	563	84	535		140	568	596
V/C Ratio(X)	0.02	0.00	0.27	0.60	0.00	0.26	0.63	0.84		0.81	0.48	0.48
Avail Cap(c_a), veh/h	517	0	651	512	0	638	195	678		233	685	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	0.0	11.8	17.2	0.0	11.8	23.6	16.7	0.0	22.7	13.5	13.5
Incr Delay (d2), s/veh	0.0	0.0	0.2	1.6	0.0	0.2	7.6	7.5	0.0	10.3	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.1	2.8	0.0	1.0	0.7	5.2	0.0	1.6	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.1	0.0	12.1	18.8	0.0	12.0	31.1	24.2	0.0	33.0	14.1	14.1
LnGrp LOS	B		B	B		B	C	C		C	B	B
Approach Vol, veh/h		164			419			502			676	
Approach Delay, s/veh		12.1			16.5			24.9			17.3	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	21.3		22.2	8.9	19.6		22.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.1	20.3		20.1	7.3	19.1		20.1				
Max Q Clear Time (g_c+I1), s	13.8	8.5		17.1	5.5	13.8		5.6				
Green Ext Time (p_c), s	0.0	2.5		0.6	0.0	1.2		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.8
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	217	0	130	393	748	0	0	640	365
Future Volume (veh/h)	0	0	0	217	0	130	393	748	0	0	640	365
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				228	0	137	414	787	0	0	674	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				285	0	254	491	2167	0	0	788	
Arrive On Green				0.17	0.00	0.17	0.30	0.63	0.00	0.00	0.23	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				228	0	137	414	787	0	0	674	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				7.7	0.0	4.9	14.4	6.6	0.0	0.0	11.3	0.0
Cycle Q Clear(g_c), s				7.7	0.0	4.9	14.4	6.6	0.0	0.0	11.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				285	0	254	491	2167	0	0	788	
V/C Ratio(X)				0.80	0.00	0.54	0.84	0.36	0.00	0.00	0.86	
Avail Cap(c_a), veh/h				286	0	254	510	2167	0	0	821	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.86	0.86	0.00	0.00	0.83	0.00
Uniform Delay (d), s/veh				24.1	0.0	22.9	19.6	5.2	0.0	0.0	22.1	0.0
Incr Delay (d2), s/veh				14.8	0.0	2.3	9.7	0.4	0.0	0.0	9.8	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.1	0.0	1.8	6.1	1.7	0.0	0.0	5.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				38.9	0.0	25.2	29.3	5.6	0.0	0.0	31.9	0.0
LnGrp LOS				D		C	C	A			C	
Approach Vol, veh/h					365			1201			674	
Approach Delay, s/veh					33.7			13.8			31.9	
Approach LOS					C			B			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.2	19.8		16.0		44.0
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0
Max Green Setting (Gmax), s	18.2	* 14		10.0		38.0
Max Q Clear Time (g_c+I1), s	16.4	13.3		9.7		8.6
Green Ext Time (p_c), s	0.2	0.5		0.1		5.9

Intersection Summary	
HCM 7th Control Delay, s/veh	22.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	232	361	102	950	826	84
Future Volume (veh/h)	232	361	102	950	826	84
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	244	380	107	1000	869	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	439	414	167	2036	1379	140
Arrive On Green	0.27	0.27	0.10	0.60	0.44	0.44
Sat Flow, veh/h	1619	1525	1619	3510	3225	318
Grp Volume(v), veh/h	244	380	107	1000	474	483
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1743
Q Serve(g_s), s	11.6	21.8	5.7	15.0	19.3	19.3
Cycle Q Clear(g_c), s	11.6	21.8	5.7	15.0	19.3	19.3
Prop In Lane	1.00	1.00	1.00			0.18
Lane Grp Cap(c), veh/h	439	414	167	2036	752	766
V/C Ratio(X)	0.56	0.92	0.64	0.49	0.63	0.63
Avail Cap(c_a), veh/h	522	492	221	2036	752	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.64	0.64	0.56	0.56
Uniform Delay (d), s/veh	28.1	31.8	38.7	10.4	19.5	19.5
Incr Delay (d2), s/veh	0.4	18.8	1.0	0.5	2.3	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	9.9	2.3	5.1	7.6	7.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	28.5	50.7	39.7	11.0	21.8	21.8
LnGrp LOS	C	D	D	B	C	C
Approach Vol, veh/h	624			1107	957	
Approach Delay, s/veh	42.0			13.7	21.8	
Approach LOS	D			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.0	45.6			59.6	30.4
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	12.3	32.0			49.0	29.0
Max Q Clear Time (g_c+I1), s	17.3	21.3			17.0	23.8
Green Ext Time (p_c), s	0.0	4.4			8.2	0.7

Intersection Summary		
HCM 7th Control Delay, s/veh	23.2	
HCM 7th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	22	32	87	23	368	23	537	71	393	809	46
Future Volume (veh/h)	102	22	32	87	23	368	23	537	71	393	809	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	107	23	34	92	24	387	24	565	75	414	852	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	164	501	447	456	501	447	44	713	94	409	1513	85
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.23	0.23	0.25	0.46	0.46
Sat Flow, veh/h	886	1710	1525	1224	1710	1525	1619	3036	402	1619	3291	185
Grp Volume(v), veh/h	107	23	34	92	24	387	24	318	322	414	443	457
Grp Sat Flow(s),veh/h/ln	886	1710	1525	1224	1710	1525	1619	1710	1728	1619	1710	1767
Q Serve(g_s), s	3.2	0.6	1.0	3.6	0.6	14.8	0.9	10.7	10.8	15.5	11.6	11.6
Cycle Q Clear(g_c), s	18.0	0.6	1.0	4.6	0.6	14.8	0.9	10.7	10.8	15.5	11.6	11.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.10
Lane Grp Cap(c), veh/h	164	501	447	456	501	447	44	402	406	409	786	812
V/C Ratio(X)	0.65	0.05	0.08	0.20	0.05	0.87	0.54	0.79	0.79	1.01	0.56	0.56
Avail Cap(c_a), veh/h	164	501	447	456	501	447	277	501	506	409	786	812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	15.6	15.7	17.4	15.6	20.6	29.5	22.1	22.1	23.0	12.1	12.1
Incr Delay (d2), s/veh	8.9	0.0	0.1	0.2	0.0	16.2	9.9	6.7	6.9	47.9	0.9	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.2	0.3	1.0	0.2	6.8	0.4	4.4	4.5	10.7	3.8	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.9	15.6	15.8	17.6	15.6	36.7	39.4	28.8	29.0	70.9	13.0	13.0
LnGrp LOS	D	B	B	B	B	D	D	C	C	F	B	B
Approach Vol, veh/h		164			503			664			1314	
Approach Delay, s/veh		30.8			32.2			29.3			31.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	32.7		22.5	20.0	18.9		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	23.0		18.0	15.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	12.9	13.6		16.8	17.5	12.8		20.0				
Green Ext Time (p_c), s	0.0	3.8		0.4	0.0	1.6		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh	30.9	
HCM 7th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	260	33	52	228	124	37	235	37	231	217	246
Future Volume (veh/h)	160	260	33	52	228	124	37	235	37	231	217	246
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	168	274	35	55	240	131	39	247	39	243	228	259
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	452	1073	136	485	760	401	426	1160	181	539	669	597
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	919	3054	386	973	2164	1141	826	2965	462	994	1710	1525
Grp Volume(v), veh/h	168	152	157	55	188	183	39	141	145	243	228	259
Grp Sat Flow(s),veh/h/ln	919	1710	1730	973	1710	1595	826	1710	1717	994	1710	1525
Q Serve(g_s), s	5.7	2.2	2.3	1.5	2.8	2.9	1.3	1.9	2.0	7.5	3.3	4.3
Cycle Q Clear(g_c), s	8.7	2.2	2.3	3.8	2.8	2.9	5.6	1.9	2.0	9.5	3.3	4.3
Prop In Lane	1.00		0.22	1.00		0.72	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	452	601	608	485	601	560	426	669	672	539	669	597
V/C Ratio(X)	0.37	0.25	0.26	0.11	0.31	0.33	0.09	0.21	0.22	0.45	0.34	0.43
Avail Cap(c_a), veh/h	602	881	892	645	881	822	529	881	885	662	881	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	8.1	8.1	9.4	8.3	8.3	9.9	7.1	7.1	10.2	7.5	7.8
Incr Delay (d2), s/veh	0.5	0.2	0.2	0.1	0.3	0.3	0.1	0.2	0.2	0.6	0.3	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.6	0.6	0.2	0.8	0.8	0.2	0.4	0.4	1.0	0.7	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.0	8.3	8.3	9.5	8.6	8.6	10.0	7.2	7.2	10.8	7.8	8.3
LnGrp LOS	B	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		477			426			325			730	
Approach Delay, s/veh		9.6			8.7			7.5			9.0	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	18.2	16.8	18.2	16.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	7.6	10.7	11.5	5.8
Green Ext Time (p_c), s	1.2	1.6	2.2	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	8.8
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	530	0	1	195	1	0
Future Vol, veh/h	530	0	1	195	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	576	0	1	212	1	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	576	0	684	288
Stage 1	-	-	-	-	576	-
Stage 2	-	-	-	-	108	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1007	-	387	715
Stage 1	-	-	-	-	531	-
Stage 2	-	-	-	-	910	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1007	-	386	715
Mov Cap-2 Maneuver	-	-	-	-	386	-
Stage 1	-	-	-	-	531	-
Stage 2	-	-	-	-	909	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.04	14.35
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	386	-	-	1007	-
HCM Lane V/C Ratio	0.003	-	-	0.001	-
HCM Control Delay (s/veh)	14.3	-	-	8.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	368	0	17	482	5	19
Future Vol, veh/h	368	0	17	482	5	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	387	0	18	507	5	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	387	0	677	194
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	289	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1182	-	391	821
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	740	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1182	-	385	821
Mov Cap-2 Maneuver	-	-	-	-	491	-
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	729	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.28	10.18
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	721	-	-	1182	-
HCM Lane V/C Ratio	0.035	-	-	0.015	-
HCM Control Delay (s/veh)	10.2	-	-	8.1	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2	0	0	5	0	0	0	0	0	0	0
Future Vol, veh/h	0	2	0	0	5	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2	0	0	5	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5	0	0	2	0	0	8	8	2	8	8	5
Stage 1	-	-	-	-	-	-	2	2	-	5	5	-
Stage 2	-	-	-	-	-	-	5	5	-	2	2	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1629	-	-	1633	-	-	1017	891	1088	1017	891	1083
Stage 1	-	-	-	-	-	-	1026	898	-	1022	895	-
Stage 2	-	-	-	-	-	-	1022	895	-	1026	898	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1629	-	-	1633	-	-	1017	891	1088	1017	891	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-	1017	891	-	1017	891	-
Stage 1	-	-	-	-	-	-	1026	898	-	1022	895	-
Stage 2	-	-	-	-	-	-	1022	895	-	1026	898	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1629	-	-	1633	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	316	116	0	0	0
Future Vol, veh/h	0	316	116	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	343	126	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	126	0	-	0	470	126
Stage 1	-	-	-	-	126	-
Stage 2	-	-	-	-	343	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1473	-	-	-	556	930
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	723	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1473	-	-	-	556	930
Mov Cap-2 Maneuver	-	-	-	-	610	-
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	723	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1473	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	385	142	53	144	0
Future Vol, veh/h	0	385	142	53	144	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	0	150	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	418	154	58	157	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	212	0	-	0	573	154
Stage 1	-	-	-	-	154	-
Stage 2	-	-	-	-	418	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1370	-	-	-	485	897
Stage 1	-	-	-	-	879	-
Stage 2	-	-	-	-	668	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1370	-	-	-	485	897
Mov Cap-2 Maneuver	-	-	-	-	485	-
Stage 1	-	-	-	-	879	-
Stage 2	-	-	-	-	668	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	15.94
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1370	-	-	-	485	-
HCM Lane V/C Ratio	-	-	-	-	0.323	-
HCM Control Delay (s/veh)	0	-	-	-	15.9	0
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0	-	-	-	1.4	-

Intersection	
Int Delay, s/veh	7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	97	0	0	33	0	0
Future Vol, veh/h	97	0	0	33	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	105	0	0	36	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	19	18	0	0	36	0
Stage 1	18	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1004	1066	-	-	1588	-
Stage 1	1010	-	-	-	-	-
Stage 2	1027	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1004	1066	-	-	1588	-
Mov Cap-2 Maneuver	921	-	-	-	-	-
Stage 1	1010	-	-	-	-	-
Stage 2	1027	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.42	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	921	1588	-
HCM Lane V/C Ratio	-	-	0.115	-	-
HCM Control Delay (s/veh)	-	-	9.4	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	412	0	0	616
Future Vol, veh/h	0	0	412	0	0	616
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	448	0	0	670

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	783	224	0	0	448	0
Stage 1	448	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	335	786	-	-	1123	-
Stage 1	617	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	335	786	-	-	1123	-
Mov Cap-2 Maneuver	335	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	703	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1123	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	599	276	0	0	0
Future Vol, veh/h	0	599	276	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	631	291	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	291	0	-	0	921	291
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	631	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1283	-	-	-	303	753
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	534	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1283	-	-	-	303	753
Mov Cap-2 Maneuver	-	-	-	-	303	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	534	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1283	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	433	0	5	343	214	0	2	13	198	2	7
Future Volume (veh/h)	7	433	0	5	343	214	0	2	13	198	2	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1900	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	7	456	0	5	361	225	0	2	14	216	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	555	737	0	490	737	625	0	45	314	1197	415	0
Arrive On Green	0.39	0.39	0.00	0.39	0.39	0.39	0.00	0.22	0.22	0.22	0.00	0.00
Sat Flow, veh/h	982	1900	0	900	1900	1610	0	205	1436	2689	1900	0
Grp Volume(v), veh/h	7	456	0	5	361	225	0	0	16	216	0	0
Grp Sat Flow(s),veh/h/ln	982	1900	0	900	1900	1610	0	0	1641	1345	1900	0
Q Serve(g_s), s	0.1	4.4	0.0	0.1	3.3	2.3	0.0	0.0	0.2	1.6	0.0	0.0
Cycle Q Clear(g_c), s	3.4	4.4	0.0	4.5	3.3	2.3	0.0	0.0	0.2	1.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.87	1.00		0.00
Lane Grp Cap(c), veh/h	555	737	0	490	737	625	0	0	359	1197	415	0
V/C Ratio(X)	0.01	0.62	0.00	0.01	0.49	0.36	0.00	0.00	0.04	0.18	0.00	0.00
Avail Cap(c_a), veh/h	1183	1952	0	1065	1952	1654	0	0	1615	3254	1869	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	5.6	0.0	7.5	5.3	5.0	0.0	0.0	7.1	7.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.5	0.4	0.0	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.6	6.5	0.0	7.5	5.8	5.3	0.0	0.0	7.1	7.8	0.0	0.0
LnGrp LOS	A	A		A	A	A			A	A		
Approach Vol, veh/h		463			591			16			216	
Approach Delay, s/veh		6.5			5.6			7.1			7.8	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.5		13.4		9.5		13.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		22.5		23.5		22.5		23.5				
Max Q Clear Time (g_c+I1), s		2.2		6.4		3.8		6.5				
Green Ext Time (p_c), s		0.0		2.2		0.7		2.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	6.3
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	176	456	40	117	269	350	461	40	158	212	91
Future Volume (veh/h)	114	176	456	40	117	269	350	461	40	158	212	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	120	185	0	42	123	0	368	485	42	166	223	96
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	149	749		54	548		413	959	83	204	310	263
Arrive On Green	0.09	0.22	0.00	0.03	0.16	0.00	0.26	0.30	0.30	0.13	0.17	0.17
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	3185	275	1619	1800	1525
Grp Volume(v), veh/h	120	185	0	42	123	0	368	260	267	166	223	96
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1750	1619	1800	1525
Q Serve(g_s), s	4.5	2.8	0.0	1.6	2.0	0.0	13.7	7.8	7.9	6.2	7.3	3.5
Cycle Q Clear(g_c), s	4.5	2.8	0.0	1.6	2.0	0.0	13.7	7.8	7.9	6.2	7.3	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	149	749		54	548		413	515	527	204	310	263
V/C Ratio(X)	0.81	0.25		0.78	0.22		0.89	0.50	0.51	0.81	0.72	0.37
Avail Cap(c_a), veh/h	259	1951		234	1897		1012	1096	1122	1191	1339	1134
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	20.1	0.0	29.9	22.8	0.0	22.4	18.0	18.0	26.5	24.4	22.8
Incr Delay (d2), s/veh	3.8	0.2	0.0	8.9	0.2	0.0	2.7	0.8	0.8	3.0	3.1	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.0	0.0	0.7	0.7	0.0	4.7	2.7	2.7	2.3	3.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.6	20.3	0.0	38.8	23.0	0.0	25.1	18.7	18.7	29.5	27.5	23.7
LnGrp LOS	C	C		D	C		C	B	B	C	C	C
Approach Vol, veh/h		305			165			895			485	
Approach Delay, s/veh		24.7			27.0			21.4			27.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	19.1	19.9	17.3	9.7	15.4	11.9	25.4
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	9.6	35.6	39.0	46.4	10.0	34.6	45.9	* 40
Max Q Clear Time (g_c+I1), s	13.6	4.8	15.7	9.3	6.5	4.0	8.2	9.9
Green Ext Time (p_c), s	0.0	1.0	0.3	1.4	0.0	0.6	0.1	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	24.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	0	0	789	554	12
Future Vol, veh/h	31	0	0	789	554	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	33	0	0	831	583	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1420	589	596	0	-	0
Stage 1	589	-	-	-	-	-
Stage 2	831	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	152	512	991	-	-	-
Stage 1	558	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	152	512	991	-	-	-
Mov Cap-2 Maneuver	152	-	-	-	-	-
Stage 1	558	-	-	-	-	-
Stage 2	431	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	35.06	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	991	-	152	-	-
HCM Lane V/C Ratio	-	-	0.215	-	-
HCM Control Delay (s/veh)	0	-	35.1	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	345	0	4	393	0	3	0	7	4	0	0
Future Vol, veh/h	4	345	0	4	393	0	3	0	7	4	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	363	0	4	414	0	3	0	7	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	414	0	0	363	0	0	587	794	182	612	794	207
Stage 1	-	-	-	-	-	-	372	372	-	422	422	-
Stage 2	-	-	-	-	-	-	215	422	-	190	372	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1156	-	-	1207	-	-	397	323	836	381	323	806
Stage 1	-	-	-	-	-	-	627	623	-	585	592	-
Stage 2	-	-	-	-	-	-	773	592	-	799	623	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1207	-	-	394	321	836	375	321	806
Mov Cap-2 Maneuver	-	-	-	-	-	-	394	321	-	375	321	-
Stage 1	-	-	-	-	-	-	624	620	-	583	589	-
Stage 2	-	-	-	-	-	-	770	589	-	789	620	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.12	0.11	10.85	14.71
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	626	41	-	-	36	-	-	375
HCM Lane V/C Ratio	0.017	0.004	-	-	0.003	-	-	0.011
HCM Control Delay (s/veh)	10.9	8.1	0	-	8	0	-	14.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	349	3	3	393	0	3	0	0	3	0	0
Future Vol, veh/h	4	349	3	3	393	0	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	367	3	3	414	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	414	0	0	371	0	0	591	797	185	612	799	207
Stage 1	-	-	-	-	-	-	377	377	-	420	420	-
Stage 2	-	-	-	-	-	-	213	420	-	192	379	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1156	-	-	1199	-	-	395	322	832	381	321	806
Stage 1	-	-	-	-	-	-	622	619	-	587	593	-
Stage 2	-	-	-	-	-	-	775	593	-	797	618	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1199	-	-	392	319	832	379	319	806
Mov Cap-2 Maneuver	-	-	-	-	-	-	392	319	-	379	319	-
Stage 1	-	-	-	-	-	-	619	617	-	585	591	-
Stage 2	-	-	-	-	-	-	773	591	-	794	616	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.12	0.08	14.25	14.59
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	392	40	-	-	27	-	-	379
HCM Lane V/C Ratio	0.008	0.004	-	-	0.003	-	-	0.008
HCM Control Delay (s/veh)	14.3	8.1	0	-	8	0	-	14.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	346	4	3	390	3	3	0	0	3	0	0
Future Vol, veh/h	3	346	4	3	390	3	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	364	4	3	411	3	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	414	0	0	368	0	0	584	793	184	607	793	207
Stage 1	-	-	-	-	-	-	373	373	-	418	418	-
Stage 2	-	-	-	-	-	-	212	420	-	188	375	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1156	-	-	1201	-	-	399	324	833	385	323	806
Stage 1	-	-	-	-	-	-	626	622	-	588	594	-
Stage 2	-	-	-	-	-	-	777	593	-	801	621	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1201	-	-	397	322	833	382	321	806
Mov Cap-2 Maneuver	-	-	-	-	-	-	397	322	-	382	321	-
Stage 1	-	-	-	-	-	-	624	620	-	586	592	-
Stage 2	-	-	-	-	-	-	774	591	-	799	619	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.08	14.15	14.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	397	30	-	-	27	-	-	382
HCM Lane V/C Ratio	0.008	0.003	-	-	0.003	-	-	0.008
HCM Control Delay (s/veh)	14.1	8.1	0	-	8	0	-	14.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	361	0	4	383	0	3	0	0	3	0	0
Future Vol, veh/h	4	361	0	4	383	0	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	380	0	4	403	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	403	0	0	380	0	0	598	800	190	610	800	202
Stage 1	-	-	-	-	-	-	388	388	-	412	412	-
Stage 2	-	-	-	-	-	-	210	412	-	198	388	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1166	-	-	1190	-	-	390	320	826	383	320	812
Stage 1	-	-	-	-	-	-	612	612	-	594	598	-
Stage 2	-	-	-	-	-	-	778	598	-	790	612	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1166	-	-	1190	-	-	387	318	826	380	318	812
Mov Cap-2 Maneuver	-	-	-	-	-	-	387	318	-	380	318	-
Stage 1	-	-	-	-	-	-	610	610	-	591	596	-
Stage 2	-	-	-	-	-	-	775	596	-	787	610	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.12	0.11	14.38	14.56
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	387	39	-	-	37	-	-	380
HCM Lane V/C Ratio	0.008	0.004	-	-	0.004	-	-	0.008
HCM Control Delay (s/veh)	14.4	8.1	0	-	8	0	-	14.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	344	8	8	379	0	16	0	18	3	0	0
Future Vol, veh/h	4	344	8	8	379	0	16	0	18	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	362	8	8	399	0	17	0	19	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	399	0	0	371	0	0	591	791	185	605	795	199
Stage 1	-	-	-	-	-	-	375	375	-	416	416	-
Stage 2	-	-	-	-	-	-	216	416	-	189	379	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1171	-	-	1199	-	-	395	325	832	386	323	814
Stage 1	-	-	-	-	-	-	624	621	-	590	595	-
Stage 2	-	-	-	-	-	-	772	595	-	800	618	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1171	-	-	1199	-	-	390	321	832	372	319	814
Mov Cap-2 Maneuver	-	-	-	-	-	-	390	321	-	372	319	-
Stage 1	-	-	-	-	-	-	621	618	-	586	591	-
Stage 2	-	-	-	-	-	-	766	591	-	779	616	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.12	0.23	12.1	14.75
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	543	39	-	-	74	-	-	372
HCM Lane V/C Ratio	0.066	0.004	-	-	0.007	-	-	0.008
HCM Control Delay (s/veh)	12.1	8.1	0	-	8	0.1	-	14.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	355	13	21	372	18	22
Future Vol, veh/h	355	13	21	372	18	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	374	14	22	392	19	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	387	0	621	194
Stage 1	-	-	-	-	381	-
Stage 2	-	-	-	-	240	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1182	-	424	821
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	783	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1182	-	415	821
Mov Cap-2 Maneuver	-	-	-	-	415	-
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	767	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.58	11.81
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	570	-	-	192	-
HCM Lane V/C Ratio	0.074	-	-	0.019	-
HCM Control Delay (s/veh)	11.8	-	-	8.1	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	341	45	27	372	20	23
Future Vol, veh/h	341	45	27	372	20	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	359	47	28	392	21	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	406	0	635	203
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	253	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1163	-	415	810
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	772	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1163	-	404	810
Mov Cap-2 Maneuver	-	-	-	-	404	-
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	751	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.74	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	552	-	-	244	-
HCM Lane V/C Ratio	0.082	-	-	0.024	-
HCM Control Delay (s/veh)	12.1	-	-	8.2	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	347	13	13	401	16	41
Future Vol, veh/h	347	13	13	401	16	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	365	14	14	422	17	43

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	379	0	611	189
Stage 1	-	-	-	-	372	-
Stage 2	-	-	-	-	238	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1191	-	430	826
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1191	-	425	826
Mov Cap-2 Maneuver	-	-	-	-	425	-
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	775	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.35	11.07
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	653	-	-	113	-
HCM Lane V/C Ratio	0.092	-	-	0.011	-
HCM Control Delay (s/veh)	11.1	-	-	8.1	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	358	12	11	430	10	30
Future Vol, veh/h	358	12	11	430	10	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	377	13	12	453	11	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	389	0	633	195
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	249	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1180	-	417	820
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	775	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1180	-	412	820
Mov Cap-2 Maneuver	-	-	-	-	412	-
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	766	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.29	10.85
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	657	-	-	90	-
HCM Lane V/C Ratio	0.064	-	-	0.01	-
HCM Control Delay (s/veh)	10.9	-	-	8.1	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

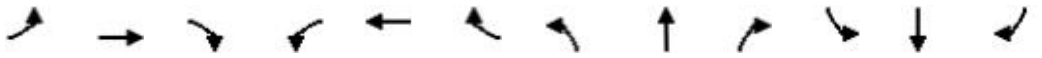
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	388	417	103	128	42
Future Vol, veh/h	42	388	417	103	128	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	44	408	439	108	135	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	547	0	-	0	786	274
Stage 1	-	-	-	-	493	-
Stage 2	-	-	-	-	293	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1032	-	-	-	333	730
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	738	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1032	-	-	-	319	730
Mov Cap-2 Maneuver	-	-	-	-	431	-
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.84	0	16.92
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1032	-	-	-	479
HCM Lane V/C Ratio	0.043	-	-	-	0.373
HCM Control Delay (s/veh)	8.6	-	-	-	16.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	294	236	71	501	0	0	0	0	36	9	19
Future Volume (veh/h)	0	294	236	71	501	0	0	0	0	36	9	19
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	309	248	75	527	0				34	15	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	942	737	88	2186	0				82	35	47
Arrive On Green	0.00	0.57	0.57	0.06	0.71	0.00				0.06	0.06	0.06
Sat Flow, veh/h	0	1723	1286	1457	3159	0				1457	630	839
Grp Volume(v), veh/h	0	289	268	75	527	0				34	0	35
Grp Sat Flow(s),veh/h/ln	0	1539	1389	1457	1539	0				1457	0	1469
Q Serve(g_s), s	0.0	6.1	6.3	3.2	3.7	0.0				1.4	0.0	1.4
Cycle Q Clear(g_c), s	0.0	6.1	6.3	3.2	3.7	0.0				1.4	0.0	1.4
Prop In Lane	0.00		0.93	1.00		0.00				1.00		0.57
Lane Grp Cap(c), veh/h	0	883	797	88	2186	0				82	0	82
V/C Ratio(X)	0.00	0.33	0.34	0.85	0.24	0.00				0.42	0.00	0.42
Avail Cap(c_a), veh/h	0	883	797	219	2186	0				118	0	118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.98	0.98	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.9	7.0	28.8	3.1	0.0				28.3	0.0	28.3
Incr Delay (d2), s/veh	0.0	1.0	1.1	8.1	0.3	0.0				1.3	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.4	1.4	1.2	0.4	0.0				0.5	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	7.9	8.1	36.9	3.4	0.0				29.5	0.0	29.6
LnGrp LOS		A	A	D	A					C		C
Approach Vol, veh/h		557			602						69	
Approach Delay, s/veh		8.0			7.6						29.6	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.5	41.6		12.0		50.0
Change Period (Y+Rc), s	4.7	6.0		8.5		6.0
Max Green Setting (Gmax), s	9.3	28.0		5.0		42.0
Max Q Clear Time (g_c+I1), s	5.2	8.3		3.4		5.7
Green Ext Time (p_c), s	0.0	1.7		0.0		1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	9.0
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	305	0	0	351	52	203	0	91	0	0	0
Future Volume (veh/h)	21	305	0	0	351	52	203	0	91	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	22	321	0	0	369	55	214	0	96			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	146	2017	0	0	1415	631	298	0	265			
Arrive On Green	0.09	0.59	0.00	0.00	0.41	0.41	0.17	0.00	0.17			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	22	321	0	0	369	55	214	0	96			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.7	2.3	0.0	0.0	3.9	1.2	6.5	0.0	3.1			
Cycle Q Clear(g_c), s	0.7	2.3	0.0	0.0	3.9	1.2	6.5	0.0	3.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	146	2017	0	0	1415	631	298	0	265			
V/C Ratio(X)	0.15	0.16	0.00	0.00	0.26	0.09	0.72	0.00	0.36			
Avail Cap(c_a), veh/h	156	2017	0	0	1415	631	623	0	555			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.97	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.1	5.1	0.0	0.0	10.6	9.8	21.4	0.0	20.0			
Incr Delay (d2), s/veh	0.5	0.2	0.0	0.0	0.4	0.3	3.2	0.0	0.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.4	0.0	0.0	1.1	0.3	2.7	0.0	1.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.5	5.3	0.0	0.0	11.0	10.1	24.7	0.0	20.9			
LnGrp LOS	C	A			B	B	C		C			
Approach Vol, veh/h		343			424			310				
Approach Delay, s/veh		6.4			10.9			23.5				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		38.4			9.7	28.8		16.6				
Change Period (Y+Rc), s		6.0			4.7	6.0		7.0				
Max Green Setting (Gmax), s		22.0			5.3	12.0		20.0				
Max Q Clear Time (g_c+I1), s		4.3			2.7	5.9		8.5				
Green Ext Time (p_c), s		1.6			0.0	1.1		1.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			13.1									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	1	42	2	0	0	51	796	20	9	519	35
Future Vol, veh/h	16	1	42	2	0	0	51	796	20	9	519	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	17	1	44	2	0	0	54	838	21	9	546	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1529	1550	292	1238	1547	838	583	0	0	859	0	0
Stage 1	584	584	-	945	945	-	-	-	-	-	-	-
Stage 2	945	966	-	293	602	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	89	115	711	144	115	369	1001	-	-	791	-	-
Stage 1	470	501	-	317	343	-	-	-	-	-	-	-
Stage 2	317	335	-	697	492	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	83	107	711	125	108	369	1001	-	-	791	-	-
Mov Cap-2 Maneuver	83	107	-	125	108	-	-	-	-	-	-	-
Stage 1	464	495	-	300	325	-	-	-	-	-	-	-
Stage 2	300	317	-	644	486	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	26.82	34.32	0.52	0.15
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1001	-	-	226	125	791	-	-
HCM Lane V/C Ratio	0.054	-	-	0.274	0.017	0.012	-	-
HCM Control Delay (s/veh)	8.8	-	-	26.8	34.3	9.6	-	-
HCM Lane LOS	A	-	-	D	D	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	0	119	0	0	0	79	834	0	0	525	44
Future Vol, veh/h	59	0	119	0	0	0	79	834	0	0	525	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	62	0	125	0	0	0	83	878	0	0	553	46

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1181	1620	299	1321	1643	439	599	0	0	878	0	0
Stage 1	576	576	-	1044	1044	-	-	-	-	-	-	-
Stage 2	605	1044	-	276	599	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	148	104	703	117	101	571	988	-	-	778	-	-
Stage 1	475	506	-	249	308	-	-	-	-	-	-	-
Stage 2	456	308	-	712	494	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	135	95	703	88	92	571	988	-	-	778	-	-
Mov Cap-2 Maneuver	135	95	-	88	92	-	-	-	-	-	-	-
Stage 1	475	506	-	228	283	-	-	-	-	-	-	-
Stage 2	418	283	-	585	494	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	24.89	0	0.78	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	988	-	-	135	703	-	778	-	-
HCM Lane V/C Ratio	0.084	-	-	0.459	0.178	-	-	-	-
HCM Control Delay (s/veh)	9	-	-	52.4	11.2	0	0	-	-
HCM Lane LOS	A	-	-	F	B	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	2.1	0.6	-	0	-	-

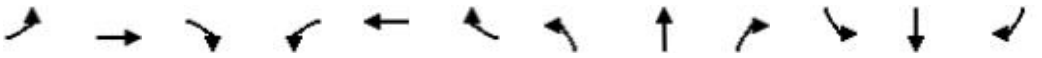
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	635	11	90	827	31	8	0	139	25	0	9
Future Vol, veh/h	2	635	11	90	827	31	8	0	139	25	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	668	12	95	871	33	8	0	146	26	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	903	0	0	680	0	0	1303	1771	340	1415	1761	452
Stage 1	-	-	-	-	-	-	678	678	-	1076	1076	-
Stage 2	-	-	-	-	-	-	625	1093	-	338	684	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	761	-	-	922	-	-	120	84	662	99	85	561
Stage 1	-	-	-	-	-	-	413	455	-	238	298	-
Stage 2	-	-	-	-	-	-	444	293	-	655	452	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	761	-	-	922	-	-	106	75	662	69	76	561
Mov Cap-2 Maneuver	-	-	-	-	-	-	106	75	-	69	76	-
Stage 1	-	-	-	-	-	-	412	453	-	213	267	-
Stage 2	-	-	-	-	-	-	392	263	-	509	451	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.89	14.98	69.07
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	514	761	-	-	922	-	-	90
HCM Lane V/C Ratio	0.301	0.003	-	-	0.103	-	-	0.397
HCM Control Delay (s/veh)	15	9.7	-	-	9.4	-	-	69.1
HCM Lane LOS	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	1.3	0	-	-	0.3	-	-	1.6



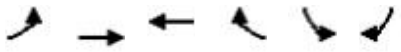
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	816	11	90	962	153	8	2	79	207	7	16
Future Volume (veh/h)	15	816	11	90	962	153	8	2	79	207	7	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	16	859	12	95	1013	161	8	2	83	223	0	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	30	1126	16	129	1656	263	141	157	133	1047	0	474
Arrive On Green	0.02	0.33	0.33	0.08	0.39	0.39	0.09	0.09	0.09	0.31	0.00	0.31
Sat Flow, veh/h	1619	3453	48	1619	4276	678	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	16	425	446	95	776	398	8	2	83	223	0	17
Grp Sat Flow(s),veh/h/ln	1619	1710	1791	1619	1638	1678	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	0.9	20.5	20.5	5.3	17.4	17.5	0.4	0.1	4.8	4.5	0.0	0.7
Cycle Q Clear(g_c), s	0.9	20.5	20.5	5.3	17.4	17.5	0.4	0.1	4.8	4.5	0.0	0.7
Prop In Lane	1.00		0.03	1.00		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	30	557	584	129	1269	650	141	157	133	1047	0	474
V/C Ratio(X)	0.54	0.76	0.76	0.74	0.61	0.61	0.06	0.01	0.62	0.21	0.00	0.04
Avail Cap(c_a), veh/h	256	662	694	256	1269	650	503	560	474	1047	0	474
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	27.7	27.7	41.3	22.5	22.6	38.4	38.2	40.4	23.3	0.0	22.0
Incr Delay (d2), s/veh	14.5	4.4	4.2	8.0	2.2	4.3	0.2	0.0	4.7	0.5	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	8.5	8.9	2.3	6.7	7.3	0.2	0.0	2.0	1.8	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.1	32.1	31.9	49.2	24.8	26.9	38.5	38.3	45.1	23.8	0.0	22.2
LnGrp LOS	E	C	C	D	C	C	D	D	D	C		C
Approach Vol, veh/h		887			1269			93			240	
Approach Delay, s/veh		32.5			27.2			44.4			23.7	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	34.4		33.0	6.2	40.0		12.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	14.5	35.5		28.5	14.5	35.5		28.5				
Max Q Clear Time (g_c+I1), s	7.3	22.5		6.5	2.9	19.5		6.8				
Green Ext Time (p_c), s	0.1	4.2		0.8	0.0	7.0		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh	29.4	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.



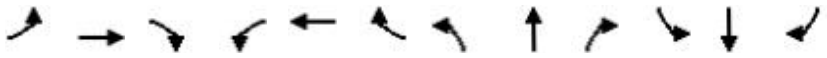
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	583	753	0	255	499
Future Volume (veh/h)	0	583	753	0	255	499
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	614	793	0	268	525
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1684	1684		955	513
Arrive On Green	0.00	0.49	0.49	0.00	0.32	0.32
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	614	793	0	268	525
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	7.2	10.0	0.0	4.4	21.0
Cycle Q Clear(g_c), s	0.0	7.2	10.0	0.0	4.4	21.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1684	1684		955	513
V/C Ratio(X)	0.00	0.36	0.47		0.28	1.02
Avail Cap(c_a), veh/h	0	1684	1684		955	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.2	10.9	0.0	16.4	22.0
Incr Delay (d2), s/veh	0.0	0.6	0.9	0.0	0.2	46.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	3.3	0.0	1.4	13.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	10.8	11.9	0.0	16.6	68.1
LnGrp LOS		B	B		B	F
Approach Vol, veh/h		614	793		793	
Approach Delay, s/veh		10.8	11.9		50.7	
Approach LOS		B	B		D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	38.0	27.0	38.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	32.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	9.2	23.0	12.0
Green Ext Time (p_c), s	3.4	0.0	4.4

Intersection Summary	
HCM 7th Control Delay, s/veh	25.6
HCM 7th LOS	C

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	406	0	0	729	48	509	89	308	7	0	304
Future Volume (veh/h)	123	406	0	0	729	48	509	89	308	7	0	304
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	129	427	0	0	767	51	603	0	324	7	0	320
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	318	2438	0	0	1322	88	794	0	748	0	0	0
Arrive On Green	0.11	0.50	0.00	0.00	0.28	0.28	0.25	0.00	0.25	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4870	312	3238	0	3051		0	
Grp Volume(v), veh/h	129	427	0	0	533	285	603	0	324		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1744	1619	0	1525			
Q Serve(g_s), s	1.9	2.2	0.0	0.0	6.5	6.5	8.0	0.0	4.2			
Cycle Q Clear(g_c), s	1.9	2.2	0.0	0.0	6.5	6.5	8.0	0.0	4.2			
Prop In Lane	1.00		0.00	0.00		0.18	1.00		1.00			
Lane Grp Cap(c), veh/h	318	2438	0	0	920	490	794	0	748			
V/C Ratio(X)	0.41	0.18	0.00	0.00	0.58	0.58	0.76	0.00	0.43			
Avail Cap(c_a), veh/h	319	4661	0	0	2401	1278	907	0	855			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.3	6.4	0.0	0.0	14.3	14.3	16.2	0.0	14.8			
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.0	0.4	0.8	3.5	0.0	0.5			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.6	0.5	0.0	0.0	2.0	2.2	2.7	0.0	1.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.9	6.5	0.0	0.0	14.8	15.2	19.7	0.0	15.3			
LnGrp LOS	B	A			B	B	B		B			
Approach Vol, veh/h		556			818			927				
Approach Delay, s/veh		9.6			14.9			18.2				
Approach LOS		A			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		29.0			10.0	19.0		17.4				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		13.0				
Max Q Clear Time (g_c+I1), s		4.2			3.9	8.5		10.0				
Green Ext Time (p_c), s		2.5			0.0	4.5		1.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	14.9
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	13	87	30	61	71	347	456	13	24	301	93
Future Volume (veh/h)	15	13	87	30	61	71	347	456	13	24	301	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	16	14	92	32	64	75	365	480	14	25	317	98
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	33	211	179	60	101	119	550	713	604	49	432	366
Arrive On Green	0.02	0.12	0.12	0.04	0.13	0.13	0.19	0.40	0.40	0.03	0.24	0.24
Sat Flow, veh/h	1619	1800	1525	1619	755	885	2956	1800	1525	1619	1800	1525
Grp Volume(v), veh/h	16	14	92	32	0	139	365	480	14	25	317	98
Grp Sat Flow(s),veh/h/ln	1619	1800	1525	1619	0	1641	1478	1800	1525	1619	1800	1525
Q Serve(g_s), s	0.4	0.3	2.4	0.8	0.0	3.4	4.9	9.4	0.2	0.7	7.0	2.2
Cycle Q Clear(g_c), s	0.4	0.3	2.4	0.8	0.0	3.4	4.9	9.4	0.2	0.7	7.0	2.2
Prop In Lane	1.00		1.00	1.00		0.54	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	33	211	179	60	0	220	550	713	604	49	432	366
V/C Ratio(X)	0.49	0.07	0.51	0.53	0.00	0.63	0.66	0.67	0.02	0.51	0.73	0.27
Avail Cap(c_a), veh/h	208	755	640	245	0	726	1963	1783	1511	189	797	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	16.8	17.8	20.3	0.0	17.6	16.2	10.7	7.9	20.5	15.0	13.2
Incr Delay (d2), s/veh	10.8	0.1	2.3	7.2	0.0	3.0	1.4	1.1	0.0	8.2	2.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.8	0.4	0.0	1.3	1.3	2.5	0.1	0.3	2.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.6	17.0	20.1	27.5	0.0	20.5	17.6	11.8	7.9	28.7	17.5	13.6
LnGrp LOS	C	B	C	C		C	B	B	A	C	B	B
Approach Vol, veh/h		122			171			859			440	
Approach Delay, s/veh		21.2			21.9			14.2			17.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	21.5	6.1	9.5	12.5	14.8	5.4	10.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.6	42.5	6.5	18.0	28.5	19.0	5.5	19.0
Max Q Clear Time (g_c+I1), s	2.7	11.4	2.8	4.4	6.9	9.0	2.4	5.4
Green Ext Time (p_c), s	0.0	2.8	0.0	0.2	1.2	1.3	0.0	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	16.4
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	8	464	23	6	380
Future Vol, veh/h	28	8	464	23	6	380
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	29	8	488	24	6	400

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	901	488	0	0	513	0
Stage 1	488	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	311	584	-	-	1063	-
Stage 1	621	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	309	584	-	-	1063	-
Mov Cap-2 Maneuver	309	-	-	-	-	-
Stage 1	621	-	-	-	-	-
Stage 2	667	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	16.72	0	0.13
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	345	28	-
HCM Lane V/C Ratio	-	-	0.11	0.006	-
HCM Control Delay (s/veh)	-	-	16.7	8.4	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	3	92	0	0	2	71	76	0	147	0
Future Vol, veh/h	0	0	3	92	0	0	2	71	76	0	147	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	3	97	0	0	2	75	80	0	155	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	234	314	155	274	274	115	155	0	0	155	0	0
Stage 1	155	155	-	119	119	-	-	-	-	-	-	-
Stage 2	79	159	-	155	155	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	725	605	896	683	637	943	1438	-	-	1438	-	-
Stage 1	852	773	-	890	801	-	-	-	-	-	-	-
Stage 2	935	770	-	852	773	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	724	604	896	679	636	943	1438	-	-	1438	-	-
Mov Cap-2 Maneuver	724	604	-	679	636	-	-	-	-	-	-	-
Stage 1	852	773	-	889	800	-	-	-	-	-	-	-
Stage 2	933	769	-	849	773	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.03	11.18	0.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	22	-	-	896	679	1438	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.143	-	-	-
HCM Control Delay (s/veh)	7.5	0	-	9	11.2	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0	-	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	45	8	43	42	16	3	52	19	20	90	17
Future Vol, veh/h	18	45	8	43	42	16	3	52	19	20	90	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	47	8	45	44	17	3	55	20	21	95	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	229	227	104	232	226	65	113	0	0	75	0	0
Stage 1	146	146	-	71	71	-	-	-	-	-	-	-
Stage 2	83	81	-	161	155	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	730	676	957	728	677	1005	1489	-	-	1537	-	-
Stage 1	862	780	-	944	840	-	-	-	-	-	-	-
Stage 2	930	832	-	846	773	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	661	665	957	660	666	1005	1489	-	-	1537	-	-
Mov Cap-2 Maneuver	661	665	-	660	666	-	-	-	-	-	-	-
Stage 1	850	770	-	942	838	-	-	-	-	-	-	-
Stage 2	864	830	-	776	763	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.87	11.05	0.3	1.16
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1489	-	-	688	701	1537	-	-
HCM Lane V/C Ratio	0.002	-	-	0.109	0.152	0.014	-	-
HCM Control Delay (s/veh)	7.4	-	-	10.9	11.1	7.4	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.5	0	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	84	0	0	0	0	72	28	25	43	0
Future Vol, veh/h	11	0	84	0	0	0	0	72	28	25	43	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	0	88	0	0	0	0	76	29	26	45	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.5	8.4	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	72%	0%	0%	0%	100%
Vol Right, %	28%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	11	84	25	43
LT Vol	0	11	0	25	0
Through Vol	72	0	0	0	43
RT Vol	28	0	84	0	0
Lane Flow Rate	105	12	88	26	45
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.133	0.017	0.104	0.038	0.059
Departure Headway (Hd)	4.559	5.435	4.232	5.231	4.73
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	776	663	852	677	748
Service Time	2.65	3.135	1.932	3.019	2.518
HCM Lane V/C Ratio	0.135	0.018	0.103	0.038	0.06
HCM Control Delay, s/veh	8.4	8.2	7.4	8.2	7.8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0.1	0.3	0.1	0.2

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	22	47	8	25	28	54
Future Vol, veh/h	22	47	8	25	28	54
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	23	49	8	26	29	57
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7.2	7.7	7.4
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	28	54	22	47	8	25
LT Vol	28	0	0	0	8	0
Through Vol	0	0	22	0	0	25
RT Vol	0	54	0	47	0	0
Lane Flow Rate	29	57	23	49	8	26
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.042	0.063	0.03	0.055	0.012	0.034
Departure Headway (Hd)	5.179	3.978	4.668	3.967	5.189	4.688
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	687	891	761	894	685	757
Service Time	2.945	1.744	2.432	1.73	2.957	2.456
HCM Lane V/C Ratio	0.042	0.064	0.03	0.055	0.012	0.034
HCM Control Delay, s/veh	8.2	7	7.6	7	8	7.6
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.2	0	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	228	197	190	195	3	167	42	253	15	70	12
Future Volume (veh/h)	12	228	197	190	195	3	167	42	253	15	70	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	13	240	207	200	205	3	176	44	266	16	74	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	27	413	342	247	1272	19	451	454	384	481	736	126
Arrive On Green	0.02	0.23	0.23	0.15	0.37	0.37	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1619	1777	1469	1619	3451	50	1191	1800	1525	1311	2920	500
Grp Volume(v), veh/h	13	231	216	200	101	107	176	44	266	16	43	44
Grp Sat Flow(s),veh/h/ln	1619	1710	1536	1619	1710	1791	1191	1800	1525	1311	1710	1710
Q Serve(g_s), s	0.3	4.9	5.2	4.9	1.6	1.6	5.5	0.8	6.5	0.4	0.8	0.8
Cycle Q Clear(g_c), s	0.3	4.9	5.2	4.9	1.6	1.6	6.3	0.8	6.5	1.2	0.8	0.8
Prop In Lane	1.00		0.96	1.00		0.03	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	27	398	357	247	630	660	451	454	384	481	431	431
V/C Ratio(X)	0.48	0.58	0.61	0.81	0.16	0.16	0.39	0.10	0.69	0.03	0.10	0.10
Avail Cap(c_a), veh/h	240	1564	1405	335	1664	1743	1282	1708	1448	1395	1623	1623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	14.0	14.1	16.8	8.7	8.7	14.2	11.8	13.9	12.2	11.8	11.8
Incr Delay (d2), s/veh	12.5	1.3	1.7	10.1	0.1	0.1	0.5	0.1	2.2	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.4	1.4	2.1	0.4	0.4	1.3	0.3	2.0	0.1	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	15.3	15.7	27.0	8.8	8.8	14.8	11.9	16.2	12.3	11.9	11.9
LnGrp LOS	C	B	B	C	A	A	B	B	B	B	B	B
Approach Vol, veh/h		460			408			486			103	
Approach Delay, s/veh		16.0			17.7			15.3			12.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	15.4		15.0	5.2	21.0		15.0				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	8.5	37.6		39.0	6.1	40.0		39.0				
Max Q Clear Time (g_c+I1), s	6.3	7.2		8.5	2.3	3.6		3.2				
Green Ext Time (p_c), s	0.1	2.4		1.9	0.0	1.1		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	16.0
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	409	61	77	321	25	107	8	135	36	8	19
Future Volume (veh/h)	29	409	61	77	321	25	107	8	135	36	8	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	31	431	64	81	338	26	113	8	142	38	8	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	559	1223	180	499	1317	101	456	328	278	474	83	207
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	925	2989	441	820	3219	246	1256	1800	1525	1279	456	1139
Grp Volume(v), veh/h	31	245	250	81	179	185	113	8	142	38	0	28
Grp Sat Flow(s),veh/h/ln	925	1710	1721	820	1710	1756	1256	1800	1525	1279	0	1595
Q Serve(g_s), s	0.7	2.9	2.9	2.2	2.0	2.0	2.4	0.1	2.5	0.7	0.0	0.4
Cycle Q Clear(g_c), s	2.7	2.9	2.9	5.2	2.0	2.0	2.8	0.1	2.5	0.8	0.0	0.4
Prop In Lane	1.00		0.26	1.00		0.14	1.00		1.00	1.00		0.71
Lane Grp Cap(c), veh/h	559	699	704	499	699	718	456	328	278	474	0	290
V/C Ratio(X)	0.06	0.35	0.35	0.16	0.26	0.26	0.25	0.02	0.51	0.08	0.00	0.10
Avail Cap(c_a), veh/h	1253	1982	1994	1114	1982	2035	1683	2086	1768	1793	0	1936
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.6	6.0	6.0	7.8	5.7	5.7	11.2	9.9	10.8	10.2	0.0	10.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.2	0.2	0.2	0.3	0.0	1.5	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.4	0.4	0.2	0.3	0.3	0.5	0.0	0.7	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.7	6.3	6.3	7.9	5.9	5.9	11.5	9.9	12.3	10.3	0.0	10.1
LnGrp LOS	A	A	A	A	A	A	B	A	B	B		B
Approach Vol, veh/h		526			445			263			66	
Approach Delay, s/veh		6.3			6.3			11.9			10.2	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.8	11.5	17.8	11.5
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	34.0	34.0	34.0	* 36
Max Q Clear Time (g_c+I1), s	4.9	4.8	7.2	2.8
Green Ext Time (p_c), s	2.9	0.9	2.4	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	7.6
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	484	133	41	479	15	91	8	47	9	0	2
Future Volume (veh/h)	9	484	133	41	479	15	91	8	47	9	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	9	509	140	43	504	16	96	8	49	9	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	581	1198	328	524	1528	48	462	15	210	507	0	210
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.14	0.14	0.14	0.14	0.00	0.14
Sat Flow, veh/h	801	2653	726	711	3383	107	1293	108	1525	1534	0	1525
Grp Volume(v), veh/h	9	327	322	43	254	266	104	0	49	9	0	2
Grp Sat Flow(s),veh/h/ln	801	1710	1669	711	1710	1781	1401	0	1525	1534	0	1525
Q Serve(g_s), s	0.2	3.2	3.2	1.1	2.3	2.3	1.6	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.5	3.2	3.2	4.3	2.3	2.3	1.7	0.0	0.7	0.1	0.0	0.0
Prop In Lane	1.00		0.43	1.00		0.06	0.92		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	581	772	754	524	772	804	477	0	210	507	0	210
V/C Ratio(X)	0.02	0.42	0.43	0.08	0.33	0.33	0.22	0.00	0.23	0.02	0.00	0.01
Avail Cap(c_a), veh/h	976	1615	1577	874	1615	1682	2113	0	2005	2100	0	2005
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.1	4.5	4.5	6.0	4.3	4.3	9.8	0.0	9.4	9.1	0.0	9.1
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.1	0.2	0.2	0.2	0.0	0.6	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.1	0.3	0.3	0.4	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.1	4.9	4.9	6.0	4.5	4.5	10.0	0.0	9.9	9.1	0.0	9.1
LnGrp LOS	A	A	A	A	A	A	A		A	A		A
Approach Vol, veh/h		658			563			153			11	
Approach Delay, s/veh		4.9			4.7			10.0			9.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.4	8.0	16.4	8.0
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	23.0	32.0	23.0	32.0
Max Q Clear Time (g_c+I1), s	5.2	3.7	6.3	2.1
Green Ext Time (p_c), s	3.5	0.7	3.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.4
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	345	31	24	302	155	57	64	27	222	95	224
Future Volume (veh/h)	184	345	31	24	302	155	57	64	27	222	95	224
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	194	363	33	25	318	163	60	67	28	234	100	236
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	313	569	51	245	479	240	146	103	43	448	131	310
Arrive On Green	0.11	0.18	0.18	0.14	0.22	0.22	0.08	0.08	0.08	0.26	0.26	0.26
Sat Flow, veh/h	1714	3172	287	1810	2205	1106	1810	1272	532	1714	502	1185
Grp Volume(v), veh/h	194	195	201	25	245	236	60	0	95	234	0	336
Grp Sat Flow(s),veh/h/ln	1714	1710	1748	1810	1710	1601	1810	0	1804	1714	0	1687
Q Serve(g_s), s	6.1	6.0	6.0	0.7	7.4	7.6	1.8	0.0	2.9	6.6	0.0	10.4
Cycle Q Clear(g_c), s	6.1	6.0	6.0	0.7	7.4	7.6	1.8	0.0	2.9	6.6	0.0	10.4
Prop In Lane	1.00		0.16	1.00		0.69	1.00		0.29	1.00		0.70
Lane Grp Cap(c), veh/h	313	307	314	245	371	348	146	0	146	448	0	441
V/C Ratio(X)	0.62	0.64	0.64	0.10	0.66	0.68	0.41	0.00	0.65	0.52	0.00	0.76
Avail Cap(c_a), veh/h	313	757	774	245	760	712	160	0	160	759	0	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.9	21.5	21.5	21.4	20.2	20.3	24.7	0.0	25.2	17.8	0.0	19.2
Incr Delay (d2), s/veh	3.7	2.2	2.2	0.2	2.0	2.3	1.8	0.0	8.0	0.9	0.0	2.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.4	2.5	0.3	2.9	2.8	0.8	0.0	1.5	2.5	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.6	23.6	23.7	21.6	22.2	22.6	26.5	0.0	33.2	18.8	0.0	22.0
LnGrp LOS	C	C	C	C	C	C	C		C	B		C
Approach Vol, veh/h		590			506			155			570	
Approach Delay, s/veh		25.0			22.4			30.6			20.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	15.2		9.2	10.6	16.9		19.9				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.7	* 25		5.0	6.1	25.1		25.0				
Max Q Clear Time (g_c+I1), s	12.7	8.0		4.9	8.1	9.6		12.4				
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	2.6		2.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	23.4
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	349	156	69	287	157	80
Future Volume (veh/h)	349	156	69	287	157	80
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	367	164	73	302	165	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	803	353	121	1932	259	244
Arrive On Green	0.35	0.35	0.07	0.56	0.16	0.16
Sat Flow, veh/h	2401	1016	1619	3510	1619	1525
Grp Volume(v), veh/h	270	261	73	302	165	84
Grp Sat Flow(s),veh/h/ln	1710	1617	1619	1710	1619	1525
Q Serve(g_s), s	3.9	4.0	1.4	1.3	3.0	1.5
Cycle Q Clear(g_c), s	3.9	4.0	1.4	1.3	3.0	1.5
Prop In Lane		0.63	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	595	562	121	1932	259	244
V/C Ratio(X)	0.45	0.46	0.60	0.16	0.64	0.34
Avail Cap(c_a), veh/h	1287	1217	384	3819	1331	1254
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.0	8.0	14.2	3.3	12.4	11.8
Incr Delay (d2), s/veh	0.5	0.6	4.7	0.0	2.6	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.0	0.6	0.2	1.0	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.5	8.6	18.9	3.3	15.0	12.6
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h	531			375	249	
Approach Delay, s/veh	8.6			6.4	14.2	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.9	15.6		9.2		22.5
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	7.5	* 24		26.0		35.3
Max Q Clear Time (g_c+I1), s	3.4	6.0		5.0		3.3
Green Ext Time (p_c), s	0.0	3.1		0.7		2.1

Intersection Summary		
HCM 7th Control Delay, s/veh	9.1	
HCM 7th LOS	A	

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	48	53	180	44	71	31	540	211	77	340	9
Future Volume (veh/h)	1	48	53	180	44	71	31	540	211	77	340	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	51	56	189	46	75	33	568	0	81	358	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	390	206	226	403	162	264	60	676		113	1392	35
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.38	0.00	0.07	0.41	0.41
Sat Flow, veh/h	1155	784	861	1170	616	1004	1619	1800	1525	1619	3409	86
Grp Volume(v), veh/h	1	0	107	189	0	121	33	568	0	81	179	188
Grp Sat Flow(s),veh/h/ln	1155	0	1645	1170	0	1619	1619	1800	1525	1619	1710	1785
Q Serve(g_s), s	0.0	0.0	2.4	7.0	0.0	2.8	0.9	13.3	0.0	2.3	3.2	3.2
Cycle Q Clear(g_c), s	2.8	0.0	2.4	9.4	0.0	2.8	0.9	13.3	0.0	2.3	3.2	3.2
Prop In Lane	1.00		0.52	1.00		0.62	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	390	0	432	403	0	425	60	676		113	698	728
V/C Ratio(X)	0.00	0.00	0.25	0.47	0.00	0.28	0.55	0.84		0.72	0.26	0.26
Avail Cap(c_a), veh/h	549	0	658	563	0	647	367	875		367	832	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	13.5	17.2	0.0	13.6	21.9	13.2	0.0	21.1	9.1	9.1
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.9	0.0	0.4	7.5	5.8	0.0	8.1	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.8	1.7	0.0	0.9	0.4	5.2	0.0	1.0	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	0.0	13.7	18.0	0.0	14.0	29.3	19.0	0.0	29.2	9.2	9.2
LnGrp LOS	B		B	B		B	C	B		C	A	A
Approach Vol, veh/h		108			310			601			448	
Approach Delay, s/veh		13.8			16.4			19.6			12.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	23.4		16.7	7.7	21.9		16.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	22.5		18.5	10.5	22.5		18.5				
Max Q Clear Time (g_c+I1), s	12.8	5.2		11.4	4.3	15.3		4.8				
Green Ext Time (p_c), s	0.0	1.8		0.8	0.1	2.1		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	16.4
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	118	0	83	368	822	0	0	483	200
Future Volume (veh/h)	0	0	0	118	0	83	368	822	0	0	483	200
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				124	0	87	387	865	0	0	508	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				277	0	247	567	2183	0	0	644	
Arrive On Green				0.16	0.00	0.16	0.35	0.64	0.00	0.00	0.19	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				124	0	87	387	865	0	0	508	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				3.9	0.0	3.0	12.2	7.3	0.0	0.0	8.5	0.0
Cycle Q Clear(g_c), s				3.9	0.0	3.0	12.2	7.3	0.0	0.0	8.5	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				277	0	247	567	2183	0	0	644	
V/C Ratio(X)				0.45	0.00	0.35	0.68	0.40	0.00	0.00	0.79	
Avail Cap(c_a), veh/h				286	0	254	567	2183	0	0	741	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.79	0.79	0.00	0.00	0.94	0.00
Uniform Delay (d), s/veh				22.7	0.0	22.4	16.7	5.3	0.0	0.0	23.2	0.0
Incr Delay (d2), s/veh				1.1	0.0	0.9	2.2	0.4	0.0	0.0	9.0	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.6	0.0	1.1	4.3	1.8	0.0	0.0	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				23.9	0.0	23.2	18.9	5.7	0.0	0.0	32.2	0.0
LnGrp LOS				C		C	B	A			C	
Approach Vol, veh/h					211			1252			508	
Approach Delay, s/veh					23.6			9.8			32.2	
Approach LOS					C			A			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	27.0	17.3		15.7		44.3						
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0						
Max Green Setting (Gmax), s	20.3	* 13		10.0		38.0						
Max Q Clear Time (g_c+I1), s	14.2	10.5		5.9		9.3						
Green Ext Time (p_c), s	0.3	0.8		0.3		6.6						

Intersection Summary	
HCM 7th Control Delay, s/veh	17.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	327	371	190	997	449	69
Future Volume (veh/h)	327	371	190	997	449	69
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	344	391	200	1049	473	73
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	452	425	221	2010	1185	182
Arrive On Green	0.28	0.28	0.14	0.59	0.40	0.40
Sat Flow, veh/h	1619	1525	1619	3510	3062	456
Grp Volume(v), veh/h	344	391	200	1049	271	275
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1718
Q Serve(g_s), s	17.5	22.4	11.0	16.4	10.2	10.3
Cycle Q Clear(g_c), s	17.5	22.4	11.0	16.4	10.2	10.3
Prop In Lane	1.00	1.00	1.00			0.27
Lane Grp Cap(c), veh/h	452	425	221	2010	682	685
V/C Ratio(X)	0.76	0.92	0.90	0.52	0.40	0.40
Avail Cap(c_a), veh/h	522	492	221	2010	682	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.65	0.65	0.88	0.88
Uniform Delay (d), s/veh	29.7	31.5	38.3	11.0	19.3	19.4
Incr Delay (d2), s/veh	4.6	19.5	25.7	0.6	1.5	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	10.3	5.8	5.6	4.1	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	34.3	51.0	63.9	11.7	20.8	20.9
LnGrp LOS	C	D	E	B	C	C
Approach Vol, veh/h	735			1249	546	
Approach Delay, s/veh	43.2			20.0	20.9	
Approach LOS	D			C	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	17.0	41.9			58.9	31.1
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	12.3	32.0			49.0	29.0
Max Q Clear Time (g_c+I1), s	13.0	12.3			18.4	24.4
Green Ext Time (p_c), s	0.0	3.1			8.7	0.7

Intersection Summary		
HCM 7th Control Delay, s/veh	26.9	
HCM 7th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	13	25	46	18	344	15	688	40	264	671	18
Future Volume (veh/h)	84	13	25	46	18	344	15	688	40	264	671	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	88	14	26	48	19	362	16	724	42	278	706	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	215	535	477	499	535	477	32	887	51	296	1472	40
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.02	0.27	0.27	0.18	0.43	0.43
Sat Flow, veh/h	911	1710	1525	1243	1710	1525	1619	3285	190	1619	3402	92
Grp Volume(v), veh/h	88	14	26	48	19	362	16	377	389	278	355	370
Grp Sat Flow(s),veh/h/ln	911	1710	1525	1243	1710	1525	1619	1710	1766	1619	1710	1784
Q Serve(g_s), s	5.5	0.3	0.7	1.6	0.4	12.3	0.6	11.9	11.9	9.7	8.5	8.5
Cycle Q Clear(g_c), s	17.8	0.3	0.7	2.3	0.4	12.3	0.6	11.9	11.9	9.7	8.5	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.05
Lane Grp Cap(c), veh/h	215	535	477	499	535	477	32	462	477	296	740	772
V/C Ratio(X)	0.41	0.03	0.05	0.10	0.04	0.76	0.50	0.82	0.82	0.94	0.48	0.48
Avail Cap(c_a), veh/h	215	535	477	499	535	477	296	535	552	296	740	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	13.7	13.8	14.6	13.7	17.8	27.9	19.7	19.7	23.2	11.7	11.7
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.1	0.0	6.9	11.8	8.4	8.2	36.8	0.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.1	0.2	0.4	0.2	4.8	0.3	5.0	5.1	6.4	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.1	13.7	13.9	14.7	13.8	24.7	39.7	28.1	27.9	60.0	12.2	12.1
LnGrp LOS	C	B	B	B	B	C	D	C	C	E	B	B
Approach Vol, veh/h		128			429			782			1003	
Approach Delay, s/veh		22.9			23.1			28.2			25.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	29.4		22.5	15.0	20.0		22.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.5	18.0		18.0	10.5	18.0		18.0
Max Q Clear Time (g_c+I1), s	12.3	10.5		14.3	11.7	13.9		19.8
Green Ext Time (p_c), s	0.0	2.6		0.9	0.0	1.6		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	25.8
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	154	43	54	262	217	27	170	21	247	236	146
Future Volume (veh/h)	186	154	43	54	262	217	27	170	21	247	236	146
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	196	162	45	57	276	228	28	179	22	260	248	154
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	429	1083	292	581	735	588	426	1098	133	529	735	441
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	813	2662	718	1068	1806	1444	893	3071	372	1074	2056	1232
Grp Volume(v), veh/h	196	102	105	57	261	243	28	99	102	260	205	197
Grp Sat Flow(s),veh/h/ln	813	1710	1671	1068	1710	1540	893	1710	1733	1074	1710	1578
Q Serve(g_s), s	8.5	1.4	1.5	1.4	4.1	4.2	0.9	1.5	1.5	8.3	3.3	3.5
Cycle Q Clear(g_c), s	12.8	1.4	1.5	2.9	4.1	4.2	4.4	1.5	1.5	9.9	3.3	3.5
Prop In Lane	1.00		0.43	1.00		0.94	1.00		0.21	1.00		0.78
Lane Grp Cap(c), veh/h	429	696	680	581	696	626	426	612	620	529	612	564
V/C Ratio(X)	0.46	0.15	0.15	0.10	0.38	0.39	0.07	0.16	0.17	0.49	0.33	0.35
Avail Cap(c_a), veh/h	481	806	787	649	806	726	527	806	816	651	806	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	7.2	7.2	8.1	7.9	8.0	10.6	8.4	8.4	11.7	9.0	9.0
Incr Delay (d2), s/veh	0.8	0.1	0.1	0.1	0.3	0.4	0.1	0.1	0.1	0.7	0.3	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.4	0.4	0.2	1.1	1.1	0.1	0.4	0.4	1.4	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.3	7.2	7.3	8.2	8.3	8.4	10.7	8.5	8.5	12.5	9.3	9.4
LnGrp LOS	B	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		403			561			229			662	
Approach Delay, s/veh		10.2			8.3			8.8			10.6	
Approach LOS		B			A			A			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	18.2	20.0	18.2	20.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	6.4	14.8	11.9	6.2
Green Ext Time (p_c), s	0.8	0.7	1.8	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	9.6
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	108	0	1	494	1	0
Future Vol, veh/h	108	0	1	494	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	117	0	1	537	1	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	117	0	388	59
Stage 1	-	-	-	-	117	-
Stage 2	-	-	-	-	271	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1484	-	593	1001
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	756	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1484	-	593	1001
Mov Cap-2 Maneuver	-	-	-	-	593	-
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	756	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.02	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1484	-
HCM Lane V/C Ratio	-	-	-	0.001	-
HCM Control Delay (s/veh)	0	-	-	7.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	350	5	5	375	4	5
Future Vol, veh/h	350	5	5	375	4	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	368	5	5	395	4	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	374	0	579	187
Stage 1	-	-	-	-	371	-
Stage 2	-	-	-	-	208	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1196	-	451	830
Stage 1	-	-	-	-	674	-
Stage 2	-	-	-	-	813	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1196	-	449	830
Mov Cap-2 Maneuver	-	-	-	-	536	-
Stage 1	-	-	-	-	674	-
Stage 2	-	-	-	-	809	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.11	10.47
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	667	-	-	1196	-
HCM Lane V/C Ratio	0.014	-	-	0.004	-
HCM Control Delay (s/veh)	10.5	-	-	8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	5	0	0	1	0	0	0	0	0	0	0
Future Vol, veh/h	0	5	0	0	1	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	5	0	0	1	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	5	0	0	7	7	5	7	7	1
Stage 1	-	-	-	-	-	-	5	5	-	1	1	-
Stage 2	-	-	-	-	-	-	1	1	-	5	5	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1635	-	-	1629	-	-	1019	893	1083	1019	893	1089
Stage 1	-	-	-	-	-	-	1022	895	-	1027	899	-
Stage 2	-	-	-	-	-	-	1027	899	-	1022	895	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1635	-	-	1629	-	-	1019	893	1083	1019	893	1089
Mov Cap-2 Maneuver	-	-	-	-	-	-	1019	893	-	1019	893	-
Stage 1	-	-	-	-	-	-	1022	895	-	1027	899	-
Stage 2	-	-	-	-	-	-	1027	899	-	1022	895	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1635	-	-	1629	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	65	294	0	0	0
Future Vol, veh/h	0	65	294	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	71	320	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	320	0	-	0	390	320
Stage 1	-	-	-	-	320	-
Stage 2	-	-	-	-	71	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1252	-	-	-	618	726
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	957	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1252	-	-	-	618	726
Mov Cap-2 Maneuver	-	-	-	-	646	-
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	957	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1252	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	78	360	135	29	0
Future Vol, veh/h	0	78	360	135	29	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	0	150	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	85	391	147	32	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	538	0	-	0	476	391
Stage 1	-	-	-	-	391	-
Stage 2	-	-	-	-	85	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1040	-	-	-	551	662
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1040	-	-	-	551	662
Mov Cap-2 Maneuver	-	-	-	-	551	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	944	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.93
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1040	-	-	-	551	-
HCM Lane V/C Ratio	-	-	-	-	0.057	-
HCM Control Delay (s/veh)	0	-	-	-	11.9	0
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	0	0	84	0	0
Future Vol, veh/h	6	0	0	84	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	0	0	91	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	47	46	0	0	91	0
Stage 1	46	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	968	1030	-	-	1516	-
Stage 1	982	-	-	-	-	-
Stage 2	1027	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	968	1030	-	-	1516	-
Mov Cap-2 Maneuver	894	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	1027	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.06	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	894	1516	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s/veh)	-	-	9.1	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1028	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1028	-	-	-	-	-
Mov Cap-2 Maneuver	1028	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	-

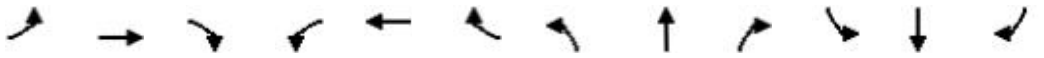
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	367	1231	0	0	0
Future Vol, veh/h	0	367	1231	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	386	1296	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1296	0	-	0	1682	1296
Stage 1	-	-	-	-	1296	-
Stage 2	-	-	-	-	386	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	542	-	-	-	105	200
Stage 1	-	-	-	-	259	-
Stage 2	-	-	-	-	691	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	542	-	-	-	105	200
Mov Cap-2 Maneuver	-	-	-	-	105	-
Stage 1	-	-	-	-	259	-
Stage 2	-	-	-	-	691	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	542	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-



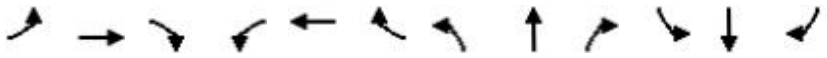
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	310	34	28	1151	204	0	2	16	190	2	7
Future Volume (veh/h)	7	310	34	28	1151	204	0	2	16	190	2	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1900	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	7	326	36	29	1212	215	0	2	17	208	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	1185	131	703	1339	1135	0	10	82	299	166	0
Arrive On Green	0.70	0.70	0.70	0.70	0.70	0.70	0.00	0.06	0.06	0.09	0.00	0.00
Sat Flow, veh/h	444	1681	186	981	1900	1610	0	172	1464	3429	1900	0
Grp Volume(v), veh/h	7	0	362	29	1212	215	0	0	19	208	0	0
Grp Sat Flow(s),veh/h/ln	444	0	1867	981	1900	1610	0	0	1636	1714	1900	0
Q Serve(g_s), s	1.2	0.0	6.3	1.0	46.2	4.0	0.0	0.0	1.0	5.2	0.0	0.0
Cycle Q Clear(g_c), s	47.4	0.0	6.3	7.3	46.2	4.0	0.0	0.0	1.0	5.2	0.0	0.0
Prop In Lane	1.00		0.10	1.00		1.00	0.00		0.89	1.00		0.00
Lane Grp Cap(c), veh/h	163	0	1316	703	1339	1135	0	0	92	299	166	0
V/C Ratio(X)	0.04	0.00	0.28	0.04	0.90	0.19	0.00	0.00	0.21	0.70	0.00	0.00
Avail Cap(c_a), veh/h	292	0	1857	987	1890	1602	0	0	351	728	404	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.0	0.0	4.8	6.1	10.7	4.5	0.0	0.0	40.1	39.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	5.0	0.1	0.0	0.0	1.1	2.9	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.5	0.2	12.9	0.8	0.0	0.0	0.4	2.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.1	0.0	4.9	6.2	15.7	4.6	0.0	0.0	41.2	42.4	0.0	0.0
LnGrp LOS	C		A	A	B	A			D	D		
Approach Vol, veh/h		369			1456			19			208	
Approach Delay, s/veh		5.4			13.9			41.2			42.4	
Approach LOS		A			B			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.5		67.2		12.3		67.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		19.1		88.5		18.9		88.5				
Max Q Clear Time (g_c+I1), s		3.0		49.4		7.2		48.2				
Green Ext Time (p_c), s		0.0		2.1		0.5		14.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.5
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	135	457	60	226	241	616	296	80	267	514	134
Future Volume (veh/h)	84	135	457	60	226	241	616	296	80	267	514	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	88	142	0	63	238	0	648	312	84	281	541	141
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	108	391		79	328		533	1242	329	312	591	501
Arrive On Green	0.07	0.11	0.00	0.05	0.10	0.00	0.33	0.46	0.46	0.19	0.33	0.33
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	2674	708	1619	1800	1525
Grp Volume(v), veh/h	88	142	0	63	238	0	648	198	198	281	541	141
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1672	1619	1800	1525
Q Serve(g_s), s	6.3	4.5	0.0	4.5	7.9	0.0	38.5	8.2	8.4	19.8	33.7	8.0
Cycle Q Clear(g_c), s	6.3	4.5	0.0	4.5	7.9	0.0	38.5	8.2	8.4	19.8	33.7	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	108	391		79	328		533	794	777	312	591	501
V/C Ratio(X)	0.81	0.36		0.80	0.73		1.22	0.25	0.26	0.90	0.92	0.28
Avail Cap(c_a), veh/h	132	1041		118	1012		533	794	777	629	714	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	47.8	0.0	55.1	51.3	0.0	39.2	18.9	19.0	46.1	37.7	29.1
Incr Delay (d2), s/veh	26.5	0.6	0.0	20.4	3.1	0.0	113.2	0.2	0.2	9.2	14.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	1.9	0.0	2.2	3.4	0.0	31.1	3.1	3.1	8.4	16.4	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	80.3	48.4	0.0	75.4	54.4	0.0	152.4	19.1	19.2	55.3	52.5	29.4
LnGrp LOS	F	D		E	D		F	B	B	E	D	C
Approach Vol, veh/h		230			301			1044			963	
Approach Delay, s/veh		60.6			58.8			101.8			49.9	
Approach LOS		E			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	18.8	43.0	45.0	12.3	16.6	27.1	60.9
Change Period (Y+Rc), s	4.5	5.4	4.5	6.6	4.5	5.4	4.5	* 6.6
Max Green Setting (Gmax), s	8.5	35.6	38.5	46.4	9.5	34.6	45.4	* 40
Max Q Clear Time (g_c+I1), s	10.5	6.5	40.5	35.7	8.3	9.9	21.8	10.4
Green Ext Time (p_c), s	0.0	0.8	0.0	2.6	0.0	1.3	0.7	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	73.3
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	3	4	914	890	31
Future Vol, veh/h	15	3	4	914	890	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	3	4	962	937	33

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1924	953	969	0	-	0
Stage 1	953	-	-	-	-	-
Stage 2	971	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	74	317	719	-	-	-
Stage 1	378	-	-	-	-	-
Stage 2	371	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	73	317	719	-	-	-
Mov Cap-2 Maneuver	73	-	-	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	371	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	59.7	2 0.04	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	8	-	84	-	-
HCM Lane V/C Ratio	0.006	-	0.225	-	-
HCM Control Delay (s/veh)	10	0	59.7	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	468	3	5	539	0	4	0	5	4	0	4
Future Vol, veh/h	3	468	3	5	539	0	4	0	5	4	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	493	3	5	567	0	4	0	5	4	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	567	0	0	496	0	0	795	1078	248	831	1080	284
Stage 1	-	-	-	-	-	-	501	501	-	578	578	-
Stage 2	-	-	-	-	-	-	294	578	-	253	502	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1015	-	-	1078	-	-	282	220	758	266	220	719
Stage 1	-	-	-	-	-	-	526	546	-	474	504	-
Stage 2	-	-	-	-	-	-	695	504	-	735	545	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1015	-	-	1078	-	-	278	218	758	261	218	719
Mov Cap-2 Maneuver	-	-	-	-	-	-	278	218	-	261	218	-
Stage 1	-	-	-	-	-	-	524	544	-	471	502	-
Stage 2	-	-	-	-	-	-	687	502	-	727	543	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	0.12	13.59	14.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	429	23	-	-	33	-	-	383
HCM Lane V/C Ratio	0.022	0.003	-	-	0.005	-	-	0.022
HCM Control Delay (s/veh)	13.6	8.6	0	-	8.4	0	-	14.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	471	0	4	541	0	3	0	0	3	0	0
Future Vol, veh/h	4	471	0	4	541	0	3	0	0	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	496	0	4	569	0	3	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	569	0	0	496	0	0	797	1082	248	834	1082	285
Stage 1	-	-	-	-	-	-	504	504	-	578	578	-
Stage 2	-	-	-	-	-	-	293	578	-	256	504	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1013	-	-	1078	-	-	281	219	758	264	219	718
Stage 1	-	-	-	-	-	-	524	544	-	474	504	-
Stage 2	-	-	-	-	-	-	696	504	-	732	544	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1013	-	-	1078	-	-	278	217	758	262	217	718
Mov Cap-2 Maneuver	-	-	-	-	-	-	278	217	-	262	217	-
Stage 1	-	-	-	-	-	-	521	541	-	471	502	-
Stage 2	-	-	-	-	-	-	693	502	-	728	541	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.11	0.1	18.09	18.93
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	278	30	-	-	26	-	-	262
HCM Lane V/C Ratio	0.011	0.004	-	-	0.004	-	-	0.012
HCM Control Delay (s/veh)	18.1	8.6	0	-	8.4	0	-	18.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	470	3	3	537	0	3	0	0	3	0	7
Future Vol, veh/h	4	470	3	3	537	0	3	0	0	3	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	495	3	3	565	0	3	0	0	3	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	565	0	0	498	0	0	794	1076	249	827	1078	283
Stage 1	-	-	-	-	-	-	505	505	-	572	572	-
Stage 2	-	-	-	-	-	-	289	572	-	256	506	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1017	-	-	1076	-	-	282	221	757	267	221	720
Stage 1	-	-	-	-	-	-	523	544	-	478	508	-
Stage 2	-	-	-	-	-	-	700	508	-	732	543	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1017	-	-	1076	-	-	277	219	757	265	219	720
Mov Cap-2 Maneuver	-	-	-	-	-	-	277	219	-	265	219	-
Stage 1	-	-	-	-	-	-	521	541	-	476	506	-
Stage 2	-	-	-	-	-	-	691	506	-	729	540	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.11	0.08	18.13	12.75
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	277	30	-	-	20	-	-	475
HCM Lane V/C Ratio	0.011	0.004	-	-	0.003	-	-	0.022
HCM Control Delay (s/veh)	18.1	8.6	0	-	8.4	0	-	12.7
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	470	3	3	539	3	5	0	0	5	0	0
Future Vol, veh/h	3	470	3	3	539	3	5	0	0	5	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	495	3	3	567	3	5	0	0	5	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	571	0	0	498	0	0	793	1079	249	829	1079	285
Stage 1	-	-	-	-	-	-	503	503	-	575	575	-
Stage 2	-	-	-	-	-	-	290	577	-	254	504	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1012	-	-	1076	-	-	283	220	757	266	220	718
Stage 1	-	-	-	-	-	-	525	545	-	475	506	-
Stage 2	-	-	-	-	-	-	699	505	-	734	544	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1012	-	-	1076	-	-	281	218	757	265	218	718
Mov Cap-2 Maneuver	-	-	-	-	-	-	281	218	-	265	218	-
Stage 1	-	-	-	-	-	-	523	543	-	474	504	-
Stage 2	-	-	-	-	-	-	697	503	-	731	542	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	0.07	18.06	18.89
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	281	22	-	-	20	-	-	265
HCM Lane V/C Ratio	0.019	0.003	-	-	0.003	-	-	0.02
HCM Control Delay (s/veh)	18.1	8.6	0	-	8.4	0	-	18.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	458	26	30	519	0	32	0	24	2	4	0
Future Vol, veh/h	4	458	26	30	519	0	32	0	24	2	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	482	27	32	546	0	34	0	25	2	4	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	546	0	0	509	0	0	843	1114	255	859	1127	273
Stage 1	-	-	-	-	-	-	504	504	-	609	609	-
Stage 2	-	-	-	-	-	-	338	609	-	249	518	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1033	-	-	1066	-	-	260	210	751	253	206	731
Stage 1	-	-	-	-	-	-	524	544	-	454	488	-
Stage 2	-	-	-	-	-	-	655	488	-	738	537	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1033	-	-	1066	-	-	245	202	751	235	198	731
Mov Cap-2 Maneuver	-	-	-	-	-	-	245	202	-	235	198	-
Stage 1	-	-	-	-	-	-	521	542	-	438	471	-
Stage 2	-	-	-	-	-	-	627	471	-	710	534	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.11	0.71	17.6	22.76
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	344	27	-	-	197	-	-	209
HCM Lane V/C Ratio	0.171	0.004	-	-	0.03	-	-	0.03
HCM Control Delay (s/veh)	17.6	8.5	0	-	8.5	0.3	-	22.8
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	467	19	23	536	6	12
Future Vol, veh/h	467	19	23	536	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	492	20	24	564	6	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	512	0	832	256
Stage 1	-	-	-	-	502	-
Stage 2	-	-	-	-	331	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1064	-	312	750
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	706	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1064	-	303	750
Mov Cap-2 Maneuver	-	-	-	-	303	-
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	687	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.55	12.44
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	503	-	-	148	-
HCM Lane V/C Ratio	0.038	-	-	0.023	-
HCM Control Delay (s/veh)	12.4	-	-	8.5	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	448	35	35	519	35	33
Future Vol, veh/h	448	35	35	519	35	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	472	37	37	546	37	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	508	0	837	254
Stage 1	-	-	-	-	490	-
Stage 2	-	-	-	-	347	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1067	-	309	751
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	693	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1067	-	297	751
Mov Cap-2 Maneuver	-	-	-	-	297	-
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	665	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.82	15.32
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	420	-	-	227	-
HCM Lane V/C Ratio	0.17	-	-	0.035	-
HCM Control Delay (s/veh)	15.3	-	-	8.5	0.3
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	468	34	74	535	28	34
Future Vol, veh/h	468	34	74	535	28	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	493	36	78	563	29	36

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	528	0	948	264
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	437	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1049	-	263	740
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	624	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1049	-	240	740
Mov Cap-2 Maneuver	-	-	-	-	240	-
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	569	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.59	16.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	381	-	-	437	-
HCM Lane V/C Ratio	0.171	-	-	0.074	-
HCM Control Delay (s/veh)	16.4	-	-	8.7	0.6
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	493	15	34	604	16	21
Future Vol, veh/h	493	15	34	604	16	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	519	16	36	636	17	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	535	0	916	267
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	389	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1043	-	275	737
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	660	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1043	-	264	737
Mov Cap-2 Maneuver	-	-	-	-	264	-
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	632	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.76	14.57
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	415	-	-	192	-
HCM Lane V/C Ratio	0.094	-	-	0.034	-
HCM Control Delay (s/veh)	14.6	-	-	8.6	0.3
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	68	501	619	171	168	69
Future Vol, veh/h	68	501	619	171	168	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	470	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	72	527	652	180	177	73

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	832	0	-	0	1148	416
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	810	-	-	-	195	591
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	647	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	810	-	-	-	178	591
Mov Cap-2 Maneuver	-	-	-	-	299	-
Stage 1	-	-	-	-	398	-
Stage 2	-	-	-	-	647	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.18	0	37.25
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	810	-	-	-	350
HCM Lane V/C Ratio	0.088	-	-	-	0.714
HCM Control Delay (s/veh)	9.9	-	-	-	37.2
HCM Lane LOS	A	-	-	-	E
HCM 95th %tile Q(veh)	0.3	-	-	-	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	436	232	58	743	0	0	0	0	41	23	20
Future Volume (veh/h)	0	436	232	58	743	0	0	0	0	41	23	20
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1620	1620	1530	1620	0				1530	1620	1620
Adj Flow Rate, veh/h	0	459	244	61	782	0				43	24	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1144	604	77	2214	0				93	51	45
Arrive On Green	0.00	0.59	0.59	0.11	1.00	0.00				0.06	0.06	0.06
Sat Flow, veh/h	0	2027	1028	1457	3159	0				1457	797	697
Grp Volume(v), veh/h	0	362	341	61	782	0				43	0	45
Grp Sat Flow(s),veh/h/ln	0	1539	1435	1457	1539	0				1457	0	1494
Q Serve(g_s), s	0.0	7.6	7.7	2.4	0.0	0.0				1.7	0.0	1.7
Cycle Q Clear(g_c), s	0.0	7.6	7.7	2.4	0.0	0.0				1.7	0.0	1.7
Prop In Lane	0.00		0.72	1.00		0.00				1.00		0.47
Lane Grp Cap(c), veh/h	0	904	843	77	2214	0				93	0	96
V/C Ratio(X)	0.00	0.40	0.40	0.79	0.35	0.00				0.46	0.00	0.47
Avail Cap(c_a), veh/h	0	904	843	138	2214	0				121	0	125
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.95	0.95	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.7	6.7	26.5	0.0	0.0				27.1	0.0	27.1
Incr Delay (d2), s/veh	0.0	1.3	1.4	6.2	0.4	0.0				1.3	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.7	1.6	0.8	0.1	0.0				0.6	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	8.0	8.1	32.6	0.4	0.0				28.4	0.0	28.4
LnGrp LOS		A	A	C	A					C		C
Approach Vol, veh/h		703			843						88	
Approach Delay, s/veh		8.1			2.8						28.4	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.9	41.3		10.8		49.2
Change Period (Y+Rc), s	4.7	6.0		7.0		6.0
Max Green Setting (Gmax), s	5.7	31.6		5.0		42.0
Max Q Clear Time (g_c+I1), s	4.4	9.7		3.7		2.0
Green Ext Time (p_c), s	0.0	2.3		0.0		3.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.4
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	452	0	0	504	79	273	0	144	0	0	0
Future Volume (veh/h)	21	452	0	0	504	79	273	0	144	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1800	1800	1800			
Adj Flow Rate, veh/h	22	476	0	0	531	83	287	0	152			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	135	1833	0	0	1281	571	367	0	326			
Arrive On Green	0.17	1.00	0.00	0.00	0.37	0.37	0.21	0.00	0.21			
Sat Flow, veh/h	1619	3510	0	0	3510	1525	1714	0	1525			
Grp Volume(v), veh/h	22	476	0	0	531	83	287	0	152			
Grp Sat Flow(s),veh/h/ln	1619	1710	0	0	1710	1525	1714	0	1525			
Q Serve(g_s), s	0.7	0.0	0.0	0.0	6.9	2.2	9.5	0.0	5.2			
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.0	6.9	2.2	9.5	0.0	5.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	135	1833	0	0	1281	571	367	0	326			
V/C Ratio(X)	0.16	0.26	0.00	0.00	0.41	0.15	0.78	0.00	0.47			
Avail Cap(c_a), veh/h	135	1833	0	0	1281	571	543	0	483			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.95	0.95	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.2	0.0	0.0	0.0	13.9	12.4	22.3	0.0	20.6			
Incr Delay (d2), s/veh	0.5	0.3	0.0	0.0	1.0	0.5	4.4	0.0	1.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.0	0.0	2.2	0.6	4.0	0.0	1.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.7	0.3	0.0	0.0	14.9	13.0	26.7	0.0	21.6			
LnGrp LOS	C	A			B	B	C		C			
Approach Vol, veh/h		498			614			439				
Approach Delay, s/veh		1.4			14.6			24.9				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		38.2			9.7	28.5		21.8				
Change Period (Y+Rc), s		6.0			4.7	6.0		9.0				
Max Green Setting (Gmax), s		26.0			5.0	16.3		19.0				
Max Q Clear Time (g_c+I1), s		2.0			2.7	8.9		11.5				
Green Ext Time (p_c), s		2.7			0.0	2.0		1.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			13.3									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	36	25	0	3	51	890	10	2	874	22
Future Vol, veh/h	26	0	36	25	0	3	51	890	10	2	874	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	0	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	0	38	26	0	3	54	937	11	2	920	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1980	1991	472	1508	1992	937	943	0	0	947	0	0
Stage 1	936	936	-	1044	1044	-	-	-	-	-	-	-
Stage 2	1044	1055	-	464	947	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	42	61	544	92	61	324	735	-	-	733	-	-
Stage 1	289	347	-	279	308	-	-	-	-	-	-	-
Stage 2	279	305	-	553	342	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	57	544	79	57	324	735	-	-	733	-	-
Mov Cap-2 Maneuver	38	57	-	79	57	-	-	-	-	-	-	-
Stage 1	288	346	-	259	286	-	-	-	-	-	-	-
Stage 2	256	283	-	513	341	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	132.56	67.13	0.55	0.02
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	735	-	-	83	86	733	-	-
HCM Lane V/C Ratio	0.073	-	-	0.784	0.342	0.003	-	-
HCM Control Delay (s/veh)	10.3	-	-	132.6	67.1	9.9	-	-
HCM Lane LOS	B	-	-	F	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	4	1.3	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	0	90	0	0	0	92	820	0	0	858	81
Future Vol, veh/h	43	0	90	0	0	0	92	820	0	0	858	81
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	86	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	0	95	0	0	0	97	863	0	0	903	85

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1571	2003	494	1508	2045	432	988	0	0	863	0	0
Stage 1	946	946	-	1057	1057	-	-	-	-	-	-	-
Stage 2	625	1057	-	452	988	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	76	60	526	85	57	578	707	-	-	788	-	-
Stage 1	285	343	-	244	304	-	-	-	-	-	-	-
Stage 2	444	304	-	562	328	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	66	52	526	60	49	578	707	-	-	788	-	-
Mov Cap-2 Maneuver	66	52	-	60	49	-	-	-	-	-	-	-
Stage 1	285	343	-	211	263	-	-	-	-	-	-	-
Stage 2	383	263	-	461	328	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	53.65	0	1.1	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	707	-	-	66	526	-	788	-	-
HCM Lane V/C Ratio	0.137	-	-	0.69	0.18	-	-	-	-
HCM Control Delay (s/veh)	10.9	-	-	138	13.3	0	0	-	-
HCM Lane LOS	B	-	-	F	B	A	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	3	0.7	-	0	-	-

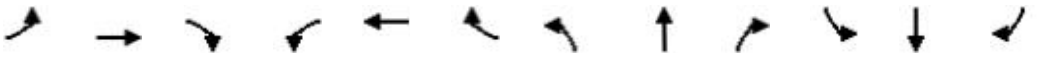
Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	948	18	160	938	34	10	0	82	8	0	10
Future Vol, veh/h	11	948	18	160	938	34	10	0	82	8	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	998	19	168	987	36	11	0	86	8	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1023	0	0	1017	0	0	1861	2391	508	1864	2382	512
Stage 1	-	-	-	-	-	-	1031	1031	-	1342	1342	-
Stage 2	-	-	-	-	-	-	831	1360	-	522	1040	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	686	-	-	690	-	-	46	34	515	46	35	513
Stage 1	-	-	-	-	-	-	253	313	-	163	223	-
Stage 2	-	-	-	-	-	-	335	218	-	511	310	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	686	-	-	690	-	-	34	26	515	28	26	513
Mov Cap-2 Maneuver	-	-	-	-	-	-	34	26	-	28	26	-
Stage 1	-	-	-	-	-	-	249	308	-	123	168	-
Stage 2	-	-	-	-	-	-	248	165	-	418	305	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.12	1.68	38.46	91.21
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	201	686	-	-	690	-	-	60
HCM Lane V/C Ratio	0.481	0.017	-	-	0.244	-	-	0.318
HCM Control Delay (s/veh)	38.5	10.3	-	-	11.9	-	-	91.2
HCM Lane LOS	E	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	2.4	0.1	-	-	1	-	-	1.1



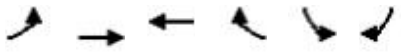
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	1101	15	108	1035	180	14	1	134	245	4	13
Future Volume (veh/h)	13	1101	15	108	1035	180	14	1	134	245	4	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	14	1159	16	114	1089	189	15	1	141	261	0	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	26	1196	17	140	1755	304	184	205	174	936	0	424
Arrive On Green	0.02	0.35	0.35	0.09	0.42	0.42	0.11	0.11	0.11	0.28	0.00	0.28
Sat Flow, veh/h	1619	3454	48	1619	4214	731	1619	1800	1525	3368	0	1525
Grp Volume(v), veh/h	14	574	601	114	846	432	15	1	141	261	0	14
Grp Sat Flow(s),veh/h/ln	1619	1710	1791	1619	1638	1668	1619	1800	1525	1684	0	1525
Q Serve(g_s), s	0.9	33.8	33.9	7.1	20.8	20.9	0.8	0.1	9.3	6.2	0.0	0.7
Cycle Q Clear(g_c), s	0.9	33.8	33.9	7.1	20.8	20.9	0.8	0.1	9.3	6.2	0.0	0.7
Prop In Lane	1.00		0.03	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	26	592	620	140	1365	695	184	205	174	936	0	424
V/C Ratio(X)	0.54	0.97	0.97	0.82	0.62	0.62	0.08	0.00	0.81	0.28	0.00	0.03
Avail Cap(c_a), veh/h	229	592	620	229	1365	695	450	500	424	936	0	424
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.1	33.0	33.0	46.0	23.5	23.5	40.6	40.3	44.4	29.0	0.0	27.0
Incr Delay (d2), s/veh	16.3	29.2	28.5	10.9	2.1	4.1	0.2	0.0	8.8	0.7	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	18.0	18.7	3.2	8.1	8.7	0.4	0.0	3.9	2.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.3	62.2	61.4	57.0	25.7	27.7	40.8	40.3	53.1	29.7	0.0	27.1
LnGrp LOS	E	E	E	E	C	C	D	D	D	C		C
Approach Vol, veh/h		1189			1392			157			275	
Approach Delay, s/veh		61.8			28.8			51.8			29.6	
Approach LOS		E			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.3	40.0		33.0	6.1	47.2		16.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	14.5	35.5		28.5	14.5	35.5		28.5				
Max Q Clear Time (g_c+I1), s	9.1	35.9		8.2	2.9	22.9		11.3				
Green Ext Time (p_c), s	0.1	0.0		0.9	0.0	6.7		0.4				

Intersection Summary		
HCM 7th Control Delay, s/veh	43.1	
HCM 7th LOS	D	

Notes

User approved volume balancing among the lanes for turning movement.



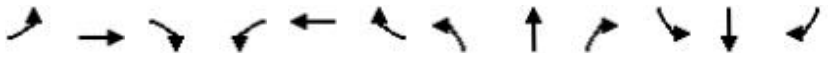
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	862	773	0	588	590
Future Volume (veh/h)	0	862	773	0	588	590
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1600	1872
Adj Flow Rate, veh/h	0	907	814	0	619	621
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1578	1578		1046	561
Arrive On Green	0.00	0.46	0.46	0.00	0.35	0.35
Sat Flow, veh/h	0	3600	3600	0	2956	1586
Grp Volume(v), veh/h	0	907	814	0	619	621
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1478	1586
Q Serve(g_s), s	0.0	12.6	10.9	0.0	11.1	23.0
Cycle Q Clear(g_c), s	0.0	12.6	10.9	0.0	11.1	23.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1578	1578		1046	561
V/C Ratio(X)	0.00	0.57	0.52		0.59	1.11
Avail Cap(c_a), veh/h	0	1578	1578		1046	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	12.8	12.4	0.0	17.2	21.0
Incr Delay (d2), s/veh	0.0	1.5	1.2	0.0	1.0	70.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.4	3.8	0.0	3.7	18.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	14.4	13.6	0.0	18.1	91.5
LnGrp LOS		B	B		B	F
Approach Vol, veh/h		907	814		1240	
Approach Delay, s/veh		14.4	13.6		54.9	
Approach LOS		B	B		D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	36.0	29.0	36.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	30.0	23.0	30.0
Max Q Clear Time (g_c+I1), s	14.6	25.0	12.9
Green Ext Time (p_c), s	4.7	0.0	4.3

Intersection Summary	
HCM 7th Control Delay, s/veh	31.1
HCM 7th LOS	C

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	861	0	0	1236	149	461	124	297	54	0	427
Future Volume (veh/h)	297	861	0	0	1236	149	461	124	297	54	0	427
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800	1700	0	1872
Adj Flow Rate, veh/h	313	906	0	0	1301	157	308	379	313	57	0	449
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	249	2848	0	0	1827	221	354	394	667	0	0	0
Arrive On Green	0.08	0.58	0.00	0.00	0.41	0.41	0.22	0.22	0.22	0.00	0.00	0.00
Sat Flow, veh/h	2956	5076	0	0	4605	536	1619	1800	3051		0	
Grp Volume(v), veh/h	313	906	0	0	959	499	308	379	313		0.0	
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1703	1619	1800	1525			
Q Serve(g_s), s	5.0	5.7	0.0	0.0	14.5	14.5	10.9	12.4	5.3			
Cycle Q Clear(g_c), s	5.0	5.7	0.0	0.0	14.5	14.5	10.9	12.4	5.3			
Prop In Lane	1.00		0.00	0.00		0.31	1.00		1.00			
Lane Grp Cap(c), veh/h	249	2848	0	0	1347	701	354	394	667			
V/C Ratio(X)	1.26	0.32	0.00	0.00	0.71	0.71	0.87	0.96	0.47			
Avail Cap(c_a), veh/h	249	3637	0	0	1874	974	354	394	667			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	27.2	6.4	0.0	0.0	14.6	14.6	22.4	23.0	20.2			
Incr Delay (d2), s/veh	144.8	0.0	0.0	0.0	0.6	1.1	20.4	35.7	0.6			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.6	1.4	0.0	0.0	4.6	4.9	5.6	8.4	1.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	172.1	6.5	0.0	0.0	15.2	15.7	42.8	58.7	20.8			
LnGrp LOS	F	A			B	B	D	E	C			
Approach Vol, veh/h		1219			1458			1000				
Approach Delay, s/veh		49.0			15.3			42.0				
Approach LOS		D			B			D				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		40.5			10.0	30.5		19.0				
Change Period (Y+Rc), s		6.0			5.0	6.0		6.0				
Max Green Setting (Gmax), s		44.0			5.0	34.0		13.0				
Max Q Clear Time (g_c+I1), s		7.7			7.0	16.5		14.4				
Green Ext Time (p_c), s		5.9			0.0	8.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	33.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	78	419	29	27	72	159	384	28	47	430	42
Future Volume (veh/h)	133	78	419	29	27	72	159	384	28	47	430	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	140	82	0	31	28	76	167	404	29	49	453	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	176	328		57	47	127	278	630	534	81	551	467
Arrive On Green	0.11	0.18	0.00	0.04	0.11	0.11	0.09	0.35	0.35	0.05	0.31	0.31
Sat Flow, veh/h	1619	1800	1525	1619	428	1162	2956	1800	1525	1619	1800	1525
Grp Volume(v), veh/h	140	82	0	31	0	104	167	404	29	49	453	44
Grp Sat Flow(s),veh/h/ln	1619	1800	1525	1619	0	1591	1478	1800	1525	1619	1800	1525
Q Serve(g_s), s	4.0	1.8	0.0	0.9	0.0	2.9	2.6	8.9	0.6	1.4	11.0	1.0
Cycle Q Clear(g_c), s	4.0	1.8	0.0	0.9	0.0	2.9	2.6	8.9	0.6	1.4	11.0	1.0
Prop In Lane	1.00		1.00	1.00		0.73	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	176	328		57	0	174	278	630	534	81	551	467
V/C Ratio(X)	0.80	0.25		0.54	0.00	0.60	0.60	0.64	0.05	0.60	0.82	0.09
Avail Cap(c_a), veh/h	351	1356		175	0	1027	728	1009	855	172	757	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.5	16.5	0.0	22.3	0.0	20.0	20.5	12.8	10.1	21.9	15.2	11.7
Incr Delay (d2), s/veh	7.9	0.4	0.0	7.7	0.0	3.3	2.1	1.1	0.0	7.0	5.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.7	0.0	0.4	0.0	1.1	0.8	2.6	0.2	0.6	3.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.4	16.9	0.0	30.1	0.0	23.3	22.6	13.9	10.2	28.9	20.4	11.8
LnGrp LOS	C	B		C		C	C	B	B	C	C	B
Approach Vol, veh/h		222			135			600			546	
Approach Delay, s/veh		24.2			24.8			16.2			20.5	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	21.0	6.2	13.1	8.9	18.9	9.6	9.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.6	26.4	5.1	35.5	11.6	19.8	10.2	30.4
Max Q Clear Time (g_c+I1), s	13.4	10.9	2.9	3.8	4.6	13.0	6.0	4.9
Green Ext Time (p_c), s	0.0	1.9	0.0	0.4	0.3	1.4	0.1	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	19.7
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	8	485	43	9	462
Future Vol, veh/h	24	8	485	43	9	462
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	8	511	45	9	486

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1016	511	0	0	556	0
Stage 1	511	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	266	567	-	-	1025	-
Stage 1	607	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	263	567	-	-	1025	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	607	-	-	-	-	-
Stage 2	602	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	18.34	0	0.16
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	303	34	-
HCM Lane V/C Ratio	-	-	0.111	0.009	-
HCM Control Delay (s/veh)	-	-	18.3	8.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	121	0	4	0	187	126	12	138	0
Future Vol, veh/h	0	0	0	121	0	4	0	187	126	12	138	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	127	0	4	0	197	133	13	145	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	367	500	145	434	434	263	145	0	0	329	0	0
Stage 1	171	171	-	263	263	-	-	-	-	-	-	-
Stage 2	197	329	-	171	171	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	593	476	907	536	518	780	1449	-	-	1241	-	-
Stage 1	836	761	-	746	694	-	-	-	-	-	-	-
Stage 2	810	650	-	836	761	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	583	471	907	530	513	780	1449	-	-	1241	-	-
Mov Cap-2 Maneuver	583	471	-	530	513	-	-	-	-	-	-	-
Stage 1	828	754	-	746	694	-	-	-	-	-	-	-
Stage 2	805	650	-	828	754	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	13.89	0	0.63
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1449	-	-	-	536	1241	-	-
HCM Lane V/C Ratio	-	-	-	-	0.245	0.01	-	-
HCM Control Delay (s/veh)	0	-	-	0	13.9	7.9	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	1	0	-	-

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	71	4	28	96	19	8	78	49	22	65	30
Future Vol, veh/h	43	71	4	28	96	19	8	78	49	22	65	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	75	4	29	101	20	8	82	52	23	68	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	280	281	84	277	271	108	100	0	0	134	0	0
Stage 1	131	131	-	125	125	-	-	-	-	-	-	-
Stage 2	149	151	-	152	146	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	676	631	981	680	639	951	1505	-	-	1463	-	-
Stage 1	878	792	-	884	797	-	-	-	-	-	-	-
Stage 2	858	777	-	855	780	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	545	617	981	584	625	951	1505	-	-	1463	-	-
Mov Cap-2 Maneuver	545	617	-	584	625	-	-	-	-	-	-	-
Stage 1	864	780	-	879	792	-	-	-	-	-	-	-
Stage 2	729	772	-	758	767	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.62	12.26	0.44	1.41
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1505	-	-	596	646	1463	-	-
HCM Lane V/C Ratio	0.006	-	-	0.208	0.233	0.016	-	-
HCM Control Delay (s/veh)	7.4	-	-	12.6	12.3	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.9	0	-	-

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	14	71	0	0	0	0	121	24	19	53	0
Future Vol, veh/h	11	14	71	0	0	0	0	121	24	19	53	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	15	75	0	0	0	0	127	25	20	56	0
Number of Lanes	1	1	0	0	0	0	0	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	7.8	8.9	8.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%
Vol Thru, %	83%	0%	16%	0%	100%
Vol Right, %	17%	0%	84%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	145	11	85	19	53
LT Vol	0	11	0	19	0
Through Vol	121	0	14	0	53
RT Vol	24	0	71	0	0
Lane Flow Rate	153	12	89	20	56
Geometry Grp	4b	5	5	5	5
Degree of Util (X)	0.201	0.018	0.111	0.03	0.075
Departure Headway (Hd)	4.741	5.565	4.476	5.366	4.864
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	762	646	803	670	739
Service Time	2.741	3.278	2.189	3.079	2.577
HCM Lane V/C Ratio	0.201	0.019	0.111	0.03	0.076
HCM Control Delay, s/veh	8.9	8.4	7.7	8.2	8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.7	0.1	0.4	0.1	0.2

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	61	47	15	50	60	64
Future Vol, veh/h	61	47	15	50	60	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	64	49	16	53	63	67
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	7.7	8.1	8
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	60	64	61	47	15	50
LT Vol	60	0	0	0	15	0
Through Vol	0	0	61	0	0	50
RT Vol	0	64	0	47	0	0
Lane Flow Rate	63	67	64	49	16	53
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.095	0.079	0.087	0.058	0.024	0.072
Departure Headway (Hd)	5.432	4.23	4.887	4.185	5.421	4.919
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	663	850	736	859	663	731
Service Time	3.144	1.942	2.597	1.894	3.132	2.63
HCM Lane V/C Ratio	0.095	0.079	0.087	0.057	0.024	0.073
HCM Control Delay, s/veh	8.7	7.3	8.1	7.2	8.3	8
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.3	0.3	0.2	0.1	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	238	246	355	213	3	269	83	278	21	115	28
Future Volume (veh/h)	18	238	246	355	213	3	269	83	278	21	115	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	19	251	259	374	224	3	283	87	293	22	121	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	36	391	348	348	1456	19	449	604	512	487	923	215
Arrive On Green	0.02	0.23	0.23	0.22	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1619	1710	1525	1619	3455	46	1125	1800	1525	1261	2753	641
Grp Volume(v), veh/h	19	251	259	374	111	116	283	87	293	22	74	76
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1792	1125	1800	1525	1261	1710	1685
Q Serve(g_s), s	0.8	8.9	10.6	14.5	2.7	2.7	15.8	2.3	10.6	0.8	2.0	2.1
Cycle Q Clear(g_c), s	0.8	8.9	10.6	14.5	2.7	2.7	17.9	2.3	10.6	3.1	2.0	2.1
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	36	391	348	348	721	755	449	604	512	487	573	565
V/C Ratio(X)	0.53	0.64	0.74	1.07	0.15	0.15	0.63	0.14	0.57	0.05	0.13	0.13
Avail Cap(c_a), veh/h	180	1005	896	348	1182	1239	756	1095	928	831	1040	1025
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.6	23.5	24.2	26.4	12.1	12.1	21.8	15.6	18.4	16.7	15.6	15.6
Incr Delay (d2), s/veh	11.5	1.8	3.1	69.2	0.1	0.1	1.5	0.1	1.0	0.0	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.3	3.6	11.6	0.9	0.9	4.0	0.9	3.6	0.2	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.1	25.3	27.3	95.7	12.2	12.2	23.3	15.8	19.4	16.8	15.7	15.7
LnGrp LOS	D	C	C	F	B	B	C	B	B	B	B	B
Approach Vol, veh/h		529			601			663			172	
Approach Delay, s/veh		27.0			64.1			20.6			15.8	
Approach LOS		C			E			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	21.2		27.2	6.0	34.2		27.2				
Change Period (Y+Rc), s	4.5	5.8		4.6	4.5	5.8		4.6				
Max Green Setting (Gmax), s	4.5	39.6		41.0	7.5	46.6		41.0				
Max Q Clear Time (g_c+I1), s	16.5	12.6		19.9	2.8	4.7		5.1				
Green Ext Time (p_c), s	0.0	2.8		2.7	0.0	1.2		0.9				

Intersection Summary		
HCM 7th Control Delay, s/veh	35.2	
HCM 7th LOS	D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	445	129	147	470	13	107	7	133	16	10	16
Future Volume (veh/h)	12	445	129	147	470	13	107	7	133	16	10	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	13	468	136	155	495	14	113	7	140	17	11	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	521	1226	354	476	1590	45	414	311	264	433	110	170
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	810	2618	756	741	3397	96	1256	1800	1525	1280	637	985
Grp Volume(v), veh/h	13	304	300	155	249	260	113	7	140	17	0	28
Grp Sat Flow(s),veh/h/ln	810	1710	1664	741	1710	1783	1256	1800	1525	1280	0	1623
Q Serve(g_s), s	0.3	3.9	3.9	5.7	3.0	3.0	2.8	0.1	2.8	0.4	0.0	0.5
Cycle Q Clear(g_c), s	3.4	3.9	3.9	9.6	3.0	3.0	3.3	0.1	2.8	0.5	0.0	0.5
Prop In Lane	1.00		0.45	1.00		0.05	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	521	800	779	476	800	834	414	311	264	433	0	281
V/C Ratio(X)	0.02	0.38	0.38	0.33	0.31	0.31	0.27	0.02	0.53	0.04	0.00	0.10
Avail Cap(c_a), veh/h	1038	1892	1841	949	1892	1973	1550	1938	1642	1651	0	1825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.6	5.8	5.8	8.9	5.5	5.5	13.0	11.5	12.6	11.7	0.0	11.6
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.4	0.2	0.2	0.4	0.0	1.7	0.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.6	0.5	0.4	0.5	0.7	0.0	0.9	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.6	6.1	6.1	9.3	5.8	5.7	13.4	11.5	14.2	11.7	0.0	11.8
LnGrp LOS	A	A	A	A	A	A	B	B	B	B		B
Approach Vol, veh/h		617			664			260			45	
Approach Delay, s/veh		6.1			6.6			13.8			11.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	21.5	12.0	21.5	12.0
Change Period (Y+Rc), s	5.8	6.2	5.8	* 6.2
Max Green Setting (Gmax), s	37.0	36.0	37.0	* 38
Max Q Clear Time (g_c+I1), s	5.9	5.3	11.6	2.5
Green Ext Time (p_c), s	3.7	0.9	4.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	7.7
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	613	126	79	618	9	133	0	79	11	5	7
Future Volume (veh/h)	3	613	126	79	618	9	133	0	79	11	5	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	3	645	133	83	651	9	140	0	83	12	5	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	504	1358	280	456	1661	23	486	0	262	375	117	262
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.17	0.00	0.17	0.17	0.17	0.17
Sat Flow, veh/h	704	2824	581	631	3454	48	1374	0	1525	943	682	1525
Grp Volume(v), veh/h	3	390	388	83	322	338	140	0	83	17	0	7
Grp Sat Flow(s),veh/h/ln	704	1710	1695	631	1710	1791	1374	0	1525	1625	0	1525
Q Serve(g_s), s	0.1	4.4	4.4	2.9	3.5	3.5	2.4	0.0	1.4	0.0	0.0	0.1
Cycle Q Clear(g_c), s	3.5	4.4	4.4	7.4	3.5	3.5	2.7	0.0	1.4	0.2	0.0	0.1
Prop In Lane	1.00		0.34	1.00		0.03	1.00		1.00	0.71		1.00
Lane Grp Cap(c), veh/h	504	822	815	456	822	862	486	0	262	492	0	262
V/C Ratio(X)	0.01	0.47	0.48	0.18	0.39	0.39	0.29	0.00	0.32	0.03	0.00	0.03
Avail Cap(c_a), veh/h	801	1545	1532	723	1545	1619	1858	0	1802	1976	0	1802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	5.0	5.0	7.5	4.8	4.8	11.0	0.0	10.4	10.0	0.0	9.9
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.2	0.3	0.3	0.3	0.0	0.7	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.3	0.6	0.6	0.6	0.0	0.4	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.9	5.4	5.5	7.7	5.1	5.1	11.3	0.0	11.1	10.0	0.0	10.0
LnGrp LOS	A	A	A	A	A	A	B		B	A		A
Approach Vol, veh/h		781			743			223			24	
Approach Delay, s/veh		5.5			5.4			11.2			10.0	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	19.2	9.5	19.2	9.5
Change Period (Y+Rc), s	5.4	4.6	5.4	4.6
Max Green Setting (Gmax), s	26.0	34.0	26.0	34.0
Max Q Clear Time (g_c+I1), s	6.4	4.7	9.4	2.2
Green Ext Time (p_c), s	4.3	1.1	4.5	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	6.2
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	478	49	21	441	198	47	63	19	281	75	293
Future Volume (veh/h)	202	478	49	21	441	198	47	63	19	281	75	293
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1800	1900	1900	1800	1800	1900	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	213	503	52	22	464	208	49	66	20	296	79	308
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	280	699	72	247	615	274	126	97	30	489	97	377
Arrive On Green	0.10	0.22	0.22	0.14	0.27	0.27	0.07	0.07	0.07	0.28	0.28	0.28
Sat Flow, veh/h	1714	3129	322	1810	2301	1024	1810	1400	424	1714	339	1323
Grp Volume(v), veh/h	213	274	281	22	344	328	49	0	86	296	0	387
Grp Sat Flow(s),veh/h/ln	1714	1710	1742	1810	1710	1616	1810	0	1824	1714	0	1662
Q Serve(g_s), s	6.9	10.1	10.1	0.7	12.5	12.7	1.8	0.0	3.1	10.1	0.0	14.7
Cycle Q Clear(g_c), s	6.9	10.1	10.1	0.7	12.5	12.7	1.8	0.0	3.1	10.1	0.0	14.7
Prop In Lane	1.00		0.19	1.00		0.63	1.00		0.23	1.00		0.80
Lane Grp Cap(c), veh/h	280	382	389	247	457	432	126	0	127	489	0	474
V/C Ratio(X)	0.76	0.72	0.72	0.09	0.75	0.76	0.39	0.00	0.68	0.61	0.00	0.82
Avail Cap(c_a), veh/h	280	710	723	247	687	649	133	0	134	681	0	660
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.4	24.4	24.4	25.6	22.8	22.9	30.2	0.0	30.9	21.0	0.0	22.6
Incr Delay (d2), s/veh	11.5	2.5	2.5	0.2	2.5	2.9	2.0	0.0	12.0	1.2	0.0	5.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	4.1	4.2	0.3	5.0	4.8	0.8	0.0	1.8	4.0	0.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.0	26.9	27.0	25.8	25.4	25.8	32.2	0.0	42.9	22.2	0.0	28.2
LnGrp LOS	D	C	C	C	C	C	C		D	C		C
Approach Vol, veh/h		768			694			135			683	
Approach Delay, s/veh		30.0			25.6			39.0			25.6	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.9	20.3		9.3	11.4	22.8		24.5				
Change Period (Y+Rc), s	4.6	* 5.1		4.6	4.5	4.6		5.1				
Max Green Setting (Gmax), s	5.5	* 28		5.0	6.9	27.3		27.0				
Max Q Clear Time (g_c+I1), s	12.7	12.1		5.1	8.9	14.7		16.7				
Green Ext Time (p_c), s	0.0	3.0		0.0	0.0	3.5		2.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	460	233	138	398	220	110
Future Volume (veh/h)	460	233	138	398	220	110
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1800	1700	1800	1700	1800
Adj Flow Rate, veh/h	484	245	145	419	232	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	757	381	180	1953	332	312
Arrive On Green	0.34	0.34	0.11	0.57	0.20	0.20
Sat Flow, veh/h	2292	1109	1619	3510	1619	1525
Grp Volume(v), veh/h	375	354	145	419	232	116
Grp Sat Flow(s),veh/h/ln	1710	1600	1619	1710	1619	1525
Q Serve(g_s), s	7.2	7.2	3.4	2.3	5.2	2.5
Cycle Q Clear(g_c), s	7.2	7.2	3.4	2.3	5.2	2.5
Prop In Lane		0.69	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	588	550	180	1953	332	312
V/C Ratio(X)	0.64	0.64	0.80	0.21	0.70	0.37
Avail Cap(c_a), veh/h	1049	982	313	3112	1085	1022
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	10.7	16.8	4.1	14.3	13.3
Incr Delay (d2), s/veh	1.2	1.3	8.1	0.1	2.7	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	2.1	1.5	0.4	1.7	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	11.9	12.0	25.0	4.1	17.0	14.0
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	729			564	348	
Approach Delay, s/veh	11.9			9.5	16.0	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.8	17.9		12.0		26.7
Change Period (Y+Rc), s	4.5	* 4.6		4.1		4.6
Max Green Setting (Gmax), s	7.5	* 24		26.0		35.3
Max Q Clear Time (g_c+I1), s	5.4	9.2		7.2		4.3
Green Ext Time (p_c), s	0.1	4.1		1.0		3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	79	90	301	54	107	57	498	317	124	618	6
Future Volume (veh/h)	11	79	90	301	54	107	57	498	317	124	618	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	12	83	95	317	57	113	60	524	0	131	651	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	468	306	350	463	215	427	81	571		163	1278	12
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.05	0.32	0.00	0.10	0.37	0.37
Sat Flow, veh/h	1104	766	876	1096	539	1069	1619	1800	1525	1619	3472	32
Grp Volume(v), veh/h	12	0	178	317	0	170	60	524	0	131	321	336
Grp Sat Flow(s),veh/h/ln	1104	0	1642	1096	0	1608	1619	1800	1525	1619	1710	1794
Q Serve(g_s), s	0.5	0.0	5.0	18.7	0.0	4.9	2.5	19.2	0.0	5.4	10.0	10.0
Cycle Q Clear(g_c), s	5.4	0.0	5.0	23.7	0.0	4.9	2.5	19.2	0.0	5.4	10.0	10.0
Prop In Lane	1.00		0.53	1.00		0.66	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	468	0	656	463	0	642	81	571		163	629	660
V/C Ratio(X)	0.03	0.00	0.27	0.68	0.00	0.26	0.75	0.92		0.80	0.51	0.51
Avail Cap(c_a), veh/h	576	0	816	570	0	799	175	597		256	653	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.6	0.0	13.8	21.8	0.0	13.8	32.1	22.5	0.0	30.1	16.8	16.8
Incr Delay (d2), s/veh	0.0	0.0	0.2	2.5	0.0	0.2	12.7	18.9	0.0	9.6	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.7	4.7	0.0	1.7	1.2	10.3	0.0	2.4	3.6	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.6	0.0	14.1	24.3	0.0	14.0	44.8	41.3	0.0	39.7	17.4	17.4
LnGrp LOS	B		B	C		B	D	D		D	B	B
Approach Vol, veh/h		190			487			584			788	
Approach Delay, s/veh		14.2			20.7			41.7			21.1	
Approach LOS		B			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	29.7		31.3	10.9	26.2		31.3				
Change Period (Y+Rc), s	4.0	4.5		4.0	4.0	4.5		4.0				
Max Green Setting (Gmax), s	7.4	26.1		34.0	10.8	22.7		34.0				
Max Q Clear Time (g_c+I1), s	4.5	12.0		25.7	7.4	21.2		7.4				
Green Ext Time (p_c), s	0.0	3.3		1.6	0.1	0.5		1.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	26.3
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	302	0	129	560	897	0	0	803	361
Future Volume (veh/h)	0	0	0	302	0	129	560	897	0	0	803	361
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1800	1800	1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h				318	0	136	589	944	0	0	845	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				348	0	309	630	2384	0	0	884	
Arrive On Green				0.20	0.00	0.20	0.39	0.70	0.00	0.00	0.26	0.00
Sat Flow, veh/h				1714	0	1525	1619	3510	0	0	3510	1525
Grp Volume(v), veh/h				318	0	136	589	944	0	0	845	0
Grp Sat Flow(s),veh/h/ln				1714	0	1525	1619	1710	0	0	1710	1525
Q Serve(g_s), s				21.8	0.0	9.4	41.9	13.9	0.0	0.0	29.2	0.0
Cycle Q Clear(g_c), s				21.8	0.0	9.4	41.9	13.9	0.0	0.0	29.2	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				348	0	309	630	2384	0	0	884	
V/C Ratio(X)				0.91	0.00	0.44	0.94	0.40	0.00	0.00	0.96	
Avail Cap(c_a), veh/h				371	0	331	630	2384	0	0	884	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.73	0.73	0.00	0.00	0.79	0.00
Uniform Delay (d), s/veh				46.8	0.0	41.9	35.2	7.6	0.0	0.0	43.8	0.0
Incr Delay (d2), s/veh				25.7	0.0	1.0	16.9	0.4	0.0	0.0	18.3	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.7	0.0	3.6	18.9	4.7	0.0	0.0	14.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				72.5	0.0	42.8	52.1	8.0	0.0	0.0	62.1	0.0
LnGrp LOS				E		D	D	A			E	
Approach Vol, veh/h					454			1533			845	
Approach Delay, s/veh					63.6			24.9			62.1	
Approach LOS					E			C			E	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.7	37.0		30.3		89.7						
Change Period (Y+Rc), s	6.0	* 6		6.0		6.0						
Max Green Setting (Gmax), s	46.3	* 31		26.0		82.0						
Max Q Clear Time (g_c+I1), s	43.9	31.2		23.8		15.9						
Green Ext Time (p_c), s	0.3	0.0		0.6		8.3						

Intersection Summary	
HCM 7th Control Delay, s/veh	42.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	233	528	170	1293	1099	84
Future Volume (veh/h)	233	528	170	1293	1099	84
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	1700	1800	1800	1800
Adj Flow Rate, veh/h	245	556	179	1361	1157	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	522	492	209	1862	1170	89
Arrive On Green	0.32	0.32	0.13	0.54	0.36	0.36
Sat Flow, veh/h	1619	1525	1619	3510	3311	245
Grp Volume(v), veh/h	245	556	179	1361	614	631
Grp Sat Flow(s),veh/h/ln	1619	1525	1619	1710	1710	1756
Q Serve(g_s), s	10.9	29.0	9.7	27.1	32.1	32.2
Cycle Q Clear(g_c), s	10.9	29.0	9.7	27.1	32.1	32.2
Prop In Lane	1.00	1.00	1.00			0.14
Lane Grp Cap(c), veh/h	522	492	209	1862	621	638
V/C Ratio(X)	0.47	1.13	0.86	0.73	0.99	0.99
Avail Cap(c_a), veh/h	522	492	221	1862	621	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	0.33	0.33
Uniform Delay (d), s/veh	24.4	30.5	38.4	15.5	28.5	28.5
Incr Delay (d2), s/veh	0.2	81.8	2.9	0.2	18.2	18.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	21.4	3.9	9.4	15.4	15.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.6	112.3	41.2	15.7	46.7	46.8
LnGrp LOS	C	F	D	B	D	D
Approach Vol, veh/h	801			1540	1245	
Approach Delay, s/veh	85.5			18.7	46.7	
Approach LOS	F			B	D	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.3	38.7			55.0	35.0
Change Period (Y+Rc), s	4.7	6.0			6.0	6.0
Max Green Setting (Gmax), s	12.3	32.0			49.0	29.0
Max Q Clear Time (g_c+I1), s	11.7	34.2			29.1	31.0
Green Ext Time (p_c), s	0.0	0.0			10.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	43.4
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	28	40	110	29	499	31	764	88	524	1149	66
Future Volume (veh/h)	142	28	40	110	29	499	31	764	88	524	1149	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	149	29	42	116	31	525	33	804	93	552	1209	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	90	447	399	380	447	399	53	815	94	496	1768	101
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.03	0.26	0.26	0.31	0.54	0.54
Sat Flow, veh/h	775	1710	1525	1208	1710	1525	1619	3088	357	1619	3289	188
Grp Volume(v), veh/h	149	29	42	116	31	525	33	445	452	552	628	650
Grp Sat Flow(s),veh/h/ln	775	1710	1525	1208	1710	1525	1619	1710	1736	1619	1710	1766
Q Serve(g_s), s	0.0	1.0	1.7	6.5	1.1	20.9	1.6	20.7	20.7	24.5	21.5	21.5
Cycle Q Clear(g_c), s	20.9	1.0	1.7	8.1	1.1	20.9	1.6	20.7	20.7	24.5	21.5	21.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.11
Lane Grp Cap(c), veh/h	90	447	399	380	447	399	53	451	458	496	919	949
V/C Ratio(X)	1.66	0.06	0.11	0.30	0.07	1.32	0.63	0.99	0.99	1.11	0.68	0.68
Avail Cap(c_a), veh/h	90	447	399	380	447	399	103	451	458	496	919	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	22.2	22.4	25.5	22.2	29.6	38.2	29.3	29.3	27.8	13.5	13.5
Incr Delay (d2), s/veh	339.0	0.1	0.1	0.4	0.1	159.6	11.6	38.8	38.6	75.2	2.1	2.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	0.4	0.6	1.8	0.4	25.0	0.8	12.6	12.7	19.1	7.6	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	379.0	22.3	22.6	26.0	22.3	189.2	49.9	68.1	67.9	102.9	15.6	15.6
LnGrp LOS	F	C	C	C	C	F	D	E	E	F	B	B
Approach Vol, veh/h		220			672			930			1830	
Approach Delay, s/veh		263.9			153.3			67.4			41.9	
Approach LOS		F			F			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	47.5		25.4	29.0	25.6		25.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.1	40.5		20.9	24.5	21.1		20.9
Max Q Clear Time (g_c+I1), s	13.6	23.5		22.9	26.5	22.7		22.9
Green Ext Time (p_c), s	0.0	8.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	82.3
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	342	41	65	302	179	44	320	46	328	297	343
Future Volume (veh/h)	229	342	41	65	302	179	44	320	46	328	297	343
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	241	360	43	68	318	188	46	337	48	345	313	361
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	358	1164	138	407	789	456	331	1330	188	481	756	674
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	812	3079	365	893	2087	1206	695	3009	425	907	1710	1525
Grp Volume(v), veh/h	241	199	204	68	259	247	46	190	195	345	313	361
Grp Sat Flow(s),veh/h/ln	812	1710	1734	893	1710	1583	695	1710	1724	907	1710	1525
Q Serve(g_s), s	13.2	4.1	4.2	2.9	5.6	5.7	2.6	3.5	3.6	18.5	6.3	8.6
Cycle Q Clear(g_c), s	18.9	4.1	4.2	7.1	5.6	5.7	11.2	3.5	3.6	22.1	6.3	8.6
Prop In Lane	1.00		0.21	1.00		0.76	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	358	646	656	407	646	598	331	756	762	481	756	674
V/C Ratio(X)	0.67	0.31	0.31	0.17	0.40	0.41	0.14	0.25	0.26	0.72	0.41	0.54
Avail Cap(c_a), veh/h	358	646	656	407	646	598	331	756	762	481	756	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	10.9	11.0	13.5	11.4	11.5	14.3	8.8	8.8	16.0	9.5	10.2
Incr Delay (d2), s/veh	4.9	0.3	0.3	0.2	0.4	0.5	0.2	0.2	0.2	5.1	0.4	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	1.3	1.4	0.5	1.8	1.8	0.3	0.9	1.0	3.6	1.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.1	11.2	11.2	13.6	11.8	11.9	14.5	8.9	9.0	21.1	9.9	11.0
LnGrp LOS	C	B	B	B	B	B	B	A	A	C	A	B
Approach Vol, veh/h		644			574			431			1019	
Approach Delay, s/veh		16.0			12.1			9.5			14.1	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.6	23.4	26.6	23.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	22.1	18.9	22.1	18.9
Max Q Clear Time (g_c+I1), s	13.2	20.9	24.1	9.1
Green Ext Time (p_c), s	1.6	0.0	0.0	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	13.4
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	612	0	1	226	1	0
Future Vol, veh/h	612	0	1	226	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	665	0	1	246	1	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	665	0	790	333
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	125	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	934	-	331	669
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	893	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	934	-	331	669
Mov Cap-2 Maneuver	-	-	-	-	331	-
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	892	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.04	15.92
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	331	-	-	934	-
HCM Lane V/C Ratio	0.003	-	-	0.001	-
HCM Control Delay (s/veh)	15.9	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	554	0	23	574	9	22
Future Vol, veh/h	554	0	23	574	9	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	583	0	24	604	9	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	583	0	934	292
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	351	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1001	-	268	711
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	690	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1001	-	262	711
Mov Cap-2 Maneuver	-	-	-	-	386	-
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	673	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	11.68
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	571	-	-	1001	-
HCM Lane V/C Ratio	0.057	-	-	0.024	-
HCM Control Delay (s/veh)	11.7	-	-	8.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2	0	0	6	0	0	0	0	0	0	0
Future Vol, veh/h	0	2	0	0	6	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2	0	0	7	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	7	0	0	2	0	0	9	9	2	9	9	7
Stage 1	-	-	-	-	-	-	2	2	-	7	7	-
Stage 2	-	-	-	-	-	-	7	7	-	2	2	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1627	-	-	1633	-	-	1015	890	1088	1015	890	1082
Stage 1	-	-	-	-	-	-	1026	898	-	1020	894	-
Stage 2	-	-	-	-	-	-	1020	894	-	1026	898	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1627	-	-	1633	-	-	1015	890	1088	1015	890	1082
Mov Cap-2 Maneuver	-	-	-	-	-	-	1015	890	-	1015	890	-
Stage 1	-	-	-	-	-	-	1026	898	-	1020	894	-
Stage 2	-	-	-	-	-	-	1020	894	-	1026	898	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1627	-	-	1633	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	365	135	0	0	0
Future Vol, veh/h	0	365	135	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	397	147	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	147	0	-	0	543	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	397	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1448	-	-	-	504	906
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	684	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1448	-	-	-	504	906
Mov Cap-2 Maneuver	-	-	-	-	572	-
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	684	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1448	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	445	164	62	167	0
Future Vol, veh/h	0	445	164	62	167	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	0	150	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	484	178	67	182	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	246	0	-	0	662	178
Stage 1	-	-	-	-	178	-
Stage 2	-	-	-	-	484	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1332	-	-	-	430	870
Stage 1	-	-	-	-	857	-
Stage 2	-	-	-	-	624	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1332	-	-	-	430	870
Mov Cap-2 Maneuver	-	-	-	-	430	-
Stage 1	-	-	-	-	857	-
Stage 2	-	-	-	-	624	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	19.35
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1332	-	-	-	430	-
HCM Lane V/C Ratio	-	-	-	-	0.422	-
HCM Control Delay (s/veh)	0	-	-	-	19.4	0
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0	-	-	-	2.1	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	0	0	38	0	0
Future Vol, veh/h	3	0	0	38	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	0	0	41	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	22	21	0	0	41	0
Stage 1	21	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1000	1063	-	-	1581	-
Stage 1	1007	-	-	-	-	-
Stage 2	1027	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1000	1063	-	-	1581	-
Mov Cap-2 Maneuver	918	-	-	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	1027	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.94	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	918	1581	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s/veh)	-	-	8.9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1028	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1028	-	-	-	-	-
Mov Cap-2 Maneuver	1028	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

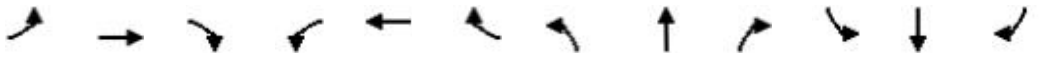
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	24	382	405	91	106	26
Future Volume (veh/h)	24	382	405	91	106	26
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	1872	1872
Adj Flow Rate, veh/h	25	402	426	96	112	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	52	1749	827	185	174	42
Arrive On Green	0.03	0.51	0.30	0.30	0.12	0.12
Sat Flow, veh/h	1619	3510	2867	621	1393	336
Grp Volume(v), veh/h	25	402	261	261	140	0
Grp Sat Flow(s),veh/h/ln	1619	1710	1710	1688	1742	0
Q Serve(g_s), s	0.4	1.6	3.1	3.2	1.9	0.0
Cycle Q Clear(g_c), s	0.4	1.6	3.1	3.2	1.9	0.0
Prop In Lane	1.00			0.37	0.80	0.19
Lane Grp Cap(c), veh/h	52	1749	509	502	218	0
V/C Ratio(X)	0.48	0.23	0.51	0.52	0.64	0.00
Avail Cap(c_a), veh/h	327	3870	1279	1262	1267	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.8	3.3	7.2	7.2	10.3	0.0
Incr Delay (d2), s/veh	6.9	0.1	0.8	0.8	3.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.4	0.4	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.6	3.4	8.0	8.1	13.5	0.0
LnGrp LOS	B	A	A	A	B	
Approach Vol, veh/h		427	522		140	
Approach Delay, s/veh		4.3	8.0		13.5	
Approach LOS		A	A		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		17.2		7.6	5.3	11.9
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		28.0		18.0	5.0	18.5
Max Q Clear Time (g_c+I1), s		3.6		3.9	2.4	5.2
Green Ext Time (p_c), s		2.2		0.3	0.0	2.2

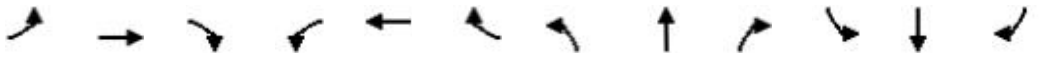
Intersection Summary	
HCM 7th Control Delay, s/veh	7.3
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	0	134	0	0	0	81	559	0	0	329	13
Future Volume (veh/h)	22	0	134	0	0	0	81	559	0	0	329	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1768	1800	1872	1800	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	23	0	141	0	0	0	85	588	0	0	346	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	192	0	174	0	2	0	764	2737	0	2	957	39
Arrive On Green	0.11	0.00	0.11	0.00	0.00	0.00	0.47	0.80	0.00	0.00	0.29	0.29
Sat Flow, veh/h	1684	0	1525	0	1800	0	1619	3510	0	1619	3350	135
Grp Volume(v), veh/h	23	0	141	0	0	0	85	588	0	0	176	184
Grp Sat Flow(s),veh/h/ln	1684	0	1525	0	1800	0	1619	1710	0	1619	1710	1776
Q Serve(g_s), s	1.3	0.0	9.5	0.0	0.0	0.0	3.1	4.4	0.0	0.0	8.6	8.7
Cycle Q Clear(g_c), s	1.3	0.0	9.5	0.0	0.0	0.0	3.1	4.4	0.0	0.0	8.6	8.7
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.00	1.00		0.08
Lane Grp Cap(c), veh/h	192	0	174	0	2	0	764	2737	0	2	489	507
V/C Ratio(X)	0.12	0.00	0.81	0.00	0.00	0.00	0.11	0.21	0.00	0.00	0.36	0.36
Avail Cap(c_a), veh/h	345	0	312	0	309	0	764	2737	0	77	489	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	0.91	0.91	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	0.0	45.4	0.0	0.0	0.0	15.5	2.5	0.0	0.0	29.9	29.9
Incr Delay (d2), s/veh	0.3	0.0	8.8	0.0	0.0	0.0	0.1	0.2	0.0	0.0	2.1	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	4.0	0.0	0.0	0.0	1.1	0.9	0.0	0.0	3.7	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.1	0.0	54.2	0.0	0.0	0.0	15.5	2.7	0.0	0.0	31.9	31.9
LnGrp LOS	D		D				B	A			C	C
Approach Vol, veh/h		164			0			673			360	
Approach Delay, s/veh		52.5			0.0			4.3			31.9	
Approach LOS		D						A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	54.0	34.5		0.0	0.0	88.5		16.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	17.5	30.0		18.0	5.0	42.5		21.5				
Max Q Clear Time (g_c+I1), s	5.1	10.7		0.0	0.0	6.4		11.5				
Green Ext Time (p_c), s	0.1	1.8		0.0	0.0	4.1		0.6				

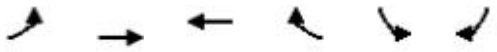
Intersection Summary			
HCM 7th Control Delay, s/veh		19.2	
HCM 7th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	437	14	61	638	24	8	0	98	15	0	10
Future Volume (veh/h)	1	437	14	61	638	24	8	0	98	15	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1872	1800	1800	1872	1800	1800	1872	1800
Adj Flow Rate, veh/h	1	460	15	64	672	25	8	0	103	16	0	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	2	1078	35	451	2086	78	24	0	304	26	0	18
Arrive On Green	0.00	0.32	0.32	0.28	0.60	0.60	0.20	0.00	0.20	0.03	0.00	0.03
Sat Flow, veh/h	1619	3380	110	1619	3497	130	115	0	1484	1006	0	691
Grp Volume(v), veh/h	1	232	243	64	342	355	111	0	0	27	0	0
Grp Sat Flow(s),veh/h/ln	1619	1710	1780	1619	1778	1849	1599	0	0	1697	0	0
Q Serve(g_s), s	0.1	11.2	11.3	3.1	10.1	10.1	6.2	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	0.1	11.2	11.3	3.1	10.1	10.1	6.2	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.07	0.07		0.93	0.59		0.41
Lane Grp Cap(c), veh/h	2	546	568	451	1061	1103	327	0	0	44	0	0
V/C Ratio(X)	0.45	0.43	0.43	0.14	0.32	0.32	0.34	0.00	0.00	0.61	0.00	0.00
Avail Cap(c_a), veh/h	100	546	568	451	1061	1103	327	0	0	299	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.92	0.92	0.92	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	52.4	28.2	28.2	28.4	10.6	10.6	35.7	0.0	0.0	50.6	0.0	0.0
Incr Delay (d2), s/veh	101.3	2.4	2.3	0.1	0.7	0.7	2.8	0.0	0.0	13.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	4.8	5.0	1.2	3.8	3.9	2.7	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	153.7	30.6	30.5	28.6	11.3	11.3	38.5	0.0	0.0	63.6	0.0	0.0
LnGrp LOS	F	C	C	C	B	B	D			E		
Approach Vol, veh/h		476			761			111			27	
Approach Delay, s/veh		30.8			12.8			38.5			63.6	
Approach LOS		C			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.8	38.0		7.2	4.6	67.1		26.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	13.5	33.5		18.5	6.5	40.5		21.5				
Max Q Clear Time (g_c+I1), s	5.1	13.3		3.7	2.1	12.1		8.2				
Green Ext Time (p_c), s	0.1	2.5		0.1	0.0	4.2		0.5				

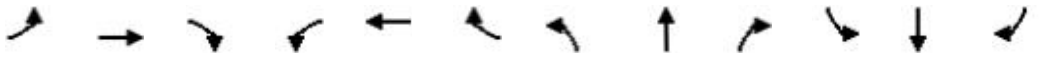
Intersection Summary		
HCM 7th Control Delay, s/veh		22.1
HCM 7th LOS		C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	45	485	615	138	145	39
Future Volume (veh/h)	45	485	615	138	145	39
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	1872	1872
Adj Flow Rate, veh/h	47	511	647	145	153	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	87	1911	999	224	206	55
Arrive On Green	0.05	0.56	0.36	0.36	0.15	0.15
Sat Flow, veh/h	1619	3510	2867	621	1364	365
Grp Volume(v), veh/h	47	511	398	394	195	0
Grp Sat Flow(s),veh/h/ln	1619	1710	1710	1688	1738	0
Q Serve(g_s), s	0.9	2.4	6.0	6.0	3.3	0.0
Cycle Q Clear(g_c), s	0.9	2.4	6.0	6.0	3.3	0.0
Prop In Lane	1.00			0.37	0.78	0.21
Lane Grp Cap(c), veh/h	87	1911	615	608	262	0
V/C Ratio(X)	0.54	0.27	0.65	0.65	0.74	0.00
Avail Cap(c_a), veh/h	266	3089	1015	1002	1009	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.3	3.5	8.3	8.3	12.6	0.0
Incr Delay (d2), s/veh	5.1	0.1	1.1	1.2	4.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.0	1.0	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.4	3.6	9.4	9.5	16.7	0.0
LnGrp LOS	B	A	A	A	B	
Approach Vol, veh/h		558	792		195	
Approach Delay, s/veh		5.0	9.4		16.7	
Approach LOS		A	A		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		21.8		9.2	6.2	15.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		28.0		18.0	5.1	18.4
Max Q Clear Time (g_c+I1), s		4.4		5.3	2.9	8.0
Green Ext Time (p_c), s		2.9		0.4	0.0	3.1

Intersection Summary	
HCM 7th Control Delay, s/veh	8.7
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	0	115	0	0	0	97	460	0	0	612	27
Future Volume (veh/h)	12	0	115	0	0	0	97	460	0	0	612	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1768	1800	1872	1800	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	13	0	121	0	0	0	102	484	0	0	644	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	166	0	150	0	309	0	365	2057	0	2	1113	48
Arrive On Green	0.10	0.00	0.10	0.00	0.00	0.00	0.23	0.60	0.00	0.00	0.33	0.33
Sat Flow, veh/h	1684	0	1525	0	1800	0	1619	3510	0	1619	3339	145
Grp Volume(v), veh/h	13	0	121	0	0	0	102	484	0	0	330	342
Grp Sat Flow(s),veh/h/ln	1684	0	1525	0	1800	0	1619	1710	0	1619	1710	1774
Q Serve(g_s), s	0.7	0.0	8.2	0.0	0.0	0.0	5.5	6.9	0.0	0.0	16.7	16.7
Cycle Q Clear(g_c), s	0.7	0.0	8.2	0.0	0.0	0.0	5.5	6.9	0.0	0.0	16.7	16.7
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.00	1.00		0.08
Lane Grp Cap(c), veh/h	166	0	150	0	309	0	365	2057	0	2	570	591
V/C Ratio(X)	0.08	0.00	0.81	0.00	0.00	0.00	0.28	0.24	0.00	0.00	0.58	0.58
Avail Cap(c_a), veh/h	297	0	269	0	309	0	365	2057	0	77	570	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	0.91	0.91	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	0.0	46.3	0.0	0.0	0.0	33.6	9.7	0.0	0.0	28.9	28.9
Incr Delay (d2), s/veh	0.2	0.0	9.7	0.0	0.0	0.0	0.4	0.2	0.0	0.0	4.2	4.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	3.5	0.0	0.0	0.0	2.1	2.4	0.0	0.0	7.2	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.2	0.0	56.0	0.0	0.0	0.0	34.0	10.0	0.0	0.0	33.1	33.0
LnGrp LOS	D		E				C	A			C	C
Approach Vol, veh/h		134			0			586			672	
Approach Delay, s/veh		54.8			0.0			14.1			33.1	
Approach LOS		D						B			C	

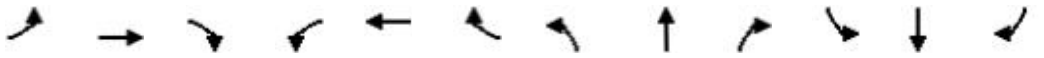
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	28.2	39.5		22.5	0.0	67.7		14.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	15.5	35.0		18.0	5.0	45.5		18.5				
Max Q Clear Time (g_c+I1), s	7.5	18.7		0.0	0.0	8.9		10.2				
Green Ext Time (p_c), s	0.1	3.5		0.0	0.0	3.3		0.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			27.2									
HCM 7th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	703	19	113	649	24	8	0	60	5	0	8
Future Volume (veh/h)	9	703	19	113	649	24	8	0	60	5	0	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1872	1800	1800	1872	1800	1800	1872	1800
Adj Flow Rate, veh/h	9	740	20	119	683	25	8	0	63	5	0	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	336	1131	31	494	1503	55	32	0	251	10	0	15
Arrive On Green	0.21	0.33	0.33	0.30	0.43	0.43	0.18	0.00	0.18	0.02	0.00	0.02
Sat Flow, veh/h	1619	3402	92	1619	3499	128	181	0	1425	637	0	1019
Grp Volume(v), veh/h	9	372	388	119	347	361	71	0	0	13	0	0
Grp Sat Flow(s),veh/h/ln	1619	1710	1783	1619	1778	1849	1606	0	0	1657	0	0
Q Serve(g_s), s	0.5	19.5	19.5	5.8	14.5	14.5	4.0	0.0	0.0	0.8	0.0	0.0
Cycle Q Clear(g_c), s	0.5	19.5	19.5	5.8	14.5	14.5	4.0	0.0	0.0	0.8	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.07	0.11		0.89	0.38		0.62
Lane Grp Cap(c), veh/h	336	568	593	494	764	794	283	0	0	25	0	0
V/C Ratio(X)	0.03	0.65	0.65	0.24	0.45	0.45	0.25	0.00	0.00	0.52	0.00	0.00
Avail Cap(c_a), veh/h	336	568	593	494	764	794	283	0	0	286	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.91	0.91	0.91	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.1	29.9	29.9	27.4	21.2	21.2	37.3	0.0	0.0	51.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.2	5.0	0.2	1.8	1.7	2.1	0.0	0.0	15.9	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	8.5	8.8	2.2	6.1	6.3	1.8	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.2	35.1	34.9	27.6	23.0	22.9	39.4	0.0	0.0	67.2	0.0	0.0
LnGrp LOS	C	D	C	C	C	C	D			E		
Approach Vol, veh/h		769			827			71			13	
Approach Delay, s/veh		35.0			23.6			39.4			67.2	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	36.5	39.4		6.1	26.3	49.6		23.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	15.5	34.9		18.1	5.3	45.1		18.5				
Max Q Clear Time (g_c+I1), s	7.8	21.5		2.8	2.5	16.5		6.0				
Green Ext Time (p_c), s	0.1	3.7		0.0	0.0	4.3		0.2				

Intersection Summary												
HCM 7th Control Delay, s/veh			29.8									
HCM 7th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	176	456	40	117	269	350	461	40	158	212	91
Future Volume (veh/h)	114	176	456	40	117	269	350	461	40	158	212	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	120	185	0	42	123	0	368	485	42	166	223	96
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	148	854		57	661		425	785	68	258	455	189
Arrive On Green	0.09	0.25	0.00	0.04	0.19	0.00	0.14	0.25	0.25	0.08	0.19	0.19
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	3141	3185	275	3141	2353	980
Grp Volume(v), veh/h	120	185	0	42	123	0	368	260	267	166	160	159
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1570	1710	1750	1570	1710	1624
Q Serve(g_s), s	3.8	2.2	0.0	1.3	1.6	0.0	5.9	7.0	7.0	2.6	4.3	4.5
Cycle Q Clear(g_c), s	3.8	2.2	0.0	1.3	1.6	0.0	5.9	7.0	7.0	2.6	4.3	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		0.60
Lane Grp Cap(c), veh/h	148	854		57	661		425	421	431	258	331	314
V/C Ratio(X)	0.81	0.22		0.74	0.19		0.87	0.62	0.62	0.64	0.48	0.51
Avail Cap(c_a), veh/h	188	2281		172	2248		425	1130	1157	382	1091	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	15.4	0.0	24.7	17.5	0.0	21.9	17.3	17.3	23.0	18.6	18.7
Incr Delay (d2), s/veh	14.8	0.1	0.0	6.8	0.1	0.0	16.2	1.5	1.5	1.0	1.1	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.7	0.0	0.6	0.5	0.0	2.8	2.3	2.4	0.9	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.8	15.5	0.0	31.6	17.6	0.0	38.1	18.8	18.8	24.0	19.7	19.9
LnGrp LOS	D	B		C	B		D	B	B	C	B	B
Approach Vol, veh/h		305			165			895			485	
Approach Delay, s/veh		24.3			21.2			26.7			21.2	
Approach LOS		C			C			C			C	

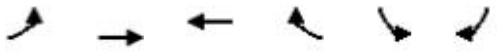
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	18.3	11.0	16.6	8.7	15.4	8.2	19.4
Change Period (Y+Rc), s	4.0	5.4	4.0	6.6	4.0	5.4	4.0	* 6.6
Max Green Setting (Gmax), s	5.5	34.5	7.0	33.0	6.0	34.0	6.3	* 34
Max Q Clear Time (g_c+I1), s	3.3	4.2	7.9	6.5	5.8	3.6	4.6	9.0
Green Ext Time (p_c), s	0.0	1.0	0.0	1.6	0.0	0.6	0.0	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	24.4
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	42	388	417	103	128	42
Future Volume (veh/h)	42	388	417	103	128	42
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	1872	1872
Adj Flow Rate, veh/h	44	408	439	108	135	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	85	1776	809	197	181	59
Arrive On Green	0.05	0.52	0.30	0.30	0.14	0.14
Sat Flow, veh/h	1619	3510	2815	665	1298	423
Grp Volume(v), veh/h	44	408	274	273	180	0
Grp Sat Flow(s),veh/h/ln	1619	1710	1710	1680	1731	0
Q Serve(g_s), s	0.7	1.7	3.5	3.6	2.6	0.0
Cycle Q Clear(g_c), s	0.7	1.7	3.5	3.6	2.6	0.0
Prop In Lane	1.00			0.40	0.75	0.24
Lane Grp Cap(c), veh/h	85	1776	508	499	242	0
V/C Ratio(X)	0.52	0.23	0.54	0.55	0.74	0.00
Avail Cap(c_a), veh/h	337	3626	1166	1145	1180	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.2	3.5	7.8	7.8	10.9	0.0
Incr Delay (d2), s/veh	4.9	0.1	0.9	0.9	4.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.5	0.5	1.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.1	3.5	8.7	8.7	15.4	0.0
LnGrp LOS	B	A	A	A	B	
Approach Vol, veh/h		452	547		180	
Approach Delay, s/veh		4.8	8.7		15.4	
Approach LOS		A	A		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		18.2		8.2	5.9	12.3
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		28.0		18.0	5.5	18.0
Max Q Clear Time (g_c+I1), s		3.7		4.6	2.7	5.6
Green Ext Time (p_c), s		2.2		0.4	0.0	2.2

Intersection Summary	
HCM 7th Control Delay, s/veh	8.2
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	1	42	2	0	0	51	796	20	9	519	35
Future Volume (veh/h)	16	1	42	2	0	0	51	796	20	9	519	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1872	1800	1872	1800	1872	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	17	1	44	2	0	0	54	838	21	9	546	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	22	1	56	5	0	0	588	1391	1179	18	1368	93
Arrive On Green	0.05	0.05	0.05	0.00	0.00	0.00	0.36	0.77	0.77	0.01	0.42	0.42
Sat Flow, veh/h	432	25	1119	1783	0	0	1619	1800	1525	1619	3251	220
Grp Volume(v), veh/h	62	0	0	2	0	0	54	838	21	9	287	296
Grp Sat Flow(s),veh/h/ln	1577	0	0	1783	0	0	1619	1800	1525	1619	1710	1760
Q Serve(g_s), s	4.3	0.0	0.0	0.1	0.0	0.0	2.4	21.8	0.3	0.6	12.8	12.9
Cycle Q Clear(g_c), s	4.3	0.0	0.0	0.1	0.0	0.0	2.4	21.8	0.3	0.6	12.8	12.9
Prop In Lane	0.27		0.71	1.00		0.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	79	0	0	5	0	0	588	1391	1179	18	720	741
V/C Ratio(X)	0.79	0.00	0.00	0.42	0.00	0.00	0.09	0.60	0.02	0.51	0.40	0.40
Avail Cap(c_a), veh/h	258	0	0	292	0	0	588	1391	1179	74	720	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	0.0	54.8	0.0	0.0	23.1	5.3	2.9	54.1	22.2	22.2
Incr Delay (d2), s/veh	15.8	0.0	0.0	48.7	0.0	0.0	0.1	1.9	0.0	20.8	1.6	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	0.1	0.0	0.0	0.9	6.4	0.1	0.3	5.3	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.5	0.0	0.0	103.5	0.0	0.0	23.2	7.2	2.9	74.9	23.8	23.8
LnGrp LOS	E			F			C	A	A	E	C	C
Approach Vol, veh/h		62			2			913			592	
Approach Delay, s/veh		67.5			103.5			8.0			24.6	
Approach LOS		E			F			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	44.4	50.8		4.8	5.7	89.5		10.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.7	46.3		18.0	5.0	51.0		18.0				
Max Q Clear Time (g_c+I1), s	4.4	14.9		2.1	2.6	23.8		6.3				
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	6.6		0.2				

Intersection Summary												
HCM 7th Control Delay, s/veh			16.7									
HCM 7th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	0	119	0	0	0	79	834	0	0	525	44
Future Volume (veh/h)	59	0	119	0	0	0	79	834	0	0	525	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1768	1800	1872	1800	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	62	0	125	0	0	0	83	878	0	0	553	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	173	0	157	0	2	0	680	2788	0	1	1133	94
Arrive On Green	0.10	0.00	0.10	0.00	0.00	0.00	0.42	0.82	0.00	0.00	0.71	0.71
Sat Flow, veh/h	1684	0	1525	0	1800	0	1619	3510	0	1619	3197	265
Grp Volume(v), veh/h	62	0	125	0	0	0	83	878	0	0	295	304
Grp Sat Flow(s),veh/h/ln	1684	0	1525	0	1800	0	1619	1710	0	1619	1710	1752
Q Serve(g_s), s	3.8	0.0	8.8	0.0	0.0	0.0	3.4	7.0	0.0	0.0	8.4	8.5
Cycle Q Clear(g_c), s	3.8	0.0	8.8	0.0	0.0	0.0	3.4	7.0	0.0	0.0	8.4	8.5
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.00	1.00		0.15
Lane Grp Cap(c), veh/h	173	0	157	0	2	0	680	2788	0	1	606	621
V/C Ratio(X)	0.36	0.00	0.80	0.00	0.00	0.00	0.12	0.31	0.00	0.00	0.49	0.49
Avail Cap(c_a), veh/h	298	0	270	0	295	0	680	2788	0	74	606	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	0.85	0.85	0.00	0.00	0.98	0.98
Uniform Delay (d), s/veh	46.0	0.0	48.2	0.0	0.0	0.0	19.5	2.5	0.0	0.0	11.6	11.6
Incr Delay (d2), s/veh	1.2	0.0	8.8	0.0	0.0	0.0	0.1	0.3	0.0	0.0	2.7	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	3.8	0.0	0.0	0.0	1.3	1.5	0.0	0.0	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.2	0.0	57.0	0.0	0.0	0.0	19.6	2.8	0.0	0.0	14.3	14.2
LnGrp LOS	D		E				B	A			B	B
Approach Vol, veh/h		187			0			961			599	
Approach Delay, s/veh		53.8			0.0			4.2			14.3	
Approach LOS		D						A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	50.7	43.5		0.0	0.0	94.2		15.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	15.5	39.0		18.0	5.0	49.5		19.5				
Max Q Clear Time (g_c+I1), s	15.4	10.5		0.0	0.0	9.0		10.8				
Green Ext Time (p_c), s	0.1	3.6		0.0	0.0	6.9		0.5				

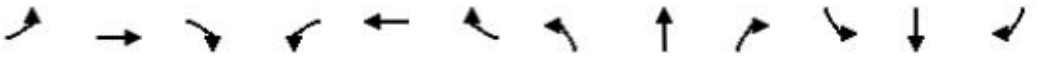
Intersection Summary	
HCM 7th Control Delay, s/veh	13.0
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	635	11	90	827	31	8	0	139	25	0	9
Future Volume (veh/h)	2	635	11	90	827	31	8	0	139	25	0	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1872	1800	1800	1872	1800	1800	1872	1800
Adj Flow Rate, veh/h	2	668	12	95	871	33	8	0	146	26	0	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	4	1882	34	118	2157	82	15	0	282	38	0	13
Arrive On Green	0.00	0.55	0.55	0.07	0.62	0.62	0.19	0.00	0.19	0.03	0.00	0.03
Sat Flow, veh/h	1619	3437	62	1619	3494	132	83	0	1513	1284	0	444
Grp Volume(v), veh/h	2	332	348	95	443	461	154	0	0	35	0	0
Grp Sat Flow(s),veh/h/ln	1619	1710	1789	1619	1778	1848	1596	0	0	1728	0	0
Q Serve(g_s), s	0.1	12.0	12.0	6.4	14.0	14.0	9.6	0.0	0.0	2.2	0.0	0.0
Cycle Q Clear(g_c), s	0.1	12.0	12.0	6.4	14.0	14.0	9.6	0.0	0.0	2.2	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.07	0.05		0.95	0.74		0.26
Lane Grp Cap(c), veh/h	4	936	979	118	1098	1141	297	0	0	52	0	0
V/C Ratio(X)	0.46	0.35	0.36	0.81	0.40	0.40	0.52	0.00	0.00	0.68	0.00	0.00
Avail Cap(c_a), veh/h	81	936	979	228	1098	1141	297	0	0	291	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.90	0.90	0.90	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	54.8	14.0	14.0	50.2	10.7	10.7	40.3	0.0	0.0	52.8	0.0	0.0
Incr Delay (d2), s/veh	59.4	1.0	1.0	11.1	1.0	1.0	6.3	0.0	0.0	14.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	4.6	4.8	2.9	5.2	5.4	4.3	0.0	0.0	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	114.2	15.0	15.0	61.3	11.7	11.7	46.6	0.0	0.0	67.3	0.0	0.0
LnGrp LOS	F	B	B	E	B	B	D			E		
Approach Vol, veh/h		682			999			154			35	
Approach Delay, s/veh		15.3			16.4			46.6			67.3	
Approach LOS		B			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	64.7		7.8	4.8	72.4		25.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	15.5	37.5		18.5	5.5	47.5		20.5				
Max Q Clear Time (g_c+I1), s	8.4	14.0		4.2	2.1	16.0		11.6				
Green Ext Time (p_c), s	0.1	3.9		0.1	0.0	6.0		0.5				

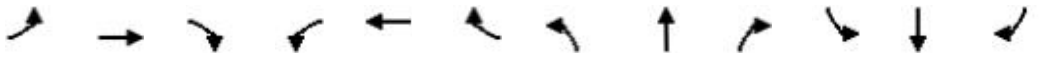
Intersection Summary		
HCM 7th Control Delay, s/veh	19.4	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	816	11	90	962	153	8	2	79	207	7	16
Future Volume (veh/h)	15	816	11	90	962	153	8	2	79	207	7	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	16	859	12	95	1013	161	8	2	83	218	7	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	28	1483	21	117	2071	329	16	131	222	441	584	495
Arrive On Green	0.02	0.43	0.43	0.07	0.48	0.48	0.01	0.07	0.07	0.26	0.32	0.32
Sat Flow, veh/h	1619	3453	48	1619	4276	678	1619	1800	1525	1684	1800	1525
Grp Volume(v), veh/h	16	425	446	95	776	398	8	2	83	218	7	17
Grp Sat Flow(s),veh/h/ln	1619	1710	1791	1619	1638	1678	1619	1800	1525	1684	1800	1525
Q Serve(g_s), s	1.1	20.8	20.8	6.4	17.6	17.7	0.5	0.1	3.0	12.1	0.3	0.7
Cycle Q Clear(g_c), s	1.1	20.8	20.8	6.4	17.6	17.7	0.5	0.1	3.0	12.1	0.3	0.7
Prop In Lane	1.00		0.03	1.00		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	28	734	769	117	1587	813	16	131	222	441	584	495
V/C Ratio(X)	0.56	0.58	0.58	0.81	0.49	0.49	0.50	0.02	0.37	0.49	0.01	0.03
Avail Cap(c_a), veh/h	75	734	769	202	1587	813	74	296	362	441	584	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	23.8	23.8	50.3	19.2	19.2	54.2	47.3	18.2	34.4	25.2	18.5
Incr Delay (d2), s/veh	14.1	2.9	2.7	12.3	1.1	2.1	22.3	0.0	1.0	0.9	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	8.6	9.0	2.9	6.7	7.1	0.3	0.1	1.3	5.0	0.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.7	26.7	26.6	62.5	20.2	21.3	76.5	47.4	19.2	35.3	25.2	18.6
LnGrp LOS	E	C	C	E	C	C	E	D	B	D	C	B
Approach Vol, veh/h		887			1269			93			242	
Approach Delay, s/veh		27.4			23.7			24.8			33.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	51.7	5.6	40.2	6.4	57.8	33.3	12.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.7	37.6	5.0	35.7	5.1	46.2	22.6	18.1
Max Q Clear Time (g_c+I1), s	8.4	22.8	2.5	2.7	3.1	19.7	14.1	5.0
Green Ext Time (p_c), s	0.1	4.5	0.0	0.1	0.0	8.9	0.4	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	26.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	13	25	46	18	344	15	688	40	264	671	18
Future Volume (veh/h)	84	13	25	46	18	344	15	688	40	264	671	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	88	14	26	48	19	362	16	724	42	278	706	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	342	222	198	327	444	517	33	1037	60	338	1716	46
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.32	0.32	0.21	0.50	0.50
Sat Flow, veh/h	1267	1710	1525	1243	3420	1525	1619	3285	190	1619	3402	92
Grp Volume(v), veh/h	88	14	26	48	19	362	16	377	389	278	355	370
Grp Sat Flow(s),veh/h/ln	1267	1710	1525	1243	1710	1525	1619	1710	1766	1619	1710	1784
Q Serve(g_s), s	2.6	0.3	0.6	1.4	0.2	0.0	0.4	7.6	7.6	6.4	5.1	5.1
Cycle Q Clear(g_c), s	2.7	0.3	0.6	2.0	0.2	0.0	0.4	7.6	7.6	6.4	5.1	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.05
Lane Grp Cap(c), veh/h	342	222	198	327	444	517	33	540	558	338	862	900
V/C Ratio(X)	0.26	0.06	0.13	0.15	0.04	0.70	0.48	0.70	0.70	0.82	0.41	0.41
Avail Cap(c_a), veh/h	762	788	703	738	1575	1022	207	788	813	435	1028	1073
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.1	14.9	15.1	15.9	14.9	11.2	18.9	11.7	11.7	14.8	6.1	6.1
Incr Delay (d2), s/veh	0.4	0.1	0.3	0.2	0.0	1.7	10.6	1.6	1.6	9.5	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.1	0.2	0.4	0.1	2.3	0.2	2.1	2.2	2.7	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.5	15.0	15.4	16.1	14.9	12.9	29.5	13.4	13.3	24.3	6.4	6.4
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	A	A
Approach Vol, veh/h		128			429			782			1003	
Approach Delay, s/veh		16.1			13.4			13.7			11.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	24.2		9.6	12.7	16.8		9.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.5		18.0	10.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	2.4	7.1		4.0	8.4	9.6		4.7				
Green Ext Time (p_c), s	0.0	4.0		0.1	0.2	2.8		0.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			12.7									
HCM 7th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	135	457	60	226	241	616	296	80	267	514	134
Future Volume (veh/h)	84	135	457	60	226	241	616	296	80	267	514	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	88	142	0	63	238	0	648	312	84	281	541	141
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	109	531		80	468		774	1033	274	382	703	182
Arrive On Green	0.07	0.16	0.00	0.05	0.14	0.00	0.25	0.39	0.39	0.12	0.26	0.26
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	3141	2674	708	3141	2687	698
Grp Volume(v), veh/h	88	142	0	63	238	0	648	198	198	281	344	338
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1570	1710	1672	1570	1710	1674
Q Serve(g_s), s	3.9	2.7	0.0	2.8	4.7	0.0	14.3	5.9	6.0	6.3	13.6	13.7
Cycle Q Clear(g_c), s	3.9	2.7	0.0	2.8	4.7	0.0	14.3	5.9	6.0	6.3	13.6	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		0.42
Lane Grp Cap(c), veh/h	109	531		80	468		774	661	646	382	447	438
V/C Ratio(X)	0.80	0.27		0.79	0.51		0.84	0.30	0.31	0.74	0.77	0.77
Avail Cap(c_a), veh/h	160	1630		126	1559		1097	976	955	744	773	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	27.2	0.0	34.3	29.2	0.0	26.1	15.5	15.6	30.9	24.9	25.0
Incr Delay (d2), s/veh	16.8	0.3	0.0	15.5	0.9	0.0	4.1	0.3	0.3	2.8	2.8	2.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.0	0.0	1.4	1.8	0.0	5.1	2.0	2.0	2.3	5.2	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.4	27.5	0.0	49.9	30.1	0.0	30.2	15.8	15.9	33.7	27.7	27.9
LnGrp LOS	D	C		D	C		C	B	B	C	C	C
Approach Vol, veh/h		230			301			1044			963	
Approach Delay, s/veh		36.2			34.2			24.7			29.5	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	16.7	22.5	25.7	9.4	15.4	13.4	34.8
Change Period (Y+Rc), s	4.5	5.4	4.5	6.6	4.5	5.4	4.5	* 6.6
Max Green Setting (Gmax), s	5.7	34.8	25.5	33.0	7.2	33.3	17.3	* 42
Max Q Clear Time (g_c+I1), s	4.8	4.7	16.3	15.7	5.9	6.7	8.3	8.0
Green Ext Time (p_c), s	0.0	0.8	1.7	3.4	0.0	1.3	0.6	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	28.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	68	501	619	171	168	69
Future Volume (veh/h)	68	501	619	171	168	69
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	1872	1872
Adj Flow Rate, veh/h	72	527	652	180	177	73
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	115	1913	964	266	233	96
Arrive On Green	0.07	0.56	0.36	0.36	0.19	0.19
Sat Flow, veh/h	1619	3510	2738	730	1214	501
Grp Volume(v), veh/h	72	527	421	411	251	0
Grp Sat Flow(s),veh/h/ln	1619	1710	1710	1669	1721	0
Q Serve(g_s), s	1.6	2.9	7.5	7.5	5.0	0.0
Cycle Q Clear(g_c), s	1.6	2.9	7.5	7.5	5.0	0.0
Prop In Lane	1.00			0.44	0.71	0.29
Lane Grp Cap(c), veh/h	115	1913	622	607	331	0
V/C Ratio(X)	0.62	0.28	0.68	0.68	0.76	0.00
Avail Cap(c_a), veh/h	291	3109	1035	1010	861	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.3	4.2	9.7	9.7	13.8	0.0
Incr Delay (d2), s/veh	5.4	0.1	1.3	1.3	3.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.2	1.6	1.5	1.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.8	4.2	11.0	11.1	17.4	0.0
LnGrp LOS	C	A	B	B	B	
Approach Vol, veh/h		599	832		251	
Approach Delay, s/veh		6.3	11.0		17.4	
Approach LOS		A	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		24.7		11.5	7.1	17.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		32.9		18.1	6.5	21.9
Max Q Clear Time (g_c+I1), s		4.9		7.0	3.6	9.5
Green Ext Time (p_c), s		3.1		0.6	0.0	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	10.3
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	0	36	25	0	3	51	890	10	2	874	22
Future Volume (veh/h)	26	0	36	25	0	3	51	890	10	2	874	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1872	1800	1872	1800	1872	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	27	0	38	26	0	3	54	937	11	2	920	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	34	0	48	41	0	5	495	1386	1174	4	1591	40
Arrive On Green	0.05	0.00	0.05	0.03	0.00	0.03	0.31	0.77	0.77	0.00	0.47	0.47
Sat Flow, veh/h	664	0	935	1578	0	182	1619	1800	1525	1619	3409	85
Grp Volume(v), veh/h	65	0	0	29	0	0	54	937	11	2	461	482
Grp Sat Flow(s),veh/h/ln	1599	0	0	1760	0	0	1619	1800	1525	1619	1710	1785
Q Serve(g_s), s	4.8	0.0	0.0	2.0	0.0	0.0	2.9	30.0	0.2	0.1	23.7	23.7
Cycle Q Clear(g_c), s	4.8	0.0	0.0	2.0	0.0	0.0	2.9	30.0	0.2	0.1	23.7	23.7
Prop In Lane	0.42		0.58	0.90		0.10	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	83	0	0	45	0	0	495	1386	1174	4	798	833
V/C Ratio(X)	0.79	0.00	0.00	0.64	0.00	0.00	0.11	0.68	0.01	0.46	0.58	0.58
Avail Cap(c_a), veh/h	240	0	0	264	0	0	495	1386	1174	67	798	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	0.0	0.0	57.9	0.0	0.0	29.9	6.6	3.2	59.8	23.4	23.4
Incr Delay (d2), s/veh	15.0	0.0	0.0	13.9	0.0	0.0	0.1	2.6	0.0	60.8	3.0	2.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	1.1	0.0	0.0	1.1	9.5	0.1	0.1	9.8	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	71.3	0.0	0.0	71.8	0.0	0.0	30.0	9.2	3.2	120.6	26.4	26.3
LnGrp LOS	E			E			C	A	A	F	C	C
Approach Vol, veh/h		65			29			1002			945	
Approach Delay, s/veh		71.3			71.8			10.2			26.6	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	41.2	60.5		7.6	4.8	96.9		10.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.0	56.0		18.0	5.0	61.0		18.0				
Max Q Clear Time (g_c+I1), s	4.9	25.7		4.0	2.1	32.0		6.8				
Green Ext Time (p_c), s	0.0	6.3		0.1	0.0	8.0		0.2				

Intersection Summary			
HCM 7th Control Delay, s/veh		20.6	
HCM 7th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	90	0	0	0	92	820	0	0	858	81
Future Volume (veh/h)	43	0	90	0	0	0	92	820	0	0	858	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.04	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1768	1800	1872	1800	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	45	0	95	0	0	0	97	863	0	0	903	85
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	135	0	122	0	2	0	632	2889	0	1	1316	124
Arrive On Green	0.08	0.00	0.08	0.00	0.00	0.00	0.39	0.84	0.00	0.00	0.83	0.83
Sat Flow, veh/h	1684	0	1525	0	1800	0	1619	3510	0	1619	3159	297
Grp Volume(v), veh/h	45	0	95	0	0	0	97	863	0	0	489	499
Grp Sat Flow(s),veh/h/ln	1684	0	1525	0	1800	0	1619	1710	0	1619	1710	1746
Q Serve(g_s), s	3.0	0.0	7.3	0.0	0.0	0.0	4.7	6.3	0.0	0.0	13.3	13.3
Cycle Q Clear(g_c), s	3.0	0.0	7.3	0.0	0.0	0.0	4.7	6.3	0.0	0.0	13.3	13.3
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.00	1.00		0.17
Lane Grp Cap(c), veh/h	135	0	122	0	2	0	632	2889	0	1	713	728
V/C Ratio(X)	0.33	0.00	0.78	0.00	0.00	0.00	0.15	0.30	0.00	0.00	0.69	0.69
Avail Cap(c_a), veh/h	260	0	235	0	270	0	632	2889	0	67	713	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	0.84	0.84	0.00	0.00	0.94	0.94
Uniform Delay (d), s/veh	52.2	0.0	54.1	0.0	0.0	0.0	23.7	1.9	0.0	0.0	6.9	6.9
Incr Delay (d2), s/veh	1.4	0.0	10.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	5.0	4.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	3.2	0.0	0.0	0.0	1.8	1.1	0.0	0.0	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.6	0.0	64.2	0.0	0.0	0.0	23.8	2.2	0.0	0.0	12.0	11.9
LnGrp LOS	D		E				C	A			B	B
Approach Vol, veh/h		140			0			960			988	
Approach Delay, s/veh		60.8			0.0			4.3			11.9	
Approach LOS		E						A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	54.5		0.0	0.0	105.9		14.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	15.5	50.0		18.0	5.0	60.5		18.5				
Max Q Clear Time (g_c+I1), s	6.7	15.3		0.0	0.0	8.3		9.3				
Green Ext Time (p_c), s	0.1	7.0		0.0	0.0	6.8		0.4				

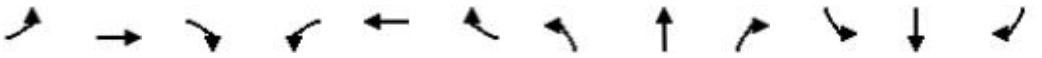
Intersection Summary		
HCM 7th Control Delay, s/veh	11.7	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	948	18	160	938	34	10	0	82	8	0	10
Future Volume (veh/h)	11	948	18	160	938	34	10	0	82	8	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.04	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1872	1800	1800	1872	1800	1800	1872	1800
Adj Flow Rate, veh/h	12	998	19	168	987	36	11	0	86	8	0	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	22	1922	37	194	2330	85	27	0	215	14	0	19
Arrive On Green	0.01	0.56	0.56	0.12	0.67	0.67	0.15	0.00	0.15	0.02	0.00	0.02
Sat Flow, veh/h	1619	3433	65	1619	3500	128	182	0	1424	700	0	963
Grp Volume(v), veh/h	12	497	520	168	502	521	97	0	0	19	0	0
Grp Sat Flow(s),veh/h/ln	1619	1710	1788	1619	1778	1849	1607	0	0	1664	0	0
Q Serve(g_s), s	0.9	21.7	21.7	12.2	15.7	15.7	6.5	0.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	0.9	21.7	21.7	12.2	15.7	15.7	6.5	0.0	0.0	1.4	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.07	0.11		0.89	0.42		0.58
Lane Grp Cap(c), veh/h	22	957	1001	194	1184	1231	242	0	0	33	0	0
V/C Ratio(X)	0.54	0.52	0.52	0.87	0.42	0.42	0.40	0.00	0.00	0.58	0.00	0.00
Avail Cap(c_a), veh/h	69	957	1001	277	1184	1231	242	0	0	251	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.87	0.87	0.87	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.8	16.4	16.4	51.9	9.3	9.3	46.0	0.0	0.0	58.3	0.0	0.0
Incr Delay (d2), s/veh	17.2	1.8	1.8	15.8	1.0	0.9	4.9	0.0	0.0	15.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	8.4	8.8	5.7	5.8	6.0	3.0	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	76.0	18.2	18.2	67.7	10.3	10.3	50.9	0.0	0.0	73.9	0.0	0.0
LnGrp LOS	E	B	B	E	B	B	D			E		
Approach Vol, veh/h		1029			1191			97			19	
Approach Delay, s/veh		18.9			18.4			50.9			73.9	
Approach LOS		B			B			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	71.7		6.8	6.1	84.4		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	20.5	45.3		18.1	5.1	60.7		18.1				
Max Q Clear Time (g_c+I1), s	14.2	23.7		3.4	2.9	17.7		8.5				
Green Ext Time (p_c), s	0.2	6.4		0.0	0.0	7.5		0.3				

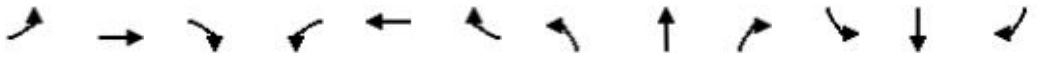
Intersection Summary	
HCM 7th Control Delay, s/veh	20.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	1101	15	108	1035	180	14	1	134	245	4	13
Future Volume (veh/h)	13	1101	15	108	1035	180	14	1	134	245	4	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.04	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1872	1700	1800	1800	1768	1800	1800
Adj Flow Rate, veh/h	14	1159	16	114	1089	189	15	1	141	258	4	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	114	1574	22	137	1980	343	27	125	234	405	528	447
Arrive On Green	0.05	0.31	0.31	0.08	0.47	0.47	0.02	0.07	0.07	0.24	0.29	0.29
Sat Flow, veh/h	1619	3454	48	1619	4214	731	1619	1800	1525	1684	1800	1525
Grp Volume(v), veh/h	14	574	601	114	846	432	15	1	141	258	4	14
Grp Sat Flow(s),veh/h/ln	1619	1710	1791	1619	1638	1668	1619	1800	1525	1684	1800	1525
Q Serve(g_s), s	1.0	36.1	36.1	8.3	22.2	22.2	1.1	0.1	6.0	16.5	0.2	0.8
Cycle Q Clear(g_c), s	1.0	36.1	36.1	8.3	22.2	22.2	1.1	0.1	6.0	16.5	0.2	0.8
Prop In Lane	1.00		0.03	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	779	817	137	1540	784	27	125	234	405	528	447
V/C Ratio(X)	0.12	0.74	0.74	0.83	0.55	0.55	0.57	0.01	0.60	0.64	0.01	0.03
Avail Cap(c_a), veh/h	114	779	817	169	1540	784	72	270	358	405	528	447
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.61	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	35.2	35.2	54.1	22.7	22.7	58.6	52.0	21.2	40.9	30.0	30.2
Incr Delay (d2), s/veh	0.3	3.8	3.6	24.4	1.4	2.8	17.5	0.0	2.5	3.3	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	16.3	17.1	4.3	8.6	9.1	0.6	0.0	2.3	7.2	0.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.9	39.0	38.9	78.5	24.1	25.5	76.1	52.0	23.7	44.2	30.1	30.4
LnGrp LOS	D	D	D	E	C	C	E	D	C	D	C	C
Approach Vol, veh/h		1189			1392			157			276	
Approach Delay, s/veh		39.1			29.0			28.9			43.3	
Approach LOS		D			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	59.2	6.5	39.7	12.9	60.9	33.4	12.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	49.0	5.3	35.2	5.1	56.4	22.5	18.0
Max Q Clear Time (g_c+I1), s	10.3	38.1	3.1	2.8	3.0	24.2	18.5	8.0
Green Ext Time (p_c), s	0.0	5.3	0.0	0.0	0.0	10.6	0.3	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	34.3
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	28	40	110	29	499	31	764	88	524	1149	66
Future Volume (veh/h)	142	28	40	110	29	499	31	764	88	524	1149	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	149	29	42	116	31	525	33	804	93	552	1209	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	278	265	236	252	529	795	53	933	108	594	2091	119
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.03	0.30	0.30	0.37	0.64	0.64
Sat Flow, veh/h	1253	1710	1525	1208	3420	1525	1619	3088	357	1619	3289	188
Grp Volume(v), veh/h	149	29	42	116	31	525	33	445	452	552	628	650
Grp Sat Flow(s),veh/h/ln	1253	1710	1525	1208	1710	1525	1619	1710	1736	1619	1710	1766
Q Serve(g_s), s	8.8	1.1	1.8	7.1	0.6	0.0	1.5	18.8	18.8	25.1	16.2	16.2
Cycle Q Clear(g_c), s	9.4	1.1	1.8	8.9	0.6	0.0	1.5	18.8	18.8	25.1	16.2	16.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.11
Lane Grp Cap(c), veh/h	278	265	236	252	529	795	53	517	525	594	1087	1123
V/C Ratio(X)	0.54	0.11	0.18	0.46	0.06	0.66	0.62	0.86	0.86	0.93	0.58	0.58
Avail Cap(c_a), veh/h	379	402	359	349	804	918	135	581	589	687	1164	1202
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	27.8	28.1	32.0	27.6	13.4	36.5	25.2	25.2	23.3	8.0	8.0
Incr Delay (d2), s/veh	1.6	0.2	0.4	1.3	0.0	1.4	11.1	11.6	11.4	17.8	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.5	0.7	2.1	0.2	6.1	0.7	8.4	8.6	11.6	4.8	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.2	28.0	28.5	33.3	27.6	14.8	47.7	36.8	36.6	41.1	8.6	8.6
LnGrp LOS	C	C	C	C	C	B	D	D	D	D	A	A
Approach Vol, veh/h		220			672			930			1830	
Approach Delay, s/veh		31.6			18.6			37.1			18.4	
Approach LOS		C			B			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	53.2		16.4	32.6	27.6		16.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.4	52.1		18.0	32.5	26.0		18.0				
Max Q Clear Time (g_c+I1), s	3.5	18.2		10.9	27.1	20.8		11.4				
Green Ext Time (p_c), s	0.0	10.7		0.1	1.0	2.3		0.4				

Intersection Summary		
HCM 7th Control Delay, s/veh	24.0	
HCM 7th LOS	C	

Notes

User approved pedestrian interval to be less than phase max green.

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	10866	10886	10885	10661	10773	10813
Vehs Exited	10903	10914	10898	10673	10773	10834
Starting Vehs	425	440	430	443	466	431
Ending Vehs	388	412	417	431	466	408
Travel Distance (mi)	13820	13915	13720	13602	13705	13753
Travel Time (hr)	437.1	442.1	435.1	429.9	436.3	436.1
Total Delay (hr)	93.9	95.7	93.7	91.6	94.7	93.9
Total Stops	12328	12398	12304	12182	12418	12327
Fuel Used (gal)	459.8	460.2	454.7	452.5	454.9	456.4

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	2712	2660	2644	2556	2594	2630
Vehs Exited	2673	2686	2659	2590	2639	2650
Starting Vehs	425	440	430	443	466	431
Ending Vehs	464	414	415	409	421	409
Travel Distance (mi)	3361	3457	3201	3322	3546	3377
Travel Time (hr)	106.2	108.8	101.2	104.4	111.5	106.4
Total Delay (hr)	22.7	23.0	20.9	21.9	23.8	22.4
Total Stops	2999	3028	2903	2898	3065	2978
Fuel Used (gal)	111.2	114.2	105.9	109.5	117.0	111.5

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	2681	2661	2674	2663	2576	2648
Vehs Exited	2707	2628	2623	2657	2583	2638
Starting Vehs	464	414	415	409	421	409
Ending Vehs	438	447	466	415	414	419
Travel Distance (mi)	3420	3364	3418	3294	3291	3357
Travel Time (hr)	108.4	106.0	106.3	104.2	104.1	105.8
Total Delay (hr)	23.0	22.3	21.7	21.9	22.3	22.2
Total Stops	3092	2911	2974	2962	2967	2982
Fuel Used (gal)	113.6	109.9	111.9	108.6	109.2	110.6

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	2818	2815	2860	2795	2859	2826
Vehs Exited	2820	2804	2846	2747	2822	2805
Starting Vehs	438	447	466	415	414	419
Ending Vehs	436	458	480	463	451	443
Travel Distance (mi)	3607	3646	3652	3449	3525	3576
Travel Time (hr)	115.0	116.1	116.6	109.3	113.5	114.1
Total Delay (hr)	25.2	25.6	26.2	23.1	25.3	25.1
Total Stops	3247	3281	3311	3128	3265	3241
Fuel Used (gal)	120.7	120.6	121.6	115.1	117.8	119.2

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	2655	2750	2707	2647	2744	2697
Vehs Exited	2703	2796	2770	2679	2729	2738
Starting Vehs	436	458	480	463	451	443
Ending Vehs	388	412	417	431	466	408
Travel Distance (mi)	3432	3448	3450	3537	3344	3442
Travel Time (hr)	107.5	111.1	110.9	112.0	107.2	109.7
Total Delay (hr)	23.0	24.8	24.9	24.8	23.3	24.1
Total Stops	2990	3178	3116	3194	3121	3122
Fuel Used (gal)	114.3	115.4	115.3	119.4	110.9	115.1

Intersection: 15: SR58 EB On Ramp/SR58 EB Off Ramp & Main St

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	TR	L	T	T	L	LTR
Maximum Queue (ft)	69	79	74	70	75	25	51
Average Queue (ft)	19	28	33	15	17	2	17
95th Queue (ft)	53	65	63	48	54	14	45
Link Distance (ft)	380	380		360	360		479
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			150			250	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 16: SR58 WB Off Ramp/SR58 WB On Ramp & Main St

Movement	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	T	T	T	T	R	LT
Maximum Queue (ft)	46	67	52	72	76	25	145
Average Queue (ft)	13	21	13	17	26	4	71
95th Queue (ft)	35	51	36	47	58	16	121
Link Distance (ft)		360	360	3089	3089		869
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	150					210	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 21: Lenwood Rd & I-15 SB Off Ramp

Movement	EB	EB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	L	L	R
Maximum Queue (ft)	122	98	62	62	57	104	29
Average Queue (ft)	75	18	60	56	11	59	2
95th Queue (ft)	123	60	67	75	40	95	22
Link Distance (ft)						1072	1072
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					180		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	T	T	T	T	TR	L	LT	L	R
Maximum Queue (ft)	70	30	76	69	28	130	119	79	168	148	35	91
Average Queue (ft)	35	4	56	17	2	81	50	21	104	72	7	43
95th Queue (ft)	66	19	85	55	15	117	88	50	156	126	26	71
Link Distance (ft)						1586	1586	1586	1060	1060		1467
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280	280									125	
Storage Blk Time (%)												0
Queuing Penalty (veh)												0

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	SB
Directions Served	R
Maximum Queue (ft)	57
Average Queue (ft)	27
95th Queue (ft)	55
Link Distance (ft)	1467
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 27: Lenwood Rd & SR58 EB Off Ramp/SR58 EB On Ramp

Movement	EB	EB	NB	SB	SB
Directions Served	L	TR	TR	L	T
Maximum Queue (ft)	31	33	43	28	35
Average Queue (ft)	5	1	27	12	20
95th Queue (ft)	22	14	40	32	44
Link Distance (ft)	1330	1330	2308		921
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				315	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 28: Lenwood Rd & SR58 WB Ramps

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	31	32	25	30	25	20
Average Queue (ft)	5	20	5	12	14	11
95th Queue (ft)	25	40	20	34	30	22
Link Distance (ft)	369			1381		921
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		420	1000		375	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 35: Barstow Rd & I-15 SB On-Ramp/I-15 SB Off-Ramp

Movement	WB	WB	NB	NB	NB	SB	SB
Directions Served	LT	R	L	T	T	T	T
Maximum Queue (ft)	91	61	200	129	93	116	107
Average Queue (ft)	35	30	96	48	27	52	41
95th Queue (ft)	71	54	165	105	69	93	85
Link Distance (ft)	682	682		584	584	457	457
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			255				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 36: Barstow Rd & I-15 NB Ramps

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	T	TR
Maximum Queue (ft)	256	111	94	212	178	134	130
Average Queue (ft)	155	50	70	107	68	62	51
95th Queue (ft)	246	83	108	199	142	116	107
Link Distance (ft)	383	383		217	217	584	584
Upstream Blk Time (%)				0	0		
Queuing Penalty (veh)				2	0		
Storage Bay Dist (ft)			70				
Storage Blk Time (%)			17	9			
Queuing Penalty (veh)			54	9			

Zone Summary

Zone wide Queuing Penalty: 65

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	14485	14840	14660	14584	14488	14612
Vehs Exited	14501	14816	14637	14587	14420	14593
Starting Vehs	599	587	579	614	582	573
Ending Vehs	583	611	602	611	650	606
Travel Distance (mi)	18857	18984	18984	18684	18748	18852
Travel Time (hr)	616.4	625.3	618.9	606.2	607.6	614.9
Total Delay (hr)	150.9	155.4	150.1	146.0	145.9	149.6
Total Stops	17398	18075	17498	17405	17345	17546
Fuel Used (gal)	628.9	635.5	633.2	623.7	626.6	629.6

Interval #0 Information Seeding

Start Time	4:45
End Time	5:00
Total Time (min)	15

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	3619	3634	3559	3538	3447	3549
Vehs Exited	3595	3624	3537	3551	3440	3556
Starting Vehs	599	587	579	614	582	573
Ending Vehs	623	597	601	601	589	588
Travel Distance (mi)	4680	4549	4638	4549	4374	4558
Travel Time (hr)	152.4	150.0	150.3	147.2	142.3	148.5
Total Delay (hr)	37.3	36.7	35.9	35.0	33.5	35.7
Total Stops	4307	4338	4213	4202	4059	4221
Fuel Used (gal)	155.2	151.9	154.1	152.4	145.1	151.7

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	3539	3658	3597	3576	3624	3592
Vehs Exited	3596	3607	3599	3552	3618	3598
Starting Vehs	623	597	601	601	589	588
Ending Vehs	566	648	599	625	595	587
Travel Distance (mi)	4675	4607	4711	4610	4736	4668
Travel Time (hr)	152.7	150.3	152.4	149.8	152.1	151.5
Total Delay (hr)	36.8	36.5	36.3	36.5	35.9	36.4
Total Stops	4247	4333	4225	4267	4293	4273
Fuel Used (gal)	155.2	153.7	156.9	153.6	158.5	155.6

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	3828	3958	3897	3799	3836	3865
Vehs Exited	3730	3926	3808	3759	3821	3807
Starting Vehs	566	648	599	625	595	587
Ending Vehs	664	680	688	665	610	646
Travel Distance (mi)	4851	5077	4896	4739	5018	4916
Travel Time (hr)	160.2	169.0	161.3	154.3	163.8	161.7
Total Delay (hr)	39.9	44.0	39.9	37.2	40.3	40.2
Total Stops	4577	4946	4591	4484	4727	4661
Fuel Used (gal)	162.8	171.1	164.0	157.8	168.7	164.9

Interval #4 Information

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	3499	3590	3607	3671	3581	3583
Vehs Exited	3580	3659	3693	3725	3541	3638
Starting Vehs	664	680	688	665	610	646
Ending Vehs	583	611	602	611	650	606
Travel Distance (mi)	4651	4752	4739	4786	4619	4709
Travel Time (hr)	151.1	155.9	154.9	154.9	149.5	153.3
Total Delay (hr)	36.9	38.2	38.0	37.3	36.2	37.3
Total Stops	4267	4458	4469	4452	4266	4383
Fuel Used (gal)	155.7	158.8	158.2	159.8	154.3	157.4

Intersection: 15: SR58 EB On Ramp/SR58 EB Off Ramp & Main St

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	TR	L	T	T	L	LTR
Maximum Queue (ft)	82	91	57	89	88	24	72
Average Queue (ft)	29	34	26	20	23	2	24
95th Queue (ft)	68	73	52	62	69	14	57
Link Distance (ft)	380	380		360	360		479
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			150			250	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 16: SR58 WB Off Ramp/SR58 WB On Ramp & Main St

Movement	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	T	T	T	T	R	LT
Maximum Queue (ft)	46	68	55	101	85	25	199
Average Queue (ft)	15	20	16	34	41	7	99
95th Queue (ft)	37	50	42	75	75	22	157
Link Distance (ft)		360	360	3108	3108		869
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	150					210	
Storage Blk Time (%)							0
Queuing Penalty (veh)							0

Intersection: 21: Lenwood Rd & I-15 SB Off Ramp

Movement	EB	EB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	L	L	R
Maximum Queue (ft)	127	121	62	62	145	185	67
Average Queue (ft)	102	45	60	56	29	82	4
95th Queue (ft)	143	106	66	77	88	140	38
Link Distance (ft)						1072	1072
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					180		
Storage Blk Time (%)					0	0	
Queuing Penalty (veh)					0	0	

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	T	T	T	T	TR	L	LT	L	R
Maximum Queue (ft)	76	76	76	76	75	180	165	141	178	164	81	102
Average Queue (ft)	64	31	70	49	16	118	92	48	99	82	24	60
95th Queue (ft)	85	76	84	90	55	164	150	100	154	139	59	90
Link Distance (ft)						1586	1586	1586	1060	1060		1467
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280	280									125	
Storage Blk Time (%)												0
Queuing Penalty (veh)												0

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	SB
Directions Served	R
Maximum Queue (ft)	95
Average Queue (ft)	47
95th Queue (ft)	87
Link Distance (ft)	1467
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 27: Lenwood Rd & SR58 EB Off Ramp/SR58 EB On Ramp

Movement	EB	EB	NB	SB	SB
Directions Served	L	TR	TR	L	T
Maximum Queue (ft)	31	46	48	28	39
Average Queue (ft)	4	4	30	9	25
95th Queue (ft)	21	24	40	28	44
Link Distance (ft)	1330	1330	2308		921
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				315	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 28: Lenwood Rd & SR58 WB Ramps

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	36	31	28	31	25	21
Average Queue (ft)	16	23	11	15	17	14
95th Queue (ft)	41	39	31	37	30	22
Link Distance (ft)	369			1381		921
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		420	1000		375	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 35: Barstow Rd & I-15 SB On-Ramp/I-15 SB Off-Ramp

Movement	WB	WB	NB	NB	NB	SB	SB
Directions Served	LT	R	L	T	T	T	T
Maximum Queue (ft)	171	71	220	145	145	196	163
Average Queue (ft)	85	37	129	69	58	119	90
95th Queue (ft)	146	60	197	122	115	172	147
Link Distance (ft)	682	682		584	584	457	457
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			255				
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				

Intersection: 36: Barstow Rd & I-15 NB Ramps

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	T	TR
Maximum Queue (ft)	234	238	94	229	202	262	222
Average Queue (ft)	127	99	58	107	78	125	105
95th Queue (ft)	208	183	99	203	160	237	207
Link Distance (ft)	383	383		217	217	584	584
Upstream Blk Time (%)				1	0		
Queuing Penalty (veh)				5	0		
Storage Bay Dist (ft)			70				
Storage Blk Time (%)			8	12			
Queuing Penalty (veh)			33	10			

Zone Summary

Zone wide Queuing Penalty: 49

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	12458	12558	12525	12494	12500	12510
Vehs Exited	12503	12562	12534	12474	12512	12524
Starting Vehs	513	514	485	481	487	478
Ending Vehs	468	510	476	501	475	471
Travel Distance (mi)	15392	15572	15154	15583	15240	15388
Travel Time (hr)	496.0	501.9	486.0	501.4	493.7	495.8
Total Delay (hr)	115.4	117.8	111.6	118.6	116.1	115.9
Total Stops	14318	14445	14144	14401	14225	14308
Fuel Used (gal)	515.9	522.8	505.8	520.9	510.2	515.1

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	3061	3013	3100	3012	3007	3035
Vehs Exited	3110	3056	3116	3011	3057	3072
Starting Vehs	513	514	485	481	487	478
Ending Vehs	464	471	469	482	437	444
Travel Distance (mi)	3866	3653	3679	3827	3790	3763
Travel Time (hr)	123.2	117.8	118.7	120.3	120.9	120.2
Total Delay (hr)	27.8	27.3	27.6	27.2	27.8	27.5
Total Stops	3539	3449	3449	3431	3455	3463
Fuel Used (gal)	129.5	123.5	122.4	127.4	126.6	125.9

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	3081	3055	3062	3086	3072	3065
Vehs Exited	3110	3013	3061	3063	3056	3060
Starting Vehs	464	471	469	482	437	444
Ending Vehs	435	513	470	505	453	468
Travel Distance (mi)	3891	3672	3694	3796	3776	3766
Travel Time (hr)	124.7	117.5	117.5	123.2	121.7	120.9
Total Delay (hr)	28.8	26.9	26.2	29.4	28.4	28.0
Total Stops	3528	3422	3369	3608	3440	3462
Fuel Used (gal)	130.3	122.7	122.8	126.2	125.9	125.6

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	3272	3309	3245	3281	3397	3298
Vehs Exited	3183	3264	3181	3260	3336	3245
Starting Vehs	435	513	470	505	453	468
Ending Vehs	524	558	534	526	514	523
Travel Distance (mi)	3860	4211	3910	4002	4141	4025
Travel Time (hr)	125.8	135.8	125.9	130.7	136.1	130.9
Total Delay (hr)	30.1	32.4	29.0	31.8	33.6	31.4
Total Stops	3697	3809	3685	3770	3944	3778
Fuel Used (gal)	129.6	140.8	131.1	134.6	138.8	135.0

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	3044	3181	3118	3115	3024	3092
Vehs Exited	3100	3229	3176	3140	3063	3140
Starting Vehs	524	558	534	526	514	523
Ending Vehs	468	510	476	501	475	471
Travel Distance (mi)	3774	4036	3871	3958	3533	3834
Travel Time (hr)	122.3	130.8	124.0	127.2	114.9	123.8
Total Delay (hr)	28.6	31.2	28.7	30.2	26.3	29.0
Total Stops	3554	3765	3641	3592	3386	3589
Fuel Used (gal)	126.5	135.9	129.4	132.8	118.9	128.7

Intersection: 15: SR58 EB On Ramp/SR58 EB Off Ramp & Main St

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	TR	L	T	T	L	LTR
Maximum Queue (ft)	75	86	74	70	75	25	64
Average Queue (ft)	24	27	33	19	19	2	20
95th Queue (ft)	59	65	64	54	57	13	51
Link Distance (ft)	380	380		360	360		479
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			150			250	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 16: SR58 WB Off Ramp/SR58 WB On Ramp & Main St

Movement	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	T	T	T	T	R	LT
Maximum Queue (ft)	37	61	49	77	72	30	166
Average Queue (ft)	12	22	15	24	28	6	79
95th Queue (ft)	33	51	39	61	61	21	133
Link Distance (ft)		360	360	3089	3089		869
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	150					210	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 21: Lenwood Rd & I-15 SB Off Ramp

Movement	EB	EB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	L	L	R
Maximum Queue (ft)	127	112	62	62	47	115	130
Average Queue (ft)	92	33	61	59	11	56	9
95th Queue (ft)	136	90	65	72	35	99	62
Link Distance (ft)						1072	1072
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					180		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	T	T	T	T	TR	L	LT	R	L
Maximum Queue (ft)	70	48	76	68	41	150	149	98	175	173	9	26
Average Queue (ft)	42	5	62	23	3	95	69	31	110	82	0	5
95th Queue (ft)	72	24	87	58	22	138	125	74	161	145	6	20
Link Distance (ft)						1586	1586	1586	1060	1060		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280	280									300	125
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	SB	SB
Directions Served	R	R
Maximum Queue (ft)	81	74
Average Queue (ft)	49	34
95th Queue (ft)	77	67
Link Distance (ft)	1467	1467
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 27: Lenwood Rd & SR58 EB Off Ramp/SR58 EB On Ramp

Movement	EB	EB	NB	SB	SB
Directions Served	L	TR	TR	L	T
Maximum Queue (ft)	31	22	48	27	30
Average Queue (ft)	6	2	27	13	22
95th Queue (ft)	27	20	38	32	43
Link Distance (ft)	1330	1330	2308		921
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				315	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 28: Lenwood Rd & SR58 WB Ramps

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	31	31	27	30	24	20
Average Queue (ft)	8	22	5	11	12	11
95th Queue (ft)	31	40	21	33	28	22
Link Distance (ft)	369			1381		921
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		420	1000		375	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 35: Barstow Rd & I-15 SB On-Ramp/I-15 SB Off-Ramp

Movement	WB	WB	NB	NB	NB	SB	SB
Directions Served	LT	R	L	T	T	T	T
Maximum Queue (ft)	108	58	257	306	110	155	119
Average Queue (ft)	43	30	115	72	38	64	40
95th Queue (ft)	81	54	200	185	89	118	90
Link Distance (ft)	682	682		584	584	457	457
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			255				
Storage Blk Time (%)			2	0			
Queuing Penalty (veh)			6	0			

Intersection: 36: Barstow Rd & I-15 NB Ramps

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	T	TR
Maximum Queue (ft)	302	144	94	237	220	169	155
Average Queue (ft)	161	65	76	134	85	74	62
95th Queue (ft)	253	110	108	235	179	139	125
Link Distance (ft)	383	383		217	217	584	584
Upstream Blk Time (%)	0			2	0		
Queuing Penalty (veh)	0			9	1		
Storage Bay Dist (ft)			70				
Storage Blk Time (%)			25	10			
Queuing Penalty (veh)			93	12			

Zone Summary

Zone wide Queuing Penalty: 121

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	16795	17027	16913	16964	16993	16941
Vehs Exited	16853	17015	16984	16953	16976	16955
Starting Vehs	696	677	724	690	724	694
Ending Vehs	638	689	653	701	741	669
Travel Distance (mi)	20845	21549	21853	21505	21733	21497
Travel Time (hr)	698.2	730.1	727.3	714.6	723.5	718.8
Total Delay (hr)	183.6	198.1	191.6	187.1	191.4	190.4
Total Stops	19953	20944	20339	20271	20427	20378
Fuel Used (gal)	700.9	725.0	733.5	723.5	731.3	722.8

Interval #0 Information Seeding

Start Time	4:45
End Time	5:00
Total Time (min)	15

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	4172	4237	4196	4139	4098	4161
Vehs Exited	4188	4196	4204	4173	4152	4176
Starting Vehs	696	677	724	690	724	694
Ending Vehs	680	718	716	656	670	676
Travel Distance (mi)	5117	5414	5467	5219	5393	5322
Travel Time (hr)	171.2	181.7	180.4	174.7	176.9	177.0
Total Delay (hr)	44.5	48.1	46.8	46.3	45.1	46.1
Total Stops	4898	5212	5059	5025	4920	5018
Fuel Used (gal)	171.9	182.0	182.0	174.7	180.7	178.3

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	4172	4089	4113	4151	4219	4147
Vehs Exited	4171	4123	4102	4120	4256	4150
Starting Vehs	680	718	716	656	670	676
Ending Vehs	681	684	727	687	633	678
Travel Distance (mi)	5231	5105	5208	5254	5330	5226
Travel Time (hr)	173.6	175.0	174.2	172.3	178.2	174.7
Total Delay (hr)	44.4	48.7	45.8	43.2	46.9	45.8
Total Stops	4971	5014	4868	4853	5034	4944
Fuel Used (gal)	174.4	171.8	175.5	176.0	179.5	175.4

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	4336	4473	4452	4459	4415	4418
Vehs Exited	4298	4410	4409	4403	4304	4366
Starting Vehs	681	684	727	687	633	678
Ending Vehs	719	747	770	743	744	725
Travel Distance (mi)	5334	5673	5755	5622	5595	5596
Travel Time (hr)	181.6	195.0	193.0	189.3	186.6	189.1
Total Delay (hr)	49.9	54.7	52.4	51.6	50.5	51.8
Total Stops	5271	5596	5446	5403	5371	5415
Fuel Used (gal)	181.4	191.4	194.2	189.8	188.8	189.1

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	4115	4228	4152	4215	4261	4199
Vehs Exited	4196	4286	4269	4257	4264	4256
Starting Vehs	719	747	770	743	744	725
Ending Vehs	638	689	653	701	741	669
Travel Distance (mi)	5164	5356	5423	5409	5415	5353
Travel Time (hr)	171.9	178.4	179.7	178.3	181.8	178.0
Total Delay (hr)	44.8	46.5	46.5	46.1	49.0	46.6
Total Stops	4813	5122	4966	4990	5102	4993
Fuel Used (gal)	173.2	179.8	181.9	183.0	182.3	180.0

Intersection: 15: SR58 EB On Ramp/SR58 EB Off Ramp & Main St

Movement	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	TR	L	T	T	L	LT	R
Maximum Queue (ft)	82	97	61	94	112	15	76	20
Average Queue (ft)	35	40	25	22	26	1	29	1
95th Queue (ft)	74	80	53	68	73	9	61	15
Link Distance (ft)	380	380		360	360		479	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			150			200		75
Storage Blk Time (%)				0			1	
Queuing Penalty (veh)				0			0	

Intersection: 16: SR58 WB Off Ramp/SR58 WB On Ramp & Main St

Movement	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	T	T	T	T	R	LT
Maximum Queue (ft)	48	64	42	90	82	35	178
Average Queue (ft)	15	21	17	33	39	8	97
95th Queue (ft)	36	52	38	71	73	25	153
Link Distance (ft)		360	360	3108	3108		869
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	150					210	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 21: Lenwood Rd & I-15 SB Off Ramp

Movement	EB	EB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	L	L	R
Maximum Queue (ft)	127	127	62	62	174	197	157
Average Queue (ft)	116	75	62	60	43	96	17
95th Queue (ft)	145	140	64	68	115	159	97
Link Distance (ft)						1072	1072
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					180		
Storage Blk Time (%)					0	0	
Queuing Penalty (veh)					0	0	

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	T	T	T	T	TR	L	LT	L	R
Maximum Queue (ft)	76	76	76	76	76	189	175	150	201	171	88	124
Average Queue (ft)	70	51	69	52	25	132	114	70	107	89	30	65
95th Queue (ft)	83	95	90	95	72	176	170	127	162	142	69	101
Link Distance (ft)						1586	1586	1586	1060	1060		1467
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280	280									125	
Storage Blk Time (%)											0	0
Queuing Penalty (veh)											0	0

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	SB
Directions Served	R
Maximum Queue (ft)	101
Average Queue (ft)	53
95th Queue (ft)	88
Link Distance (ft)	1467
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 27: Lenwood Rd & SR58 EB Off Ramp/SR58 EB On Ramp

Movement	EB	EB	NB	SB	SB
Directions Served	L	TR	TR	L	T
Maximum Queue (ft)	35	58	48	28	30
Average Queue (ft)	8	6	30	11	23
95th Queue (ft)	31	35	43	30	44
Link Distance (ft)	1330	1330	2308		921
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				315	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 28: Lenwood Rd & SR58 WB Ramps

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	40	40	27	31	25	20
Average Queue (ft)	24	21	11	20	17	13
95th Queue (ft)	45	42	31	41	31	22
Link Distance (ft)	369			1381		921
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		420	1000		375	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 35: Barstow Rd & I-15 SB On-Ramp/I-15 SB Off-Ramp

Movement	WB	WB	NB	NB	NB	SB	SB
Directions Served	LT	R	L	T	T	T	T
Maximum Queue (ft)	193	73	260	222	145	231	202
Average Queue (ft)	92	39	155	89	69	134	106
95th Queue (ft)	156	65	236	166	127	195	171
Link Distance (ft)	682	682		584	584	457	457
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			255				
Storage Blk Time (%)			1	0			
Queuing Penalty (veh)			2	0			

Intersection: 36: Barstow Rd & I-15 NB Ramps

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	T	TR
Maximum Queue (ft)	235	295	94	231	228	359	340
Average Queue (ft)	122	138	69	159	109	186	162
95th Queue (ft)	199	250	108	251	202	334	302
Link Distance (ft)	383	383		217	217	584	584
Upstream Blk Time (%)				3	0		
Queuing Penalty (veh)				14	1		
Storage Bay Dist (ft)			70				
Storage Blk Time (%)			21	17			
Queuing Penalty (veh)			99	18			

Zone Summary

Zone wide Queuing Penalty: 135

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	17519	17489	17574	17565	17519	17530
Vehs Exited	17594	17517	17536	17576	17482	17542
Starting Vehs	668	713	610	666	631	649
Ending Vehs	593	685	648	655	668	640
Travel Distance (mi)	19806	19880	20029	19812	19787	19863
Travel Time (hr)	683.1	675.7	677.5	674.1	679.8	678.1
Total Delay (hr)	191.9	184.5	181.9	181.7	188.7	185.7
Total Stops	19666	19297	19553	19461	19497	19485
Fuel Used (gal)	671.0	670.3	675.2	669.2	667.2	670.6

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	4348	4308	4312	4231	4230	4280
Vehs Exited	4375	4409	4281	4253	4238	4316
Starting Vehs	668	713	610	666	631	649
Ending Vehs	641	612	641	644	623	620
Travel Distance (mi)	4888	4929	4870	4757	4841	4857
Travel Time (hr)	165.3	164.4	163.6	160.8	163.7	163.5
Total Delay (hr)	43.3	43.0	42.8	42.3	43.9	43.1
Total Stops	4929	4656	4766	4682	4652	4739
Fuel Used (gal)	165.5	166.7	164.3	160.2	161.6	163.7

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	4339	4245	4293	4314	4285	4295
Vehs Exited	4316	4191	4280	4284	4277	4270
Starting Vehs	641	612	641	644	623	620
Ending Vehs	664	666	654	674	631	645
Travel Distance (mi)	4856	4860	4980	4790	4773	4852
Travel Time (hr)	163.5	163.5	164.7	161.8	161.8	163.1
Total Delay (hr)	43.2	43.4	42.5	42.6	43.1	43.0
Total Stops	4797	4597	4626	4643	4772	4681
Fuel Used (gal)	162.8	163.0	166.5	161.6	159.7	162.7

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	4625	4619	4591	4685	4705	4640
Vehs Exited	4530	4556	4542	4653	4638	4591
Starting Vehs	664	666	654	674	631	645
Ending Vehs	759	729	703	706	698	700
Travel Distance (mi)	5216	5192	5159	5222	5435	5245
Travel Time (hr)	183.7	178.4	176.1	181.7	186.6	181.3
Total Delay (hr)	55.0	50.4	47.9	51.6	51.9	51.4
Total Stops	5091	5194	5149	5374	5268	5208
Fuel Used (gal)	177.2	175.0	173.7	177.3	183.8	177.4

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	4207	4317	4378	4335	4299	4303
Vehs Exited	4373	4361	4433	4386	4329	4375
Starting Vehs	759	729	703	706	698	700
Ending Vehs	593	685	648	655	668	640
Travel Distance (mi)	4846	4899	5020	5042	4737	4909
Travel Time (hr)	170.7	169.5	173.1	169.9	167.8	170.2
Total Delay (hr)	50.4	47.7	48.7	45.2	49.7	48.3
Total Stops	4849	4850	5012	4762	4805	4859
Fuel Used (gal)	165.7	165.6	170.6	170.0	162.1	166.8

Intersection: 15: SR58 EB On Ramp/SR58 EB Off Ramp & Main St

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	TR	L	T	T	L	LTR
Maximum Queue (ft)	73	102	103	79	90	20	77
Average Queue (ft)	30	33	42	20	24	2	30
95th Queue (ft)	65	71	79	59	67	12	63
Link Distance (ft)	380	380		360	360		479
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			150			250	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 16: SR58 WB Off Ramp/SR58 WB On Ramp & Main St

Movement	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	T	T	T	T	R	LT
Maximum Queue (ft)	45	83	73	81	92	35	166
Average Queue (ft)	13	24	17	26	34	9	84
95th Queue (ft)	35	56	44	62	70	26	139
Link Distance (ft)		360	360	3095	3095		869
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	150					210	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 21: Lenwood Rd & I-15 SB Off Ramp

Movement	EB	EB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	L	L	R
Maximum Queue (ft)	127	127	62	62	71	130	173
Average Queue (ft)	121	85	62	62	17	66	32
95th Queue (ft)	139	147	64	64	50	110	130
Link Distance (ft)						1072	1072
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					180		
Storage Blk Time (%)						0	
Queuing Penalty (veh)						0	

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	T	T	T	T	TR	L	LT	R	L
Maximum Queue (ft)	74	62	76	76	76	179	165	126	322	310	86	31
Average Queue (ft)	54	11	69	44	13	124	101	48	176	158	12	7
95th Queue (ft)	81	41	83	85	48	168	156	96	289	283	113	26
Link Distance (ft)						1586	1586	1586	1060	1060		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280	280									300	125
Storage Blk Time (%)										2	0	
Queuing Penalty (veh)										6	0	

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	SB	SB
Directions Served	R	R
Maximum Queue (ft)	111	102
Average Queue (ft)	60	49
95th Queue (ft)	94	85
Link Distance (ft)	1467	1467
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 27: Lenwood Rd & SR58 EB Off Ramp/SR58 EB On Ramp

Movement	EB	EB	NB	SB	SB
Directions Served	L	TR	TR	L	T
Maximum Queue (ft)	31	22	47	28	35
Average Queue (ft)	10	1	28	16	25
95th Queue (ft)	33	11	37	35	44
Link Distance (ft)	1330	1330	2308		921
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				315	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 28: Lenwood Rd & SR58 WB Ramps

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	35	31	26	31	25	20
Average Queue (ft)	16	24	5	16	12	13
95th Queue (ft)	42	39	22	38	28	23
Link Distance (ft)	369			1381		921
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		420	1000		375	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 35: Barstow Rd & I-15 SB On-Ramp/I-15 SB Off-Ramp

Movement	WB	WB	NB	NB	NB	SB	SB
Directions Served	LT	R	L	T	T	T	T
Maximum Queue (ft)	127	61	271	282	195	170	138
Average Queue (ft)	61	28	149	91	54	93	71
95th Queue (ft)	108	53	236	212	134	151	128
Link Distance (ft)	1482	1482		584	584	455	455
Upstream Blk Time (%)				0			
Queuing Penalty (veh)				0			
Storage Bay Dist (ft)			255				
Storage Blk Time (%)			2	0			
Queuing Penalty (veh)			7	0			

Intersection: 36: Barstow Rd & I-15 NB Ramps

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	T	TR
Maximum Queue (ft)	288	202	95	240	234	203	180
Average Queue (ft)	169	96	87	204	149	107	90
95th Queue (ft)	267	169	108	271	249	180	163
Link Distance (ft)	1456	1456		217	217	584	584
Upstream Blk Time (%)				15	1		
Queuing Penalty (veh)				83	7		
Storage Bay Dist (ft)			70				
Storage Blk Time (%)			47	15			
Queuing Penalty (veh)			237	28			

Zone Summary

Zone wide Queuing Penalty: 368

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	23288	23497	23534	23603	23437	23470
Vehs Exited	22986	23289	23348	23308	23196	23223
Starting Vehs	1058	1182	1093	1068	1088	1089
Ending Vehs	1360	1390	1279	1363	1329	1337
Travel Distance (mi)	27800	27271	27788	27447	27736	27608
Travel Time (hr)	1570.8	1676.9	1573.7	1293.9	1540.3	1531.1
Total Delay (hr)	897.1	1012.3	897.4	623.9	865.3	859.2
Total Stops	29912	30600	31048	31589	30584	30746
Fuel Used (gal)	1072.6	1080.2	1071.7	1000.3	1060.4	1057.0

Interval #0 Information Seeding

Start Time	4:45
End Time	5:00
Total Time (min)	15

No data recorded this interval.

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	5787	5862	5929	5753	5779	5808
Vehs Exited	5707	5825	5797	5738	5684	5749
Starting Vehs	1058	1182	1093	1068	1088	1089
Ending Vehs	1138	1219	1225	1083	1183	1163
Travel Distance (mi)	6743	6827	6960	6706	6878	6823
Travel Time (hr)	295.7	322.9	301.2	269.9	305.4	299.0
Total Delay (hr)	130.9	156.3	131.5	106.2	137.3	132.4
Total Stops	7366	7764	7774	7445	7634	7599
Fuel Used (gal)	240.8	247.9	246.1	234.4	244.9	242.8

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	5767	5637	5731	5791	5696	5724
Vehs Exited	5703	5610	5701	5730	5735	5693
Starting Vehs	1138	1219	1225	1083	1183	1163
Ending Vehs	1202	1246	1255	1144	1144	1185
Travel Distance (mi)	6825	6481	6827	6707	6821	6732
Travel Time (hr)	340.2	374.1	352.4	283.1	357.4	341.4
Total Delay (hr)	174.8	216.0	186.1	119.2	191.7	177.6
Total Stops	7297	7195	7611	7463	7192	7355
Fuel Used (gal)	253.5	251.4	256.1	236.3	255.1	250.5

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	6042	6153	6095	6277	6177	6152
Vehs Exited	5875	5956	5990	6074	5968	5966
Starting Vehs	1202	1246	1255	1144	1144	1185
Ending Vehs	1369	1443	1360	1347	1353	1358
Travel Distance (mi)	7113	7160	7202	7209	7107	7158
Travel Time (hr)	431.1	465.5	430.2	340.2	417.7	417.0
Total Delay (hr)	259.2	291.7	255.5	164.2	244.8	243.1
Total Stops	7868	7992	8043	8394	8124	8082
Fuel Used (gal)	281.8	289.1	284.1	263.7	278.5	279.4

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	5692	5845	5779	5782	5785	5783
Vehs Exited	5701	5898	5860	5766	5809	5802
Starting Vehs	1369	1443	1360	1347	1353	1358
Ending Vehs	1360	1390	1279	1363	1329	1337
Travel Distance (mi)	7119	6803	6800	6825	6930	6895
Travel Time (hr)	503.8	514.4	490.0	400.7	459.8	473.8
Total Delay (hr)	332.2	348.4	324.3	234.2	291.5	306.1
Total Stops	7381	7649	7620	8287	7634	7714
Fuel Used (gal)	296.5	291.8	285.4	266.0	281.9	284.3

Intersection: 15: SR58 EB On Ramp/SR58 EB Off Ramp & Main St

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	TR	L	T	T	L	LTR
Maximum Queue (ft)	97	119	79	99	104	25	84
Average Queue (ft)	32	44	31	28	32	2	42
95th Queue (ft)	75	89	63	74	86	14	77
Link Distance (ft)	380	380		360	360		479
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			150			250	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 16: SR58 WB Off Ramp/SR58 WB On Ramp & Main St

Movement	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	T	T	T	T	R	LT
Maximum Queue (ft)	44	89	71	103	100	39	184
Average Queue (ft)	14	30	28	45	52	12	102
95th Queue (ft)	36	69	56	88	95	33	159
Link Distance (ft)		360	360	3113	3113		869
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	150					210	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 21: Lenwood Rd & I-15 SB Off Ramp

Movement	EB	EB	WB	WB	SB	SB	SB
Directions Served	T	T	T	T	L	L	R
Maximum Queue (ft)	127	127	62	62	204	311	285
Average Queue (ft)	127	116	62	62	86	140	94
95th Queue (ft)	131	157	64	64	179	230	248
Link Distance (ft)						1072	1072
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					180		
Storage Blk Time (%)					0	1	
Queuing Penalty (veh)					0	3	

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	T	T	T	T	TR	L	LT	R	L
Maximum Queue (ft)	76	76	61	61	61	247	248	239	376	391	260	149
Average Queue (ft)	75	74	17	14	9	171	160	131	230	224	63	41
95th Queue (ft)	79	88	68	60	47	226	222	206	389	405	270	100
Link Distance (ft)						1586	1586	1586	1060	1060		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280	280									300	125
Storage Blk Time (%)										7	0	0
Queuing Penalty (veh)										22	0	0

Intersection: 22: I-15 NB Off Ramp/High Point Pkwy & Lenwood Rd

Movement	SB	SB
Directions Served	R	R
Maximum Queue (ft)	179	159
Average Queue (ft)	95	86
95th Queue (ft)	154	142
Link Distance (ft)	1467	1467
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)	3	
Queuing Penalty (veh)	2	

Intersection: 27: Lenwood Rd & SR58 EB Off Ramp/SR58 EB On Ramp

Movement	EB	EB	NB	SB	SB
Directions Served	L	TR	TR	L	T
Maximum Queue (ft)	31	55	49	27	35
Average Queue (ft)	10	14	29	11	26
95th Queue (ft)	34	42	41	31	43
Link Distance (ft)	1330	1330	2308		921
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				315	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 28: Lenwood Rd & SR58 WB Ramps

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	50	31	27	31	25	21
Average Queue (ft)	29	22	9	23	18	14
95th Queue (ft)	48	40	29	41	31	23
Link Distance (ft)	369			1381		921
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		420	1000		375	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 35: Barstow Rd & I-15 SB On-Ramp/I-15 SB Off-Ramp

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LT	R	L	T	T	T	T	R
Maximum Queue (ft)	420	132	280	588	474	479	499	280
Average Queue (ft)	219	45	263	331	135	438	441	242
95th Queue (ft)	345	95	312	624	306	559	573	400
Link Distance (ft)	1482	1482		584	584	455	455	
Upstream Blk Time (%)				1	0	42	48	
Queuing Penalty (veh)				5	0	212	243	
Storage Bay Dist (ft)			255					255
Storage Blk Time (%)			23	0			74	1
Queuing Penalty (veh)			103	1			267	2

Intersection: 36: Barstow Rd & I-15 NB Ramps

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	T	TR
Maximum Queue (ft)	458	704	95	242	240	609	627
Average Queue (ft)	151	357	76	185	130	584	573
95th Queue (ft)	295	642	115	286	255	643	659
Link Distance (ft)	1456	1456		217	217	584	584
Upstream Blk Time (%)				7	1	26	14
Queuing Penalty (veh)				48	10	142	75
Storage Bay Dist (ft)			70				
Storage Blk Time (%)			23	18			
Queuing Penalty (veh)			149	31			

Zone Summary

Zone wide Queuing Penalty: 1315

Arterial Level of Service: EB Lenwood Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed	Run 1 Speed	Run 1 Delay
Love's Travel Stop D	17	0.8	10.1	0.1	38	38	0.8
High Desert Rd	18	1.1	11.2	0.1	37	38	1.0
Truck Frieghtliner S	19	3.2	12.5	0.1	29	31	2.4
Truckstop Driveway	20	24.0	28.5	0.0	6	6	22.9
I-15 SB Off Ramp	21	16.5	19.2	0.1	11	12	16.4
Total		45.6	81.5	0.4	19	20	43.4

Arterial Level of Service: EB Lenwood Rd

Cross Street	Run 2 Speed	Run 2 Delay	Run 3 Speed	Run 3 Delay	Run 4 Speed	Run 4 Delay	Run 5 Speed
Love's Travel Stop D	38	0.7	38	0.7	38	0.7	37
High Desert Rd	37	1.2	38	1.1	37	1.1	37
Truck Frieghtliner S	28	3.9	30	3.0	28	3.5	29
Truckstop Driveway	6	25.8	6	23.2	6	24.3	6
I-15 SB Off Ramp	12	16.4	11	16.9	12	15.9	11
Total	19	48.0	19	44.9	19	45.6	19

Arterial Level of Service: NB Lenwood Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed	Run 1 Speed	Run 1 Delay
I-15 SB Off Ramp	21	10.9	19.2	0.0	9	10	10.2
Commerce Pkwy	20	22.5	32.4	0.1	9	9	24.2
Chevron Driveway	19	4.0	8.3	0.0	20	20	4.1
	18	4.6	13.7	0.1	26	26	4.8
Truck Repair Drivewa	17	2.9	13.4	0.1	31	30	3.3
Total		44.9	87.0	0.4	18	17	46.5

Arterial Level of Service: NB Lenwood Rd

Cross Street	Run 2 Speed	Run 2 Delay	Run 3 Speed	Run 3 Delay	Run 4 Speed	Run 4 Delay	Run 5 Speed
I-15 SB Off Ramp	9	10.4	9	11.2	9	10.9	8
Commerce Pkwy	9	23.4	9	22.1	10	20.4	9
Chevron Driveway	20	4.1	20	4.0	20	3.8	20
	27	4.4	27	4.5	26	4.7	26
Truck Repair Drivewa	32	2.7	32	2.5	31	2.8	31
Total	18	45.0	18	44.2	18	42.6	17

Arterial Level of Service: EB Lenwood Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed	Run 1 Speed	Run 1 Delay
Love's Travel Stop D	17	0.9	10.4	0.1	37	37	0.9
High Desert Rd	18	1.6	11.8	0.1	35	35	1.6
Truck Frieghtliner S	19	10.6	19.9	0.1	18	22	7.4
Truckstop Driveway	20	27.9	33.6	0.0	5	6	26.1
I-15 SB Off Ramp	21	15.6	19.1	0.1	12	12	15.6
Total		56.8	94.9	0.4	17	18	51.6

Arterial Level of Service: EB Lenwood Rd

Cross Street	Run 2 Speed	Run 2 Delay	Run 3 Speed	Run 3 Delay	Run 4 Speed	Run 4 Delay	Run 5 Speed
Love's Travel Stop D	37	1.0	37	0.9	37	0.9	37
High Desert Rd	36	1.5	36	1.6	35	1.6	35
Truck Frieghtliner S	17	12.3	19	10.2	19	9.6	16
Truckstop Driveway	5	28.5	5	27.6	5	27.7	5
I-15 SB Off Ramp	12	15.0	12	15.2	12	15.2	11
Total	17	58.3	17	55.5	17	55.0	16

Arterial Level of Service: NB Lenwood Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed	Run 1 Speed	Run 1 Delay
I-15 SB Off Ramp	21	10.2	18.6	0.0	10	10	10.1
Commerce Pkwy	20	21.5	35.1	0.1	9	10	21.0
Chevron Driveway	19	4.1	8.4	0.0	20	20	4.1
	18	4.7	13.5	0.1	27	26	4.9
Truck Repair Drivewa	17	3.7	13.9	0.1	30	30	3.8
Total		44.1	89.6	0.4	18	18	43.9

Arterial Level of Service: NB Lenwood Rd

Cross Street	Run 2 Speed	Run 2 Delay	Run 3 Speed	Run 3 Delay	Run 4 Speed	Run 4 Delay	Run 5 Speed
I-15 SB Off Ramp	10	10.2	10	10.2	10	9.8	9
Commerce Pkwy	10	21.3	9	21.6	9	21.7	9
Chevron Driveway	20	4.1	21	3.8	20	4.2	20
	28	4.3	27	4.5	26	5.0	27
Truck Repair Drivewa	31	3.6	30	4.2	31	3.2	30
Total	18	43.5	18	44.4	18	44.0	18

Arterial Level of Service: EB Lenwood Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed	Run 1 Speed	Run 1 Delay
Love's Travel Stop D	17	3.6	13.0	0.1	29	32	2.6
High Desert Rd	18	6.8	17.0	0.1	25	25	6.6
Truck Frieghtliner S	19	17.8	27.0	0.1	13	13	17.7
Truckstop Driveway	20	8.7	12.8	0.0	13	15	7.3
I-15 SB Off Ramp	21	16.6	19.2	0.1	11	11	16.5
Total		53.4	88.9	0.4	17	18	50.7

Arterial Level of Service: EB Lenwood Rd

Cross Street	Run 2 Speed	Run 2 Delay	Run 3 Speed	Run 3 Delay	Run 4 Speed	Run 4 Delay	Run 5 Speed
Love's Travel Stop D	28	4.1	31	3.0	25	5.8	33
High Desert Rd	24	7.1	24	7.3	25	6.4	25
Truck Frieghtliner S	14	15.9	13	18.7	13	19.2	14
Truckstop Driveway	12	9.7	13	9.2	13	8.7	13
I-15 SB Off Ramp	12	16.5	11	16.7	11	17.1	12
Total	18	53.2	17	54.9	17	57.2	18

Arterial Level of Service: NB Lenwood Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed	Run 1 Speed	Run 1 Delay
I-15 SB Off Ramp	21	11.0	19.5	0.0	9	10	10.1
Commerce Pkwy	20	16.4	24.9	0.1	12	12	16.6
Chevron Driveway	19	6.2	10.6	0.0	16	14	7.8
	18	10.1	19.2	0.1	19	15	14.3
Truck Repair Drivewa	17	6.1	16.6	0.1	25	21	9.1
Total		49.8	90.6	0.4	17	15	57.9

Arterial Level of Service: NB Lenwood Rd

Cross Street	Run 2 Speed	Run 2 Delay	Run 3 Speed	Run 3 Delay	Run 4 Speed	Run 4 Delay	Run 5 Speed
I-15 SB Off Ramp	9	11.2	9	11.0	9	11.5	9
Commerce Pkwy	12	16.0	12	16.0	11	17.7	12
Chevron Driveway	17	5.5	16	6.1	16	5.8	17
	22	7.8	19	10.0	19	10.0	21
Truck Repair Drivewa	28	4.3	28	4.3	22	8.5	29
Total	18	44.8	17	47.4	16	53.6	18

Arterial Level of Service: EB Lenwood Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed	Run 1 Speed	Run 1 Delay
Love's Travel Stop D	17	6.1	15.6	0.1	25	25	5.9
High Desert Rd	18	8.7	18.9	0.1	22	25	6.7
Truck Frieghtliner S	19	20.4	29.5	0.1	12	13	18.3
Truckstop Driveway	20	7.8	12.0	0.0	14	15	6.8
I-15 SB Off Ramp	21	15.7	19.2	0.1	12	12	15.1
Total		58.8	95.2	0.4	16	18	52.7

Arterial Level of Service: EB Lenwood Rd

Cross Street	Run 2 Speed	Run 2 Delay	Run 3 Speed	Run 3 Delay	Run 4 Speed	Run 4 Delay	Run 5 Speed
Love's Travel Stop D	24	6.2	24	6.2	27	4.9	23
High Desert Rd	22	8.7	21	9.8	21	9.7	22
Truck Frieghtliner S	12	21.1	12	22.0	12	21.4	13
Truckstop Driveway	14	7.8	14	8.0	14	8.1	13
I-15 SB Off Ramp	12	16.1	12	16.0	12	15.6	12
Total	16	59.9	16	62.0	16	59.7	16

Arterial Level of Service: NB Lenwood Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed	Run 1 Speed	Run 1 Delay
I-15 SB Off Ramp	21	10.4	18.4	0.0	9	9	10.6
Commerce Pkwy	20	16.1	27.6	0.1	12	13	15.5
Chevron Driveway	19	6.7	11.2	0.0	15	16	6.0
	18	9.1	18.0	0.1	20	24	6.2
Truck Repair Drivewa	17	8.0	18.7	0.1	23	27	5.5
Total		50.3	94.0	0.4	17	18	43.8

Arterial Level of Service: NB Lenwood Rd

Cross Street	Run 2 Speed	Run 2 Delay	Run 3 Speed	Run 3 Delay	Run 4 Speed	Run 4 Delay	Run 5 Speed
I-15 SB Off Ramp	9	10.5	10	10.3	10	9.9	9
Commerce Pkwy	13	15.5	12	15.6	12	16.7	12
Chevron Driveway	16	6.0	14	7.4	15	7.2	16
	22	7.7	17	12.1	18	10.7	21
Truck Repair Drivewa	25	6.8	18	12.6	23	8.2	25
Total	18	46.6	15	58.0	16	52.8	17

Appendix H: Detailed Trip Generation

Opening Year 2028 BIG Trip Generation

Land Use	User	Daily Trip Rate	Unit	Size	Unit	Source	ADT	AM Peak Hour					PM Peak Hour				
								% Of ADT	In:Out Ratio	In	Out	Total	% Of ADT	In:Out Ratio	In	Out	Total
Transload Warehouse Center	Passenger Cars	1.18	/KSF	5,900	KSF	ITE LUC 154 [1]	6,962	5.1%	86% : 14%	306	48	354	7.6%	26% : 74%	137	394	531
21,000	Trucks	3.00	/Container	65	Containers/Day	BNSF [2]	195	9.1%	49% : 51%	9	9	18	4.5%	47% : 53%	4	5	9
revenue containers per year	Total						7,157			315	57	372			141	399	540
365	Truck PCE	2.5	PCE				488			23	23	45			10	13	23
working days per year	**Total PCE**						**7,450**			**329**	**71**	**399**			**147**	**407**	**554**
Rail Yard	Passenger Cars	2.50	/Employee	706	Employees/Day	BNSF [3]	1,765	15.0%	50% : 50%	133	132	265	15.0%	50% : 50%	133	132	265
43,000	IMF Trucks	3.00	/Container	133	Containers/Day	BNSF [4]	399	5.0%	60% : 40%	12	8	20	4.0%	60% : 40%	10	6	16
revenue containers per year	Total						2,164			145	140	285			143	138	281
365	Truck PCE	2.5	PCE				998			30	20	50			25	15	40
working days per year	**Total PCE**						**2,763**			**163**	**152**	**315**			**158**	**147**	**305**
Passenger Cars Total							8,727			439	180	619			270	526	796
Truck Total (PCE)							1,486			53	43	95			35	28	63
Total (PCE)							**10,213**			**492**	**223**	**714**			**305**	**554**	**859**

Interim Year 2033 BIG Trip Generation

Land Use	User	Daily Trip Rate	Unit	Size	Unit	Source	ADT	AM Peak Hour					PM Peak Hour				
								% Of ADT	In:Out Ratio	In	Out	Total	% Of ADT	In:Out Ratio	In	Out	Total
Transload Warehouse Center	Passenger Cars	1.18	/KSF	7,800	KSF	ITE LUC 154 [1]	9,204	5.1%	86% : 14%	404	64	468	7.6%	26% : 74%	182	520	702
27,800	Trucks	3.00	/Container	86	Containers/Day	BNSF [2]	258	9.1%	49% : 51%	11	12	23	4.5%	47% : 53%	6	6	12
revenue containers per year	Total						9,462			415	76	491			188	526	714
365	Truck PCE	2.5	PCE				645			28	30	58			15	15	30
working days per Year	**Total PCE**						**9,849**			**432**	**94**	**526**			**197**	**535**	**732**
Rail Yard	Passenger Cars	2.50	/Employee	834	Employees/Day	BNSF [3]	2,085	15.0%	50% : 50%	157	156	313	15.0%	50% : 50%	157	156	313
53,400	IMF Trucks	3.00	/Container	165	Containers/Day	BNSF [4]	495	5.0%	60% : 40%	15	10	25	4.0%	60% : 40%	12	8	20
revenue containers per year	Total						2,580			172	166	338			169	164	333
365	Truck PCE	2.5	PCE				1,238			38	25	63			30	20	50
working days per Year	**Total PCE**						**3,323**			**195**	**181**	**376**			**187**	**176**	**363**
Passenger Cars Total							**11,289**			**561**	**220**	**781**			**339**	**676**	**1,015**
Truck Total (PCE)							**1,883**			**66**	**55**	**121**			**45**	**35**	**80**
Total (PCE)							**13,172**			**627**	**275**	**902**			**384**	**711**	**1,095**

Horizon Year 2048 BIG Trip Generation

Land Use	User	Daily Trip Rate	Unit	Size	Unit	Source	ADT	AM Peak Hour					PM Peak Hour				
								% Of ADT	In:Out Ratio	In	Out	Total	% Of ADT	In:Out Ratio	In	Out	Total
Transload Warehouse Center	Passenger Cars	1.18	/KSF	9,000	KSF	ITE LUC 154 [1]	10,620	5.1%	86% : 14%	466	74	540	7.6%	26% : 74%	210	600	810
32,200	Trucks	3.00	/Container	100	Containers/Day	BNSF [2]	299	9.1%	49% : 51%	13	14	27	4.5%	47% : 53%	7	7	14
revenue containers per year	Total						10,919			479	88	567			217	607	824
365	Truck PCE	2.5	PCE				748			33	35	68			18	18	35
working days per year	**Total PCE**						**11,368**			**499**	**109**	**608**			**228**	**618**	**845**
Rail Yard	Passenger Cars	2.50	/Employee	930	Employees/Day	BNSF [3]	2,325	15.0%	50% : 50%	175	174	349	15.0%	50% : 50%	175	174	349
67,900	IMF Trucks	3.00	/Container	210	Containers/Day	BNSF [4]	630	5.0%	60% : 40%	19	13	32	4.0%	60% : 40%	15	10	25
revenue containers per year	Total						2,955			194	187	381			190	184	374
365	Truck PCE	2.5	PCE				1,575			48	33	80			38	25	63
working days per year	**Total PCE**						**3,900**			**223**	**207**	**429**			**213**	**199**	**412**
Passenger Cars Total							12,945			641	248	889			385	774	1,159
Truck Total (PCE)							2,323			81	68	148			56	43	98
Total (PCE)							**15,268**			**722**	**316**	**1,037**			**441**	**817**	**1,257**

Notes:

1. Transload Employee Trips:
   - -Transload employee trips (passenger vehicle trips) are calculated using the average trip generation rates from ITE Land Use Code 154 (High-Cube Transload and Short-Term Storage Warehouse).
   - -The transload warehouse center is planned to be fully constructed in Opening Year 2028; however, the buildings would not be fully occupied until Horizon Year 2048. The transload warehouse center is forecast to be approximately 65% occupied in Opening Year 2028, 87% occupied in Interim Year 2033, and 100% occupied in Horizon Year 2048. The building square footage reflects the forecast occupancy rates.
   - -The daily trip generation rate for employees is calculated as the average daily trip generation rate for all vehicles (1.40) minus the average daily trip generation rate for trucks (0.18).
   - -The percent of passenger vehicle trips generated during the peak hours of adjacent street traffic is based on the peak hour trip generation rate for all vehicles minus the peak hour trip generation rate for trucks, divided by the daily employee trip generation rate.
2. Transload Truck Trips:
   - -Assume containers are spread evenly throughout the year, then apply a 13% surplus to the daily containers to account for potential surges (based on data from other southern California IMFs provided by BNSF on 12/02/2022).
   - -Assume 3 truck trips per container to account for balancing empties - about 50% of trucks will leave with a container after they drop off a container (based on customer data provided by BNSF on 6/29/2023).
   - -Truck trips shown reflect 20'/40' international containers going to/from the Ports and transload warehouses via heavy-duty trucks and 53' domestic containers going to/from the Inland Empire and the transload warehouses via heavy-duty trucks. The majority of containers processed at the transload warehouses arrive via shorthaul trains and will be transported to/from the transload warehouses via electric hostler trucks on private roads connecting the IMF and transload warehouses. The electric hostler truck trips associated with the transload warehouses are not included in the trip generation noted above.
3. Rail Yard Employee Trips:
   - -Trip generation rate of 2.5 trips/employee includes one trip in, one trip out, and a small number of additional trips for appointments, lunch out, etc.. Most employees are anticipated to stay on-site for their full shift.
   - -Daily employee count includes IMF, blockswap, and other railyard activities (train crews, maintenance employees, electric hostler drivers, shuttles etc.), along with an additional buffer for related business activities.
   - -The railyard operation and intermodal facility at BIG will be a 24 hours per day, 7 days per week operation, and will therefore require a continuous occupancy of employees to maintain productivity.
   - -In general operations, employees rotate operational functions over three, 8-hour shifts in a 24 hour period. While exact start times are subject to local and system craft agreements, production demand and employee availability, it is to be expected that the individual employee shift start times will mimic the following pattern: 1st shift start between 0600-0800, 2nd shift start between 1400-1600 and 3rd shift start between 2200-2359.
   - -Based on traffic counts in the study area, the AM peak hour ranges from 7 to 9 am, with the western portion of Barstow typically having a peak hour of 7:30-8:30 am and the eastern portion 8-9 am. The PM peak hour generally ranges from 4-6 pm.
   - -The analysis assumes approximately half of the 1st shift changes would occur in the am peak hour and half of the 2nd shift changes would occur in the pm peak hour, along with a small percentage of other miscellaneous trips.
4. Rail Yard Truck Trips (to IMF):
   - -Assume containers are spread evenly throughout the year, then apply a 13% surplus to the daily containers to account for potential surges (based on data from other southern California IMFs provided by BNSF on 12/02/2022).
   - -Assume 3 truck trips per container to account for balancing empties - about 50% of trucks will leave with a container after they drop off a container (based on customer data provided by BNSF on 6/29/2023).
   - -Truck trips shown reflect a small portion of the Rail Yard (IMF) that will operate like a traditional IMF, accepting containers from heavy-duty trucks. The majority of the IMF will be served via shorthaul trains and electric hostler trucks that will transport containers to/from the IMF. The electric hostler truck trips are not included in the Rail Yard trip generation noted above.

Appendix I: Hobart Yard Data

Max Peak Hour % Calculations

Ingate Counts	
Hour	**Count**
Tuesday	**5136**
0	156
1	160
2	173
3	152
4	190
5	229
6	212
7	200
8	235
9	293
10	267
11	294
12	267
13	268
14	310
15	290
16	279
17	190
18	183
19	209
20	161
21	179
22	119
23	120
Wednesday	**4799**
0	173
1	155
2	142
3	127
4	186
5	236
6	183
7	181
8	213
9	267
10	270
11	318
12	283
13	268
14	234
15	276
16	188
17	163
18	149
19	135
20	180
21	166
22	185
23	121
Thursday	**4922**
0	163
1	157
2	157
3	162
4	192
5	215
6	213
7	199
8	209
9	242
10	278
11	298
12	293
13	266
14	251
15	246
16	235
17	180
18	188
19	215
20	168
21	163
22	140
23	92
Grand Total	**14857**

Outgate Counts	
Hour	**Count**
Tuesday	**5074**
0	95
1	152
2	167
3	159
4	156
5	229
6	216
7	224
8	167
9	293
10	267
11	262
12	307
13	252
14	302
15	309
16	279
17	226
18	171
19	211
20	139
21	191
22	151
23	149
Wednesday	**4734**
0	88
1	152
2	171
3	119
4	162
5	242
6	187
7	179
8	194
9	237
10	265
11	278
12	301
13	276
14	237
15	280
16	220
17	159
18	163
19	125
20	136
21	192
22	206
23	165
Thursday	**4853**
0	104
1	148
2	160
3	170
4	164
5	216
6	203
7	209
8	195
9	225
10	262
11	270
12	288
13	293
14	256
15	249
16	236
17	201
18	173
19	217
20	142
21	175
22	171
23	126
Grand Total	**14661**

Max Peak Hour % of Daily Total (IN)

		Daily Total	Max Count	Peak Hour %
Tuesday	11/13/2018	5136	310	6.0%
Wednesday	11/14/2018	4799	318	6.6%
Thursday	11/15/2018	4922	298	6.1%
Average				**6.2%**

Max Peak Hour % of Daily Total (OUT)

		Daily Total	Max Count	Peak Hour %
Tuesday	11/13/2018	5074	309	6.1%
Wednesday	11/14/2018	4734	301	6.4%
Thursday	11/15/2018	4853	293	6.0%
Average				**6.2%**

* Took maximum hourly count to calculate peak hour %
then averaged these peak hour % for trip generation rate

1:00 PM Traffic Peak % of Daily Total (IN)

		Daily Total	1PM Count	Traffic Peak %
Tuesday	11/13/2018	5136	268	5.2%
Wednesday	11/14/2018	4799	268	5.6%
Thursday	11/15/2018	4922	266	5.4%
Average				**5.4%**

1:00 PM Traffic Peak % of Daily Total (OUT)

		Daily Total	1PM Count	Traffic Peak %
Tuesday	11/13/2018	5074	252	5.0%
Wednesday	11/14/2018	4734	276	5.8%
Thursday	11/15/2018	4853	293	6.0%
Average				**5.6%**

2:00 PM Traffic Peak % of Daily Total (IN)

		Daily Total	2PM Count	Traffic Peak %
Tuesday	11/13/2018	5136	310	6.0%
Wednesday	11/14/2018	4799	234	4.9%
Thursday	11/15/2018	4922	251	5.1%
Average				**5.3%**

2:00 PM Traffic Peak % of Daily Total (OUT)

		Daily Total	2PM Count	Traffic Peak %
Tuesday	11/13/2018	5074	302	6.0%
Wednesday	11/14/2018	4734	237	5.0%
Thursday	11/15/2018	4853	256	5.3%
Average				**5.4%**

Hobart Ingate and Outgate Counts

Day	Date	Hour	IngateArea	CountByArea
Sunday	11/11/2018	0	710	6
Sunday	11/11/2018	0	Bobtail	4
Sunday	11/11/2018	0	Lot 11	6
Sunday	11/11/2018	0	Lot 12	4
Sunday	11/11/2018	0	Lot 8	4
Sunday	11/11/2018	0	Main	28
Sunday	11/11/2018	1	710	3
Sunday	11/11/2018	1	Bobtail	2
Sunday	11/11/2018	1	Chassis	2
Sunday	11/11/2018	1	Lot 11	10
Sunday	11/11/2018	1	Lot 12	5
Sunday	11/11/2018	1	Lot 8	7
Sunday	11/11/2018	1	Main	45
Sunday	11/11/2018	2	710	1
Sunday	11/11/2018	2	Bobtail	2
Sunday	11/11/2018	2	Lot 11	9
Sunday	11/11/2018	2	Lot 12	2
Sunday	11/11/2018	2	Lot 8	11
Sunday	11/11/2018	2	Main	39
Sunday	11/11/2018	3	Bobtail	2
Sunday	11/11/2018	3	Chassis	7
Sunday	11/11/2018	3	Lot 11	11
Sunday	11/11/2018	3	Lot 12	3
Sunday	11/11/2018	3	Lot 8	21
Sunday	11/11/2018	3	Main	26
Sunday	11/11/2018	4	710	1
Sunday	11/11/2018	4	Bobtail	7
Sunday	11/11/2018	4	Chassis	13
Sunday	11/11/2018	4	Lot 11	5
Sunday	11/11/2018	4	Lot 12	2
Sunday	11/11/2018	4	Lot 8	15
Sunday	11/11/2018	4	Main	25
Sunday	11/11/2018	5	710	5
Sunday	11/11/2018	5	Bobtail	11
Sunday	11/11/2018	5	Chassis	10
Sunday	11/11/2018	5	Lot 11	6
Sunday	11/11/2018	5	Lot 12	13
Sunday	11/11/2018	5	Lot 8	12
Sunday	11/11/2018	5	Main	18
Sunday	11/11/2018	6	710	7
Sunday	11/11/2018	6	Bobtail	16
Sunday	11/11/2018	6	Chassis	7
Sunday	11/11/2018	6	Lot 11	10
Sunday	11/11/2018	6	Lot 12	6
Sunday	11/11/2018	6	Lot 8	15
Sunday	11/11/2018	6	Main	27
Sunday	11/11/2018	7	710	3
Sunday	11/11/2018	7	Bobtail	9
Sunday	11/11/2018	7	Chassis	6
Sunday	11/11/2018	7	Lot 11	9
Sunday	11/11/2018	7	Lot 12	18
Sunday	11/11/2018	7	Lot 8	12
Sunday	11/11/2018	7	Main	22
Sunday	11/11/2018	8	710	3
Sunday	11/11/2018	8	Bobtail	10
Sunday	11/11/2018	8	Chassis	6
Sunday	11/11/2018	8	Lot 11	14
Sunday	11/11/2018	8	Lot 12	17
Sunday	11/11/2018	8	Lot 8	16
Sunday	11/11/2018	8	Main	25
Sunday	11/11/2018	9	710	1
Sunday	11/11/2018	9	Bobtail	15
Sunday	11/11/2018	9	Lot 11	13

Day	Date	Hour	OutgateArea	CountByArea
Sunday	11/11/2018	0	Lot 11	6
Sunday	11/11/2018	0	Lot 12	3
Sunday	11/11/2018	0	Lot 9	15
Sunday	11/11/2018	0	Main	9
Sunday	11/11/2018	1	Lot 11	7
Sunday	11/11/2018	1	Lot 12	4
Sunday	11/11/2018	1	Lot 9	28
Sunday	11/11/2018	1	Main	16
Sunday	11/11/2018	2	Lot 11	10
Sunday	11/11/2018	2	Lot 12	3
Sunday	11/11/2018	2	Lot 9	19
Sunday	11/11/2018	2	Main	34
Sunday	11/11/2018	3	Lot 11	11
Sunday	11/11/2018	3	Lot 12	3
Sunday	11/11/2018	3	Lot 9	25
Sunday	11/11/2018	3	Main	39
Sunday	11/11/2018	4	Lot 11	5
Sunday	11/11/2018	4	Lot 12	3
Sunday	11/11/2018	4	Lot 9	31
Sunday	11/11/2018	4	Main	28
Sunday	11/11/2018	5	Lot 11	8
Sunday	11/11/2018	5	Lot 12	11
Sunday	11/11/2018	5	Lot 9	24
Sunday	11/11/2018	5	Main	30
Sunday	11/11/2018	6	Lot 11	8
Sunday	11/11/2018	6	Lot 12	6
Sunday	11/11/2018	6	Lot 9	36
Sunday	11/11/2018	6	Main	38
Sunday	11/11/2018	7	Lot 11	10
Sunday	11/11/2018	7	Lot 12	13
Sunday	11/11/2018	7	Lot 9	29
Sunday	11/11/2018	7	Main	22
Sunday	11/11/2018	8	Lot 11	13
Sunday	11/11/2018	8	Lot 12	22
Sunday	11/11/2018	8	Lot 9	33
Sunday	11/11/2018	8	Main	19
Sunday	11/11/2018	9	Lot 11	13
Sunday	11/11/2018	9	Lot 12	17
Sunday	11/11/2018	9	Lot 9	39
Sunday	11/11/2018	9	Main	32
Sunday	11/11/2018	10	Lot 11	14
Sunday	11/11/2018	10	Lot 12	10
Sunday	11/11/2018	10	Lot 9	46
Sunday	11/11/2018	10	Main	37
Sunday	11/11/2018	11	Lot 11	5
Sunday	11/11/2018	11	Lot 12	16
Sunday	11/11/2018	11	Lot 9	41
Sunday	11/11/2018	11	Main	46
Sunday	11/11/2018	12	Lot 11	6
Sunday	11/11/2018	12	Lot 12	10
Sunday	11/11/2018	12	Lot 9	49
Sunday	11/11/2018	12	Main	38
Sunday	11/11/2018	13	Lot 11	7
Sunday	11/11/2018	13	Lot 12	12
Sunday	11/11/2018	13	Lot 9	35
Sunday	11/11/2018	13	Main	39
Sunday	11/11/2018	14	Lot 11	5
Sunday	11/11/2018	14	Lot 12	6
Sunday	11/11/2018	14	Lot 9	36
Sunday	11/11/2018	14	Main	37
Sunday	11/11/2018	15	Lot 11	1
Sunday	11/11/2018	15	Lot 12	5
Sunday	11/11/2018	15	Lot 9	29

Sunday	11/11/2018	9	Lot 12	20
Sunday	11/11/2018	9	Lot 8	25
Sunday	11/11/2018	9	Main	42
Sunday	11/11/2018	10	710	5
Sunday	11/11/2018	10	Bobtail	10
Sunday	11/11/2018	10	Chassis	2
Sunday	11/11/2018	10	Lot 11	12
Sunday	11/11/2018	10	Lot 12	9
Sunday	11/11/2018	10	Lot 8	19
Sunday	11/11/2018	10	Main	52
Sunday	11/11/2018	11	710	7
Sunday	11/11/2018	11	Bobtail	12
Sunday	11/11/2018	11	Chassis	2
Sunday	11/11/2018	11	Lot 11	7
Sunday	11/11/2018	11	Lot 12	13
Sunday	11/11/2018	11	Lot 8	27
Sunday	11/11/2018	11	Main	35
Sunday	11/11/2018	12	710	2
Sunday	11/11/2018	12	Bobtail	13
Sunday	11/11/2018	12	Chassis	3
Sunday	11/11/2018	12	Lot 11	6
Sunday	11/11/2018	12	Lot 12	12
Sunday	11/11/2018	12	Lot 8	22
Sunday	11/11/2018	12	Main	37
Sunday	11/11/2018	13	710	6
Sunday	11/11/2018	13	Bobtail	11
Sunday	11/11/2018	13	Chassis	1
Sunday	11/11/2018	13	Lot 11	6
Sunday	11/11/2018	13	Lot 12	14
Sunday	11/11/2018	13	Lot 8	17
Sunday	11/11/2018	13	Main	42
Sunday	11/11/2018	14	710	7
Sunday	11/11/2018	14	Bobtail	8
Sunday	11/11/2018	14	Chassis	3
Sunday	11/11/2018	14	Lot 11	5
Sunday	11/11/2018	14	Lot 12	5
Sunday	11/11/2018	14	Lot 8	21
Sunday	11/11/2018	14	Main	37
Sunday	11/11/2018	15	710	2
Sunday	11/11/2018	15	Bobtail	10
Sunday	11/11/2018	15	Chassis	2
Sunday	11/11/2018	15	Lot 11	2
Sunday	11/11/2018	15	Lot 12	5
Sunday	11/11/2018	15	Lot 8	11
Sunday	11/11/2018	15	Main	40
Sunday	11/11/2018	16	710	6
Sunday	11/11/2018	16	Bobtail	13
Sunday	11/11/2018	16	Chassis	1
Sunday	11/11/2018	16	Lot 11	3
Sunday	11/11/2018	16	Lot 12	8
Sunday	11/11/2018	16	Lot 8	6
Sunday	11/11/2018	16	Main	29
Sunday	11/11/2018	17	710	2
Sunday	11/11/2018	17	Bobtail	25
Sunday	11/11/2018	17	Chassis	1
Sunday	11/11/2018	17	Lot 11	1
Sunday	11/11/2018	17	Lot 12	3
Sunday	11/11/2018	17	Lot 8	7
Sunday	11/11/2018	17	Main	28
Sunday	11/11/2018	18	710	1
Sunday	11/11/2018	18	Bobtail	10
Sunday	11/11/2018	18	Lot 11	1
Sunday	11/11/2018	18	Lot 12	3
Sunday	11/11/2018	18	Lot 8	11
Sunday	11/11/2018	18	Main	36
Sunday	11/11/2018	19	710	2
Sunday	11/11/2018	15	Main	38
Sunday	11/11/2018	16	Lot 11	5
Sunday	11/11/2018	16	Lot 12	9
Sunday	11/11/2018	16	Lot 9	21
Sunday	11/11/2018	16	Main	27
Sunday	11/11/2018	17	Lot 11	1
Sunday	11/11/2018	17	Lot 12	4
Sunday	11/11/2018	17	Lot 9	28
Sunday	11/11/2018	17	Main	46
Sunday	11/11/2018	18	Lot 12	3
Sunday	11/11/2018	18	Lot 9	26
Sunday	11/11/2018	18	Main	36
Sunday	11/11/2018	19	Lot 11	1
Sunday	11/11/2018	19	Lot 12	3
Sunday	11/11/2018	19	Lot 9	28
Sunday	11/11/2018	19	Main	20
Sunday	11/11/2018	20	Lot 11	2
Sunday	11/11/2018	20	Lot 12	2
Sunday	11/11/2018	20	Lot 9	28
Sunday	11/11/2018	20	Main	18
Sunday	11/11/2018	21	Lot 11	1
Sunday	11/11/2018	21	Lot 12	3
Sunday	11/11/2018	21	Lot 9	30
Sunday	11/11/2018	21	Main	31
Sunday	11/11/2018	22	Lot 11	5
Sunday	11/11/2018	22	Lot 12	4
Sunday	11/11/2018	22	Lot 9	30
Sunday	11/11/2018	22	Main	30
Sunday	11/11/2018	23	Lot 12	2
Sunday	11/11/2018	23	Lot 9	26
Sunday	11/11/2018	23	Main	25
Monday	11/12/2018	0	Lot 12	3
Monday	11/12/2018	0	Lot 9	15
Monday	11/12/2018	0	Main	11
Monday	11/12/2018	1	Lot 11	1
Monday	11/12/2018	1	Lot 12	2
Monday	11/12/2018	1	Lot 9	14
Monday	11/12/2018	1	Main	21
Monday	11/12/2018	2	Lot 11	3
Monday	11/12/2018	2	Lot 12	3
Monday	11/12/2018	2	Lot 9	25
Monday	11/12/2018	2	Main	23
Monday	11/12/2018	3	Lot 11	7
Monday	11/12/2018	3	Lot 12	4
Monday	11/12/2018	3	Lot 9	27
Monday	11/12/2018	3	Main	37
Monday	11/12/2018	4	Lot 11	8
Monday	11/12/2018	4	Lot 12	10
Monday	11/12/2018	4	Lot 9	38
Monday	11/12/2018	4	Main	38
Monday	11/12/2018	5	Lot 11	11
Monday	11/12/2018	5	Lot 12	12
Monday	11/12/2018	5	Lot 9	40
Monday	11/12/2018	5	Main	45
Monday	11/12/2018	6	Lot 11	20
Monday	11/12/2018	6	Lot 12	17
Monday	11/12/2018	6	Lot 9	80
Monday	11/12/2018	6	Main	59
Monday	11/12/2018	7	Lot 11	27
Monday	11/12/2018	7	Lot 12	17
Monday	11/12/2018	7	Lot 9	73
Monday	11/12/2018	7	Main	59
Monday	11/12/2018	8	Lot 11	23
Monday	11/12/2018	8	Lot 12	15
Monday	11/12/2018	8	Lot 9	86
Monday	11/12/2018	8	Main	42

Sunday	11/11/2018	19	Bobtail	14
Sunday	11/11/2018	19	Lot 12	3
Sunday	11/11/2018	19	Lot 8	7
Sunday	11/11/2018	19	Main	21
Sunday	11/11/2018	20	710	1
Sunday	11/11/2018	20	Bobtail	9
Sunday	11/11/2018	20	Chassis	2
Sunday	11/11/2018	20	Lot 11	2
Sunday	11/11/2018	20	Lot 12	3
Sunday	11/11/2018	20	Lot 8	12
Sunday	11/11/2018	20	Main	45
Sunday	11/11/2018	21	710	4
Sunday	11/11/2018	21	Bobtail	9
Sunday	11/11/2018	21	Lot 11	3
Sunday	11/11/2018	21	Lot 12	3
Sunday	11/11/2018	21	Lot 8	6
Sunday	11/11/2018	21	Main	37
Sunday	11/11/2018	22	710	1
Sunday	11/11/2018	22	Bobtail	6
Sunday	11/11/2018	22	Chassis	1
Sunday	11/11/2018	22	Lot 11	3
Sunday	11/11/2018	22	Lot 12	3
Sunday	11/11/2018	22	Lot 8	8
Sunday	11/11/2018	22	Main	27
Sunday	11/11/2018	23	710	1
Sunday	11/11/2018	23	Bobtail	9
Sunday	11/11/2018	23	Chassis	1
Sunday	11/11/2018	23	Lot 12	2
Sunday	11/11/2018	23	Lot 8	5
Sunday	11/11/2018	23	Main	22
Monday	11/12/2018	0	710	3
Monday	11/12/2018	0	Bobtail	13
Monday	11/12/2018	0	Chassis	1
Monday	11/12/2018	0	Lot 12	4
Monday	11/12/2018	0	Lot 8	6
Monday	11/12/2018	0	Main	30
Monday	11/12/2018	1	710	2
Monday	11/12/2018	1	Bobtail	6
Monday	11/12/2018	1	Lot 11	1
Monday	11/12/2018	1	Lot 12	1
Monday	11/12/2018	1	Lot 8	7
Monday	11/12/2018	1	Main	16
Monday	11/12/2018	2	710	4
Monday	11/12/2018	2	Bobtail	13
Monday	11/12/2018	2	Lot 11	9
Monday	11/12/2018	2	Lot 12	4
Monday	11/12/2018	2	Lot 8	9
Monday	11/12/2018	2	Main	30
Monday	11/12/2018	3	710	3
Monday	11/12/2018	3	Bobtail	16
Monday	11/12/2018	3	Chassis	3
Monday	11/12/2018	3	Lot 11	2
Monday	11/12/2018	3	Lot 12	7
Monday	11/12/2018	3	Lot 8	32
Monday	11/12/2018	3	Main	13
Monday	11/12/2018	4	710	2
Monday	11/12/2018	4	Bobtail	15
Monday	11/12/2018	4	Chassis	22
Monday	11/12/2018	4	Lot 11	11
Monday	11/12/2018	4	Lot 12	9
Monday	11/12/2018	4	Lot 8	31
Monday	11/12/2018	4	Main	16
Monday	11/12/2018	5	710	10
Monday	11/12/2018	5	Bobtail	29
Monday	11/12/2018	5	Chassis	20
Monday	11/12/2018	5	Lot 11	17
Monday	11/12/2018	9	Lot 11	25
Monday	11/12/2018	9	Lot 12	25
Monday	11/12/2018	9	Lot 9	100
Monday	11/12/2018	9	Main	102
Monday	11/12/2018	10	Lot 11	26
Monday	11/12/2018	10	Lot 12	22
Monday	11/12/2018	10	Lot 9	113
Monday	11/12/2018	10	Main	84
Monday	11/12/2018	11	Lot 11	28
Monday	11/12/2018	11	Lot 12	13
Monday	11/12/2018	11	Lot 9	102
Monday	11/12/2018	11	Main	91
Monday	11/12/2018	12	Lot 11	30
Monday	11/12/2018	12	Lot 12	29
Monday	11/12/2018	12	Lot 9	102
Monday	11/12/2018	12	Main	127
Monday	11/12/2018	13	Lot 11	15
Monday	11/12/2018	13	Lot 12	29
Monday	11/12/2018	13	Lot 9	112
Monday	11/12/2018	13	Main	96
Monday	11/12/2018	14	Lot 11	10
Monday	11/12/2018	14	Lot 12	21
Monday	11/12/2018	14	Lot 9	113
Monday	11/12/2018	14	Main	93
Monday	11/12/2018	15	Lot 11	13
Monday	11/12/2018	15	Lot 12	26
Monday	11/12/2018	15	Lot 9	95
Monday	11/12/2018	15	Main	134
Monday	11/12/2018	16	Lot 11	15
Monday	11/12/2018	16	Lot 12	10
Monday	11/12/2018	16	Lot 9	101
Monday	11/12/2018	16	Main	95
Monday	11/12/2018	17	Lot 11	8
Monday	11/12/2018	17	Lot 12	6
Monday	11/12/2018	17	Lot 9	97
Monday	11/12/2018	17	Main	75
Monday	11/12/2018	18	Lot 11	9
Monday	11/12/2018	18	Lot 12	5
Monday	11/12/2018	18	Lot 9	79
Monday	11/12/2018	18	Main	66
Monday	11/12/2018	19	Lot 11	10
Monday	11/12/2018	19	Lot 12	19
Monday	11/12/2018	19	Lot 9	114
Monday	11/12/2018	19	Main	50
Monday	11/12/2018	20	Lot 11	11
Monday	11/12/2018	20	Lot 12	10
Monday	11/12/2018	20	Lot 9	45
Monday	11/12/2018	20	Main	36
Monday	11/12/2018	21	Lot 11	9
Monday	11/12/2018	21	Lot 12	18
Monday	11/12/2018	21	Lot 9	94
Monday	11/12/2018	21	Main	62
Monday	11/12/2018	22	Lot 11	14
Monday	11/12/2018	22	Lot 12	24
Monday	11/12/2018	22	Lot 9	95
Monday	11/12/2018	22	Main	57
Monday	11/12/2018	23	Lot 11	18
Monday	11/12/2018	23	Lot 12	18
Monday	11/12/2018	23	Lot 9	67
Monday	11/12/2018	23	Main	49
Tuesday	11/13/2018	0	Lot 11	21
Tuesday	11/13/2018	0	Lot 12	18
Tuesday	11/13/2018	0	Lot 9	29
Tuesday	11/13/2018	0	Main	27
Tuesday	11/13/2018	1	Lot 11	17
Tuesday	11/13/2018	1	Lot 12	16

Monday	11/12/2018	5	Lot 12	11
Monday	11/12/2018	5	Lot 8	30
Monday	11/12/2018	5	Main	18
Monday	11/12/2018	6	710	8
Monday	11/12/2018	6	Bobtail	43
Monday	11/12/2018	6	Chassis	15
Monday	11/12/2018	6	Lot 11	16
Monday	11/12/2018	6	Lot 12	20
Monday	11/12/2018	6	Lot 8	61
Monday	11/12/2018	6	Main	22
Monday	11/12/2018	7	710	17
Monday	11/12/2018	7	Bobtail	38
Monday	11/12/2018	7	Chassis	8
Monday	11/12/2018	7	Lot 11	28
Monday	11/12/2018	7	Lot 12	13
Monday	11/12/2018	7	Lot 8	43
Monday	11/12/2018	7	Main	33
Monday	11/12/2018	8	710	29
Monday	11/12/2018	8	Bobtail	26
Monday	11/12/2018	8	Chassis	4
Monday	11/12/2018	8	Lot 11	23
Monday	11/12/2018	8	Lot 12	20
Monday	11/12/2018	8	Lot 8	44
Monday	11/12/2018	8	Main	51
Monday	11/12/2018	9	710	36
Monday	11/12/2018	9	Bobtail	26
Monday	11/12/2018	9	Chassis	7
Monday	11/12/2018	9	Lot 11	26
Monday	11/12/2018	9	Lot 12	24
Monday	11/12/2018	9	Lot 8	53
Monday	11/12/2018	9	Main	89
Monday	11/12/2018	10	710	35
Monday	11/12/2018	10	Bobtail	26
Monday	11/12/2018	10	Chassis	6
Monday	11/12/2018	10	Lot 11	24
Monday	11/12/2018	10	Lot 12	20
Monday	11/12/2018	10	Lot 8	37
Monday	11/12/2018	10	Main	100
Monday	11/12/2018	11	710	36
Monday	11/12/2018	11	Bobtail	25
Monday	11/12/2018	11	Chassis	8
Monday	11/12/2018	11	Lot 11	32
Monday	11/12/2018	11	Lot 12	14
Monday	11/12/2018	11	Lot 8	31
Monday	11/12/2018	11	Main	100
Monday	11/12/2018	12	710	29
Monday	11/12/2018	12	Bobtail	31
Monday	11/12/2018	12	Chassis	24
Monday	11/12/2018	12	Lot 11	25
Monday	11/12/2018	12	Lot 12	27
Monday	11/12/2018	12	Lot 8	48
Monday	11/12/2018	12	Main	102
Monday	11/12/2018	13	710	16
Monday	11/12/2018	13	Bobtail	19
Monday	11/12/2018	13	Chassis	25
Monday	11/12/2018	13	Lot 11	18
Monday	11/12/2018	13	Lot 12	31
Monday	11/12/2018	13	Lot 8	38
Monday	11/12/2018	13	Main	81
Monday	11/12/2018	14	710	24
Monday	11/12/2018	14	Bobtail	21
Monday	11/12/2018	14	Chassis	16
Monday	11/12/2018	14	Lot 11	13
Monday	11/12/2018	14	Lot 12	31
Monday	11/12/2018	14	Lot 8	42
Monday	11/12/2018	14	Main	102

Tuesday	11/13/2018	1	Lot 9	63
Tuesday	11/13/2018	1	Main	56
Tuesday	11/13/2018	2	Lot 11	18
Tuesday	11/13/2018	2	Lot 12	20
Tuesday	11/13/2018	2	Lot 9	69
Tuesday	11/13/2018	2	Main	60
Tuesday	11/13/2018	3	Lot 11	14
Tuesday	11/13/2018	3	Lot 12	15
Tuesday	11/13/2018	3	Lot 9	71
Tuesday	11/13/2018	3	Main	59
Tuesday	11/13/2018	4	Lot 11	14
Tuesday	11/13/2018	4	Lot 12	24
Tuesday	11/13/2018	4	Lot 9	57
Tuesday	11/13/2018	4	Main	61
Tuesday	11/13/2018	5	Lot 11	20
Tuesday	11/13/2018	5	Lot 12	21
Tuesday	11/13/2018	5	Lot 9	88
Tuesday	11/13/2018	5	Main	100
Tuesday	11/13/2018	6	Lot 11	27
Tuesday	11/13/2018	6	Lot 12	25
Tuesday	11/13/2018	6	Lot 9	102
Tuesday	11/13/2018	6	Main	62
Tuesday	11/13/2018	7	Lot 11	30
Tuesday	11/13/2018	7	Lot 12	41
Tuesday	11/13/2018	7	Lot 9	96
Tuesday	11/13/2018	7	Main	57
Tuesday	11/13/2018	8	Lot 11	26
Tuesday	11/13/2018	8	Lot 12	34
Tuesday	11/13/2018	8	Lot 9	76
Tuesday	11/13/2018	8	Main	31
Tuesday	11/13/2018	9	Lot 11	23
Tuesday	11/13/2018	9	Lot 12	34
Tuesday	11/13/2018	9	Lot 9	141
Tuesday	11/13/2018	9	Main	95
Tuesday	11/13/2018	10	Lot 11	12
Tuesday	11/13/2018	10	Lot 12	33
Tuesday	11/13/2018	10	Lot 9	122
Tuesday	11/13/2018	10	Main	100
Tuesday	11/13/2018	11	Lot 11	15
Tuesday	11/13/2018	11	Lot 12	40
Tuesday	11/13/2018	11	Lot 9	120
Tuesday	11/13/2018	11	Main	87
Tuesday	11/13/2018	12	Lot 11	8
Tuesday	11/13/2018	12	Lot 12	28
Tuesday	11/13/2018	12	Lot 9	125
Tuesday	11/13/2018	12	Main	146
Tuesday	11/13/2018	13	Lot 11	20
Tuesday	11/13/2018	13	Lot 12	12
Tuesday	11/13/2018	13	Lot 9	98
Tuesday	11/13/2018	13	Main	122
Tuesday	11/13/2018	14	Lot 11	19
Tuesday	11/13/2018	14	Lot 12	14
Tuesday	11/13/2018	14	Lot 9	119
Tuesday	11/13/2018	14	Main	150
Tuesday	11/13/2018	15	Lot 11	22
Tuesday	11/13/2018	15	Lot 12	23
Tuesday	11/13/2018	15	Lot 9	137
Tuesday	11/13/2018	15	Main	127
Tuesday	11/13/2018	16	Lot 11	28
Tuesday	11/13/2018	16	Lot 12	20
Tuesday	11/13/2018	16	Lot 9	136
Tuesday	11/13/2018	16	Main	95
Tuesday	11/13/2018	17	Lot 11	11
Tuesday	11/13/2018	17	Lot 12	9
Tuesday	11/13/2018	17	Lot 9	111
Tuesday	11/13/2018	17	Main	95

Monday	11/12/2018	15	710	33
Monday	11/12/2018	15	Bobtail	17
Monday	11/12/2018	15	Chassis	16
Monday	11/12/2018	15	Lot 11	10
Monday	11/12/2018	15	Lot 12	15
Monday	11/12/2018	15	Lot 8	34
Monday	11/12/2018	15	Main	140
Monday	11/12/2018	16	710	25
Monday	11/12/2018	16	Bobtail	12
Monday	11/12/2018	16	Chassis	12
Monday	11/12/2018	16	Lot 11	16
Monday	11/12/2018	16	Lot 12	8
Monday	11/12/2018	16	Lot 8	22
Monday	11/12/2018	16	Main	113
Monday	11/12/2018	17	710	19
Monday	11/12/2018	17	Bobtail	21
Monday	11/12/2018	17	Chassis	20
Monday	11/12/2018	17	Lot 11	9
Monday	11/12/2018	17	Lot 12	8
Monday	11/12/2018	17	Lot 8	24
Monday	11/12/2018	17	Main	83
Monday	11/12/2018	18	710	10
Monday	11/12/2018	18	Bobtail	24
Monday	11/12/2018	18	Chassis	5
Monday	11/12/2018	18	Lot 11	7
Monday	11/12/2018	18	Lot 12	6
Monday	11/12/2018	18	Lot 8	18
Monday	11/12/2018	18	Main	78
Monday	11/12/2018	19	710	18
Monday	11/12/2018	19	Bobtail	16
Monday	11/12/2018	19	Chassis	7
Monday	11/12/2018	19	Lot 11	10
Monday	11/12/2018	19	Lot 12	19
Monday	11/12/2018	19	Lot 8	28
Monday	11/12/2018	19	Main	74
Monday	11/12/2018	20	710	13
Monday	11/12/2018	20	Bobtail	21
Monday	11/12/2018	20	Chassis	5
Monday	11/12/2018	20	Lot 11	8
Monday	11/12/2018	20	Lot 12	9
Monday	11/12/2018	20	Lot 8	27
Monday	11/12/2018	20	Main	63
Monday	11/12/2018	21	710	9
Monday	11/12/2018	21	Bobtail	37
Monday	11/12/2018	21	Chassis	7
Monday	11/12/2018	21	Lot 11	9
Monday	11/12/2018	21	Lot 12	20
Monday	11/12/2018	21	Lot 8	25
Monday	11/12/2018	21	Main	70
Monday	11/12/2018	22	710	9
Monday	11/12/2018	22	Bobtail	28
Monday	11/12/2018	22	Chassis	4
Monday	11/12/2018	22	Lot 11	14
Monday	11/12/2018	22	Lot 12	22
Monday	11/12/2018	22	Lot 8	30
Monday	11/12/2018	22	Main	62
Monday	11/12/2018	23	710	6
Monday	11/12/2018	23	Bobtail	11
Monday	11/12/2018	23	Chassis	4
Monday	11/12/2018	23	Lot 11	17
Monday	11/12/2018	23	Lot 12	15
Monday	11/12/2018	23	Lot 8	17
Monday	11/12/2018	23	Main	40
Tuesday	11/13/2018	0	710	11
Tuesday	11/13/2018	0	Bobtail	20
Tuesday	11/13/2018	0	Chassis	2
Tuesday	11/13/2018	18	Lot 11	24
Tuesday	11/13/2018	18	Lot 12	7
Tuesday	11/13/2018	18	Lot 9	77
Tuesday	11/13/2018	18	Main	63
Tuesday	11/13/2018	19	Lot 11	24
Tuesday	11/13/2018	19	Lot 12	15
Tuesday	11/13/2018	19	Lot 9	93
Tuesday	11/13/2018	19	Main	79
Tuesday	11/13/2018	20	Lot 11	14
Tuesday	11/13/2018	20	Lot 12	15
Tuesday	11/13/2018	20	Lot 9	54
Tuesday	11/13/2018	20	Main	56
Tuesday	11/13/2018	21	Lot 11	31
Tuesday	11/13/2018	21	Lot 12	19
Tuesday	11/13/2018	21	Lot 9	73
Tuesday	11/13/2018	21	Main	68
Tuesday	11/13/2018	22	Lot 11	15
Tuesday	11/13/2018	22	Lot 12	12
Tuesday	11/13/2018	22	Lot 9	63
Tuesday	11/13/2018	22	Main	61
Tuesday	11/13/2018	23	Lot 11	9
Tuesday	11/13/2018	23	Lot 12	23
Tuesday	11/13/2018	23	Lot 9	69
Tuesday	11/13/2018	23	Main	48
Wednesday	11/14/2018	0	Lot 11	9
Wednesday	11/14/2018	0	Lot 12	16
Wednesday	11/14/2018	0	Lot 9	33
Wednesday	11/14/2018	0	Main	30
Wednesday	11/14/2018	1	Lot 11	8
Wednesday	11/14/2018	1	Lot 12	11
Wednesday	11/14/2018	1	Lot 9	66
Wednesday	11/14/2018	1	Main	67
Wednesday	11/14/2018	2	Lot 11	14
Wednesday	11/14/2018	2	Lot 12	13
Wednesday	11/14/2018	2	Lot 9	66
Wednesday	11/14/2018	2	Main	78
Wednesday	11/14/2018	3	Lot 11	7
Wednesday	11/14/2018	3	Lot 12	5
Wednesday	11/14/2018	3	Lot 9	53
Wednesday	11/14/2018	3	Main	54
Wednesday	11/14/2018	4	Lot 11	5
Wednesday	11/14/2018	4	Lot 12	18
Wednesday	11/14/2018	4	Lot 9	55
Wednesday	11/14/2018	4	Main	84
Wednesday	11/14/2018	5	Lot 11	25
Wednesday	11/14/2018	5	Lot 12	25
Wednesday	11/14/2018	5	Lot 9	103
Wednesday	11/14/2018	5	Main	89
Wednesday	11/14/2018	6	Lot 11	24
Wednesday	11/14/2018	6	Lot 12	28
Wednesday	11/14/2018	6	Lot 9	69
Wednesday	11/14/2018	6	Main	66
Wednesday	11/14/2018	7	Lot 11	35
Wednesday	11/14/2018	7	Lot 12	22
Wednesday	11/14/2018	7	Lot 9	81
Wednesday	11/14/2018	7	Main	41
Wednesday	11/14/2018	8	Lot 11	38
Wednesday	11/14/2018	8	Lot 12	22
Wednesday	11/14/2018	8	Lot 9	77
Wednesday	11/14/2018	8	Main	57
Wednesday	11/14/2018	9	Lot 11	17
Wednesday	11/14/2018	9	Lot 12	34
Wednesday	11/14/2018	9	Lot 9	93
Wednesday	11/14/2018	9	Main	93
Wednesday	11/14/2018	10	Lot 11	19
Wednesday	11/14/2018	10	Lot 12	40

Tuesday	11/13/2018	0	Lot 11	24
Tuesday	11/13/2018	0	Lot 12	24
Tuesday	11/13/2018	0	Lot 8	24
Tuesday	11/13/2018	0	Main	51
Tuesday	11/13/2018	1	710	8
Tuesday	11/13/2018	1	Bobtail	20
Tuesday	11/13/2018	1	Chassis	3
Tuesday	11/13/2018	1	Lot 11	18
Tuesday	11/13/2018	1	Lot 12	15
Tuesday	11/13/2018	1	Lot 8	24
Tuesday	11/13/2018	1	Main	72
Tuesday	11/13/2018	2	710	7
Tuesday	11/13/2018	2	Bobtail	23
Tuesday	11/13/2018	2	Chassis	3
Tuesday	11/13/2018	2	Lot 11	19
Tuesday	11/13/2018	2	Lot 12	18
Tuesday	11/13/2018	2	Lot 8	28
Tuesday	11/13/2018	2	Main	75
Tuesday	11/13/2018	3	710	3
Tuesday	11/13/2018	3	Bobtail	17
Tuesday	11/13/2018	3	Chassis	4
Tuesday	11/13/2018	3	Lot 11	14
Tuesday	11/13/2018	3	Lot 12	19
Tuesday	11/13/2018	3	Lot 8	25
Tuesday	11/13/2018	3	Main	70
Tuesday	11/13/2018	4	710	8
Tuesday	11/13/2018	4	Bobtail	28
Tuesday	11/13/2018	4	Chassis	8
Tuesday	11/13/2018	4	Lot 11	15
Tuesday	11/13/2018	4	Lot 12	21
Tuesday	11/13/2018	4	Lot 8	46
Tuesday	11/13/2018	4	Main	64
Tuesday	11/13/2018	5	710	8
Tuesday	11/13/2018	5	Bobtail	40
Tuesday	11/13/2018	5	Chassis	9
Tuesday	11/13/2018	5	Lot 11	23
Tuesday	11/13/2018	5	Lot 12	24
Tuesday	11/13/2018	5	Lot 8	48
Tuesday	11/13/2018	5	Main	77
Tuesday	11/13/2018	6	710	13
Tuesday	11/13/2018	6	Bobtail	38
Tuesday	11/13/2018	6	Chassis	16
Tuesday	11/13/2018	6	Lot 11	23
Tuesday	11/13/2018	6	Lot 12	24
Tuesday	11/13/2018	6	Lot 8	67
Tuesday	11/13/2018	6	Main	31
Tuesday	11/13/2018	7	710	10
Tuesday	11/13/2018	7	Bobtail	35
Tuesday	11/13/2018	7	Chassis	4
Tuesday	11/13/2018	7	Lot 11	31
Tuesday	11/13/2018	7	Lot 12	42
Tuesday	11/13/2018	7	Lot 8	57
Tuesday	11/13/2018	7	Main	21
Tuesday	11/13/2018	8	710	36
Tuesday	11/13/2018	8	Bobtail	28
Tuesday	11/13/2018	8	Chassis	10
Tuesday	11/13/2018	8	Lot 11	25
Tuesday	11/13/2018	8	Lot 12	35
Tuesday	11/13/2018	8	Lot 8	56
Tuesday	11/13/2018	8	Main	45
Tuesday	11/13/2018	9	710	57
Tuesday	11/13/2018	9	Bobtail	31
Tuesday	11/13/2018	9	Chassis	9
Tuesday	11/13/2018	9	Lot 11	23
Tuesday	11/13/2018	9	Lot 12	35
Tuesday	11/13/2018	9	Lot 8	65
Wednesday	11/14/2018	10	Lot 9	91
Wednesday	11/14/2018	10	Main	115
Wednesday	11/14/2018	11	Lot 11	28
Wednesday	11/14/2018	11	Lot 12	29
Wednesday	11/14/2018	11	Lot 9	106
Wednesday	11/14/2018	11	Main	115
Wednesday	11/14/2018	12	Lot 11	19
Wednesday	11/14/2018	12	Lot 12	36
Wednesday	11/14/2018	12	Lot 9	119
Wednesday	11/14/2018	12	Main	127
Wednesday	11/14/2018	13	Lot 11	14
Wednesday	11/14/2018	13	Lot 12	26
Wednesday	11/14/2018	13	Lot 9	98
Wednesday	11/14/2018	13	Main	138
Wednesday	11/14/2018	14	Lot 11	17
Wednesday	11/14/2018	14	Lot 12	15
Wednesday	11/14/2018	14	Lot 9	86
Wednesday	11/14/2018	14	Main	119
Wednesday	11/14/2018	15	Lot 11	23
Wednesday	11/14/2018	15	Lot 12	9
Wednesday	11/14/2018	15	Lot 9	111
Wednesday	11/14/2018	15	Main	137
Wednesday	11/14/2018	16	Lot 11	18
Wednesday	11/14/2018	16	Lot 12	9
Wednesday	11/14/2018	16	Lot 9	106
Wednesday	11/14/2018	16	Main	87
Wednesday	11/14/2018	17	Lot 11	7
Wednesday	11/14/2018	17	Lot 12	8
Wednesday	11/14/2018	17	Lot 9	79
Wednesday	11/14/2018	17	Main	65
Wednesday	11/14/2018	18	Lot 11	5
Wednesday	11/14/2018	18	Lot 12	4
Wednesday	11/14/2018	18	Lot 9	95
Wednesday	11/14/2018	18	Main	59
Wednesday	11/14/2018	19	Lot 11	5
Wednesday	11/14/2018	19	Lot 12	4
Wednesday	11/14/2018	19	Lot 9	71
Wednesday	11/14/2018	19	Main	45
Wednesday	11/14/2018	20	Lot 11	9
Wednesday	11/14/2018	20	Lot 12	20
Wednesday	11/14/2018	20	Lot 9	62
Wednesday	11/14/2018	20	Main	45
Wednesday	11/14/2018	21	Lot 11	12
Wednesday	11/14/2018	21	Lot 12	27
Wednesday	11/14/2018	21	Lot 9	90
Wednesday	11/14/2018	21	Main	63
Wednesday	11/14/2018	22	Lot 11	20
Wednesday	11/14/2018	22	Lot 12	24
Wednesday	11/14/2018	22	Lot 9	97
Wednesday	11/14/2018	22	Main	65
Wednesday	11/14/2018	23	Lot 11	13
Wednesday	11/14/2018	23	Lot 12	19
Wednesday	11/14/2018	23	Lot 9	77
Wednesday	11/14/2018	23	Main	56
Thursday	11/15/2018	0	Lot 11	3
Thursday	11/15/2018	0	Lot 12	7
Thursday	11/15/2018	0	Lot 9	48
Thursday	11/15/2018	0	Main	46
Thursday	11/15/2018	1	Lot 11	2
Thursday	11/15/2018	1	Lot 12	9
Thursday	11/15/2018	1	Lot 9	64
Thursday	11/15/2018	1	Main	73
Thursday	11/15/2018	2	Lot 11	6
Thursday	11/15/2018	2	Lot 12	12
Thursday	11/15/2018	2	Lot 9	71
Thursday	11/15/2018	2	Main	71

Tuesday	11/13/2018	9	Main	73
Tuesday	11/13/2018	10	710	33
Tuesday	11/13/2018	10	Bobtail	22
Tuesday	11/13/2018	10	Chassis	14
Tuesday	11/13/2018	10	Lot 11	17
Tuesday	11/13/2018	10	Lot 12	39
Tuesday	11/13/2018	10	Lot 8	45
Tuesday	11/13/2018	10	Main	97
Tuesday	11/13/2018	11	710	50
Tuesday	11/13/2018	11	Bobtail	20
Tuesday	11/13/2018	11	Chassis	20
Tuesday	11/13/2018	11	Lot 11	8
Tuesday	11/13/2018	11	Lot 12	35
Tuesday	11/13/2018	11	Lot 8	38
Tuesday	11/13/2018	11	Main	123
Tuesday	11/13/2018	12	710	33
Tuesday	11/13/2018	12	Bobtail	19
Tuesday	11/13/2018	12	Chassis	36
Tuesday	11/13/2018	12	Lot 11	13
Tuesday	11/13/2018	12	Lot 12	27
Tuesday	11/13/2018	12	Lot 8	21
Tuesday	11/13/2018	12	Main	118
Tuesday	11/13/2018	13	710	25
Tuesday	11/13/2018	13	Bobtail	32
Tuesday	11/13/2018	13	Chassis	48
Tuesday	11/13/2018	13	Lot 11	17
Tuesday	11/13/2018	13	Lot 12	7
Tuesday	11/13/2018	13	Lot 8	23
Tuesday	11/13/2018	13	Main	116
Tuesday	11/13/2018	14	710	45
Tuesday	11/13/2018	14	Bobtail	26
Tuesday	11/13/2018	14	Chassis	37
Tuesday	11/13/2018	14	Lot 11	18
Tuesday	11/13/2018	14	Lot 12	19
Tuesday	11/13/2018	14	Lot 8	25
Tuesday	11/13/2018	14	Main	140
Tuesday	11/13/2018	15	710	40
Tuesday	11/13/2018	15	Bobtail	15
Tuesday	11/13/2018	15	Chassis	15
Tuesday	11/13/2018	15	Lot 11	23
Tuesday	11/13/2018	15	Lot 12	27
Tuesday	11/13/2018	15	Lot 8	27
Tuesday	11/13/2018	15	Main	143
Tuesday	11/13/2018	16	710	41
Tuesday	11/13/2018	16	Bobtail	11
Tuesday	11/13/2018	16	Chassis	12
Tuesday	11/13/2018	16	Lot 11	25
Tuesday	11/13/2018	16	Lot 12	15
Tuesday	11/13/2018	16	Lot 8	33
Tuesday	11/13/2018	16	Main	142
Tuesday	11/13/2018	17	710	27
Tuesday	11/13/2018	17	Bobtail	17
Tuesday	11/13/2018	17	Chassis	12
Tuesday	11/13/2018	17	Lot 11	14
Tuesday	11/13/2018	17	Lot 12	7
Tuesday	11/13/2018	17	Lot 8	28
Tuesday	11/13/2018	17	Main	85
Tuesday	11/13/2018	18	710	18
Tuesday	11/13/2018	18	Bobtail	16
Tuesday	11/13/2018	18	Chassis	9
Tuesday	11/13/2018	18	Lot 11	24
Tuesday	11/13/2018	18	Lot 12	6
Tuesday	11/13/2018	18	Lot 8	40
Tuesday	11/13/2018	18	Main	70
Tuesday	11/13/2018	19	710	16
Tuesday	11/13/2018	19	Bobtail	21

Thursday	11/15/2018	3	Lot 11	8
Thursday	11/15/2018	3	Lot 12	19
Thursday	11/15/2018	3	Lot 9	82
Thursday	11/15/2018	3	Main	61
Thursday	11/15/2018	4	Lot 11	19
Thursday	11/15/2018	4	Lot 12	22
Thursday	11/15/2018	4	Lot 9	71
Thursday	11/15/2018	4	Main	52
Thursday	11/15/2018	5	Lot 11	22
Thursday	11/15/2018	5	Lot 12	34
Thursday	11/15/2018	5	Lot 9	84
Thursday	11/15/2018	5	Main	76
Thursday	11/15/2018	6	Lot 11	18
Thursday	11/15/2018	6	Lot 12	31
Thursday	11/15/2018	6	Lot 9	80
Thursday	11/15/2018	6	Main	74
Thursday	11/15/2018	7	Lot 11	35
Thursday	11/15/2018	7	Lot 12	25
Thursday	11/15/2018	7	Lot 9	103
Thursday	11/15/2018	7	Main	46
Thursday	11/15/2018	8	Lot 11	44
Thursday	11/15/2018	8	Lot 12	20
Thursday	11/15/2018	8	Lot 9	95
Thursday	11/15/2018	8	Main	36
Thursday	11/15/2018	9	Lot 11	15
Thursday	11/15/2018	9	Lot 12	33
Thursday	11/15/2018	9	Lot 9	107
Thursday	11/15/2018	9	Main	70
Thursday	11/15/2018	10	Lot 11	20
Thursday	11/15/2018	10	Lot 12	36
Thursday	11/15/2018	10	Lot 9	121
Thursday	11/15/2018	10	Main	85
Thursday	11/15/2018	11	Lot 11	31
Thursday	11/15/2018	11	Lot 12	22
Thursday	11/15/2018	11	Lot 9	131
Thursday	11/15/2018	11	Main	86
Thursday	11/15/2018	12	Lot 11	26
Thursday	11/15/2018	12	Lot 12	17
Thursday	11/15/2018	12	Lot 9	149
Thursday	11/15/2018	12	Main	96
Thursday	11/15/2018	13	Lot 11	19
Thursday	11/15/2018	13	Lot 12	39
Thursday	11/15/2018	13	Lot 9	140
Thursday	11/15/2018	13	Main	95
Thursday	11/15/2018	14	Lot 11	26
Thursday	11/15/2018	14	Lot 12	40
Thursday	11/15/2018	14	Lot 9	96
Thursday	11/15/2018	14	Main	94
Thursday	11/15/2018	15	Lot 11	9
Thursday	11/15/2018	15	Lot 12	38
Thursday	11/15/2018	15	Lot 9	112
Thursday	11/15/2018	15	Main	90
Thursday	11/15/2018	16	Lot 11	8
Thursday	11/15/2018	16	Lot 12	32
Thursday	11/15/2018	16	Lot 9	114
Thursday	11/15/2018	16	Main	82
Thursday	11/15/2018	17	Lot 11	15
Thursday	11/15/2018	17	Lot 12	15
Thursday	11/15/2018	17	Lot 9	111
Thursday	11/15/2018	17	Main	60
Thursday	11/15/2018	18	Lot 11	9
Thursday	11/15/2018	18	Lot 12	15
Thursday	11/15/2018	18	Lot 9	96
Thursday	11/15/2018	18	Main	53
Thursday	11/15/2018	19	Lot 11	9
Thursday	11/15/2018	19	Lot 12	37

Tuesday	11/13/2018	19	Chassis	8
Tuesday	11/13/2018	19	Lot 11	24
Tuesday	11/13/2018	19	Lot 12	17
Tuesday	11/13/2018	19	Lot 8	38
Tuesday	11/13/2018	19	Main	85
Tuesday	11/13/2018	20	710	13
Tuesday	11/13/2018	20	Bobtail	16
Tuesday	11/13/2018	20	Chassis	7
Tuesday	11/13/2018	20	Lot 11	17
Tuesday	11/13/2018	20	Lot 12	20
Tuesday	11/13/2018	20	Lot 8	28
Tuesday	11/13/2018	20	Main	60
Tuesday	11/13/2018	21	710	12
Tuesday	11/13/2018	21	Bobtail	13
Tuesday	11/13/2018	21	Chassis	3
Tuesday	11/13/2018	21	Lot 11	29
Tuesday	11/13/2018	21	Lot 12	14
Tuesday	11/13/2018	21	Lot 8	35
Tuesday	11/13/2018	21	Main	73
Tuesday	11/13/2018	22	710	3
Tuesday	11/13/2018	22	Bobtail	15
Tuesday	11/13/2018	22	Chassis	4
Tuesday	11/13/2018	22	Lot 11	10
Tuesday	11/13/2018	22	Lot 12	9
Tuesday	11/13/2018	22	Lot 8	14
Tuesday	11/13/2018	22	Main	64
Tuesday	11/13/2018	23	710	7
Tuesday	11/13/2018	23	Bobtail	5
Tuesday	11/13/2018	23	Chassis	4
Tuesday	11/13/2018	23	Lot 11	9
Tuesday	11/13/2018	23	Lot 12	23
Tuesday	11/13/2018	23	Lot 8	22
Tuesday	11/13/2018	23	Main	50
Wednesday	11/14/2018	0	710	14
Wednesday	11/14/2018	0	Bobtail	25
Wednesday	11/14/2018	0	Chassis	2
Wednesday	11/14/2018	0	Lot 11	11
Wednesday	11/14/2018	0	Lot 12	20
Wednesday	11/14/2018	0	Lot 8	20
Wednesday	11/14/2018	0	Main	81
Wednesday	11/14/2018	1	710	8
Wednesday	11/14/2018	1	Bobtail	16
Wednesday	11/14/2018	1	Chassis	4
Wednesday	11/14/2018	1	Lot 11	11
Wednesday	11/14/2018	1	Lot 12	10
Wednesday	11/14/2018	1	Lot 8	12
Wednesday	11/14/2018	1	Main	94
Wednesday	11/14/2018	2	710	6
Wednesday	11/14/2018	2	Bobtail	13
Wednesday	11/14/2018	2	Chassis	4
Wednesday	11/14/2018	2	Lot 11	10
Wednesday	11/14/2018	2	Lot 12	13
Wednesday	11/14/2018	2	Lot 8	14
Wednesday	11/14/2018	2	Main	82
Wednesday	11/14/2018	3	710	3
Wednesday	11/14/2018	3	Bobtail	14
Wednesday	11/14/2018	3	Chassis	5
Wednesday	11/14/2018	3	Lot 11	8
Wednesday	11/14/2018	3	Lot 12	2
Wednesday	11/14/2018	3	Lot 8	18
Wednesday	11/14/2018	3	Main	77
Wednesday	11/14/2018	4	710	9
Wednesday	11/14/2018	4	Bobtail	21
Wednesday	11/14/2018	4	Chassis	13
Wednesday	11/14/2018	4	Lot 11	8
Wednesday	11/14/2018	4	Lot 12	27

Thursday	11/15/2018	19	Lot 9	114
Thursday	11/15/2018	19	Main	57
Thursday	11/15/2018	20	Lot 11	20
Thursday	11/15/2018	20	Lot 12	23
Thursday	11/15/2018	20	Lot 9	56
Thursday	11/15/2018	20	Main	43
Thursday	11/15/2018	21	Lot 11	24
Thursday	11/15/2018	21	Lot 12	13
Thursday	11/15/2018	21	Lot 9	85
Thursday	11/15/2018	21	Main	53
Thursday	11/15/2018	22	Lot 11	26
Thursday	11/15/2018	22	Lot 12	13
Thursday	11/15/2018	22	Lot 9	68
Thursday	11/15/2018	22	Main	64
Thursday	11/15/2018	23	Lot 11	15
Thursday	11/15/2018	23	Lot 12	7
Thursday	11/15/2018	23	Lot 9	59
Thursday	11/15/2018	23	Main	45
Friday	11/16/2018	0	Lot 11	17
Friday	11/16/2018	0	Lot 12	2
Friday	11/16/2018	0	Lot 9	34
Friday	11/16/2018	0	Main	32
Friday	11/16/2018	1	Lot 11	11
Friday	11/16/2018	1	Lot 12	13
Friday	11/16/2018	1	Lot 9	61
Friday	11/16/2018	1	Main	78
Friday	11/16/2018	2	Lot 11	7
Friday	11/16/2018	2	Lot 12	25
Friday	11/16/2018	2	Lot 9	70
Friday	11/16/2018	2	Main	56
Friday	11/16/2018	3	Lot 11	6
Friday	11/16/2018	3	Lot 12	23
Friday	11/16/2018	3	Lot 9	50
Friday	11/16/2018	3	Main	63
Friday	11/16/2018	4	Lot 11	10
Friday	11/16/2018	4	Lot 12	23
Friday	11/16/2018	4	Lot 9	61
Friday	11/16/2018	4	Main	55
Friday	11/16/2018	5	Lot 11	19
Friday	11/16/2018	5	Lot 12	25
Friday	11/16/2018	5	Lot 9	83
Friday	11/16/2018	5	Main	63
Friday	11/16/2018	6	Lot 11	26
Friday	11/16/2018	6	Lot 12	29
Friday	11/16/2018	6	Lot 9	84
Friday	11/16/2018	6	Main	56
Friday	11/16/2018	7	Lot 11	27
Friday	11/16/2018	7	Lot 12	34
Friday	11/16/2018	7	Lot 9	106
Friday	11/16/2018	7	Main	57
Friday	11/16/2018	8	Lot 11	19
Friday	11/16/2018	8	Lot 12	28
Friday	11/16/2018	8	Lot 9	102
Friday	11/16/2018	8	Main	50
Friday	11/16/2018	9	Lot 11	19
Friday	11/16/2018	9	Lot 12	21
Friday	11/16/2018	9	Lot 9	124
Friday	11/16/2018	9	Main	81
Friday	11/16/2018	10	Lot 11	16
Friday	11/16/2018	10	Lot 12	20
Friday	11/16/2018	10	Lot 9	120
Friday	11/16/2018	10	Main	94
Friday	11/16/2018	11	Lot 11	22
Friday	11/16/2018	11	Lot 12	25
Friday	11/16/2018	11	Lot 9	120
Friday	11/16/2018	11	Main	86

Wednesday	11/14/2018	4	Lot 8	32
Wednesday	11/14/2018	4	Main	76
Wednesday	11/14/2018	5	710	10
Wednesday	11/14/2018	5	Bobtail	27
Wednesday	11/14/2018	5	Chassis	20
Wednesday	11/14/2018	5	Lot 11	26
Wednesday	11/14/2018	5	Lot 12	23
Wednesday	11/14/2018	5	Lot 8	54
Wednesday	11/14/2018	5	Main	76
Wednesday	11/14/2018	6	710	8
Wednesday	11/14/2018	6	Bobtail	33
Wednesday	11/14/2018	6	Chassis	17
Wednesday	11/14/2018	6	Lot 11	25
Wednesday	11/14/2018	6	Lot 12	27
Wednesday	11/14/2018	6	Lot 8	43
Wednesday	11/14/2018	6	Main	30
Wednesday	11/14/2018	7	710	7
Wednesday	11/14/2018	7	Bobtail	20
Wednesday	11/14/2018	7	Chassis	7
Wednesday	11/14/2018	7	Lot 11	36
Wednesday	11/14/2018	7	Lot 12	26
Wednesday	11/14/2018	7	Lot 8	53
Wednesday	11/14/2018	7	Main	32
Wednesday	11/14/2018	8	710	24
Wednesday	11/14/2018	8	Bobtail	31
Wednesday	11/14/2018	8	Chassis	18
Wednesday	11/14/2018	8	Lot 11	38
Wednesday	11/14/2018	8	Lot 12	17
Wednesday	11/14/2018	8	Lot 8	50
Wednesday	11/14/2018	8	Main	35
Wednesday	11/14/2018	9	710	54
Wednesday	11/14/2018	9	Bobtail	27
Wednesday	11/14/2018	9	Chassis	20
Wednesday	11/14/2018	9	Lot 11	13
Wednesday	11/14/2018	9	Lot 12	42
Wednesday	11/14/2018	9	Lot 8	34
Wednesday	11/14/2018	9	Main	77
Wednesday	11/14/2018	10	710	39
Wednesday	11/14/2018	10	Bobtail	25
Wednesday	11/14/2018	10	Chassis	16
Wednesday	11/14/2018	10	Lot 11	22
Wednesday	11/14/2018	10	Lot 12	38
Wednesday	11/14/2018	10	Lot 8	30
Wednesday	11/14/2018	10	Main	100
Wednesday	11/14/2018	11	710	47
Wednesday	11/14/2018	11	Bobtail	23
Wednesday	11/14/2018	11	Chassis	23
Wednesday	11/14/2018	11	Lot 11	27
Wednesday	11/14/2018	11	Lot 12	32
Wednesday	11/14/2018	11	Lot 8	26
Wednesday	11/14/2018	11	Main	140
Wednesday	11/14/2018	12	710	28
Wednesday	11/14/2018	12	Bobtail	36
Wednesday	11/14/2018	12	Chassis	19
Wednesday	11/14/2018	12	Lot 11	20
Wednesday	11/14/2018	12	Lot 12	33
Wednesday	11/14/2018	12	Lot 8	34
Wednesday	11/14/2018	12	Main	113
Wednesday	11/14/2018	13	710	31
Wednesday	11/14/2018	13	Bobtail	31
Wednesday	11/14/2018	13	Chassis	31
Wednesday	11/14/2018	13	Lot 11	15
Wednesday	11/14/2018	13	Lot 12	31
Wednesday	11/14/2018	13	Lot 8	33
Wednesday	11/14/2018	13	Main	96
Wednesday	11/14/2018	14	710	31

Friday	11/16/2018	12	Lot 11	24
Friday	11/16/2018	12	Lot 12	29
Friday	11/16/2018	12	Lot 9	153
Friday	11/16/2018	12	Main	73
Friday	11/16/2018	13	Lot 11	20
Friday	11/16/2018	13	Lot 12	26
Friday	11/16/2018	13	Lot 9	137
Friday	11/16/2018	13	Main	109
Friday	11/16/2018	14	Lot 11	19
Friday	11/16/2018	14	Lot 12	31
Friday	11/16/2018	14	Lot 9	116
Friday	11/16/2018	14	Main	85
Friday	11/16/2018	15	Lot 11	23
Friday	11/16/2018	15	Lot 12	25
Friday	11/16/2018	15	Lot 9	112
Friday	11/16/2018	15	Main	83
Friday	11/16/2018	16	Lot 11	7
Friday	11/16/2018	16	Lot 12	30
Friday	11/16/2018	16	Lot 9	123
Friday	11/16/2018	16	Main	75
Friday	11/16/2018	17	Lot 11	8
Friday	11/16/2018	17	Lot 12	18
Friday	11/16/2018	17	Lot 9	93
Friday	11/16/2018	17	Main	51
Friday	11/16/2018	18	Lot 11	4
Friday	11/16/2018	18	Lot 12	20
Friday	11/16/2018	18	Lot 9	67
Friday	11/16/2018	18	Main	38
Friday	11/16/2018	19	Lot 11	7
Friday	11/16/2018	19	Lot 12	29
Friday	11/16/2018	19	Lot 9	79
Friday	11/16/2018	19	Main	44
Friday	11/16/2018	20	Lot 11	9
Friday	11/16/2018	20	Lot 12	14
Friday	11/16/2018	20	Lot 9	34
Friday	11/16/2018	20	Main	32
Friday	11/16/2018	21	Lot 11	15
Friday	11/16/2018	21	Lot 12	22
Friday	11/16/2018	21	Lot 9	77
Friday	11/16/2018	21	Main	55
Friday	11/16/2018	22	Lot 11	20
Friday	11/16/2018	22	Lot 12	18
Friday	11/16/2018	22	Lot 9	66
Friday	11/16/2018	22	Main	56
Friday	11/16/2018	23	Lot 11	21
Friday	11/16/2018	23	Lot 12	22
Friday	11/16/2018	23	Lot 9	62
Friday	11/16/2018	23	Main	49
Saturday	11/17/2018	0	Lot 11	14
Saturday	11/17/2018	0	Lot 12	13
Saturday	11/17/2018	0	Lot 9	43
Saturday	11/17/2018	0	Main	38
Saturday	11/17/2018	1	Lot 11	17
Saturday	11/17/2018	1	Lot 12	13
Saturday	11/17/2018	1	Lot 9	70
Saturday	11/17/2018	1	Main	66
Saturday	11/17/2018	2	Lot 11	8
Saturday	11/17/2018	2	Lot 12	16
Saturday	11/17/2018	2	Lot 9	57
Saturday	11/17/2018	2	Main	63
Saturday	11/17/2018	3	Lot 11	10
Saturday	11/17/2018	3	Lot 12	8
Saturday	11/17/2018	3	Lot 9	44
Saturday	11/17/2018	3	Main	38
Saturday	11/17/2018	4	Lot 11	16
Saturday	11/17/2018	4	Lot 12	11

Wednesday	11/14/2018	14	Bobtail	30
Wednesday	11/14/2018	14	Chassis	20
Wednesday	11/14/2018	14	Lot 11	15
Wednesday	11/14/2018	14	Lot 12	6
Wednesday	11/14/2018	14	Lot 8	31
Wednesday	11/14/2018	14	Main	101
Wednesday	11/14/2018	15	710	47
Wednesday	11/14/2018	15	Bobtail	31
Wednesday	11/14/2018	15	Chassis	20
Wednesday	11/14/2018	15	Lot 11	28
Wednesday	11/14/2018	15	Lot 12	8
Wednesday	11/14/2018	15	Lot 8	24
Wednesday	11/14/2018	15	Main	118
Wednesday	11/14/2018	16	710	31
Wednesday	11/14/2018	16	Bobtail	10
Wednesday	11/14/2018	16	Chassis	9
Wednesday	11/14/2018	16	Lot 11	12
Wednesday	11/14/2018	16	Lot 12	9
Wednesday	11/14/2018	16	Lot 8	15
Wednesday	11/14/2018	16	Main	102
Wednesday	11/14/2018	17	710	10
Wednesday	11/14/2018	17	Bobtail	19
Wednesday	11/14/2018	17	Chassis	10
Wednesday	11/14/2018	17	Lot 11	6
Wednesday	11/14/2018	17	Lot 12	7
Wednesday	11/14/2018	17	Lot 8	28
Wednesday	11/14/2018	17	Main	83
Wednesday	11/14/2018	18	710	19
Wednesday	11/14/2018	18	Bobtail	14
Wednesday	11/14/2018	18	Chassis	4
Wednesday	11/14/2018	18	Lot 11	4
Wednesday	11/14/2018	18	Lot 12	6
Wednesday	11/14/2018	18	Lot 8	17
Wednesday	11/14/2018	18	Main	85
Wednesday	11/14/2018	19	710	9
Wednesday	11/14/2018	19	Bobtail	15
Wednesday	11/14/2018	19	Chassis	15
Wednesday	11/14/2018	19	Lot 11	7
Wednesday	11/14/2018	19	Lot 12	1
Wednesday	11/14/2018	19	Lot 8	10
Wednesday	11/14/2018	19	Main	78
Wednesday	11/14/2018	20	710	15
Wednesday	11/14/2018	20	Bobtail	17
Wednesday	11/14/2018	20	Chassis	11
Wednesday	11/14/2018	20	Lot 11	11
Wednesday	11/14/2018	20	Lot 12	24
Wednesday	11/14/2018	20	Lot 8	30
Wednesday	11/14/2018	20	Main	72
Wednesday	11/14/2018	21	710	3
Wednesday	11/14/2018	21	Bobtail	19
Wednesday	11/14/2018	21	Chassis	9
Wednesday	11/14/2018	21	Lot 11	9
Wednesday	11/14/2018	21	Lot 12	25
Wednesday	11/14/2018	21	Lot 8	26
Wednesday	11/14/2018	21	Main	75
Wednesday	11/14/2018	22	710	3
Wednesday	11/14/2018	22	Bobtail	15
Wednesday	11/14/2018	22	Chassis	9
Wednesday	11/14/2018	22	Lot 11	21
Wednesday	11/14/2018	22	Lot 12	25
Wednesday	11/14/2018	22	Lot 8	35
Wednesday	11/14/2018	22	Main	77
Wednesday	11/14/2018	23	710	4
Wednesday	11/14/2018	23	Bobtail	14
Wednesday	11/14/2018	23	Chassis	8
Wednesday	11/14/2018	23	Lot 11	13

Saturday	11/17/2018	4	Lot 9	56
Saturday	11/17/2018	4	Main	64
Saturday	11/17/2018	5	Lot 11	5
Saturday	11/17/2018	5	Lot 12	6
Saturday	11/17/2018	5	Lot 9	49
Saturday	11/17/2018	5	Main	45
Saturday	11/17/2018	6	Lot 11	23
Saturday	11/17/2018	6	Lot 12	7
Saturday	11/17/2018	6	Lot 9	85
Saturday	11/17/2018	6	Main	54
Saturday	11/17/2018	7	Lot 11	30
Saturday	11/17/2018	7	Lot 12	18
Saturday	11/17/2018	7	Lot 9	85
Saturday	11/17/2018	7	Main	45
Saturday	11/17/2018	8	Lot 11	31
Saturday	11/17/2018	8	Lot 12	9
Saturday	11/17/2018	8	Lot 9	68
Saturday	11/17/2018	8	Main	53
Saturday	11/17/2018	9	Lot 11	19
Saturday	11/17/2018	9	Lot 12	17
Saturday	11/17/2018	9	Lot 9	84
Saturday	11/17/2018	9	Main	58
Saturday	11/17/2018	10	Lot 11	21
Saturday	11/17/2018	10	Lot 12	20
Saturday	11/17/2018	10	Lot 9	66
Saturday	11/17/2018	10	Main	43
Saturday	11/17/2018	11	Lot 11	14
Saturday	11/17/2018	11	Lot 12	18
Saturday	11/17/2018	11	Lot 9	74
Saturday	11/17/2018	11	Main	38
Saturday	11/17/2018	12	Lot 11	16
Saturday	11/17/2018	12	Lot 12	11
Saturday	11/17/2018	12	Lot 9	78
Saturday	11/17/2018	12	Main	61
Saturday	11/17/2018	13	Lot 11	19
Saturday	11/17/2018	13	Lot 12	12
Saturday	11/17/2018	13	Lot 9	67
Saturday	11/17/2018	13	Main	39
Saturday	11/17/2018	14	Lot 11	9
Saturday	11/17/2018	14	Lot 12	11
Saturday	11/17/2018	14	Lot 9	49
Saturday	11/17/2018	14	Main	44
Saturday	11/17/2018	15	Lot 11	6
Saturday	11/17/2018	15	Lot 12	9
Saturday	11/17/2018	15	Lot 9	46
Saturday	11/17/2018	15	Main	52
Saturday	11/17/2018	16	Lot 11	13
Saturday	11/17/2018	16	Lot 12	13
Saturday	11/17/2018	16	Lot 9	40
Saturday	11/17/2018	16	Main	38
Saturday	11/17/2018	17	Lot 11	5
Saturday	11/17/2018	17	Lot 12	5
Saturday	11/17/2018	17	Lot 9	31
Saturday	11/17/2018	17	Main	27
Saturday	11/17/2018	18	Lot 11	8
Saturday	11/17/2018	18	Lot 12	5
Saturday	11/17/2018	18	Lot 9	38
Saturday	11/17/2018	18	Main	24
Saturday	11/17/2018	19	Lot 11	9
Saturday	11/17/2018	19	Lot 12	11
Saturday	11/17/2018	19	Lot 9	39
Saturday	11/17/2018	19	Main	31
Saturday	11/17/2018	20	Lot 11	12
Saturday	11/17/2018	20	Lot 12	2
Saturday	11/17/2018	20	Lot 9	14
Saturday	11/17/2018	20	Main	15

Wednesday	11/14/2018	23	Lot 12	18
Wednesday	11/14/2018	23	Lot 8	21
Wednesday	11/14/2018	23	Main	43
Thursday	11/15/2018	0	710	7
Thursday	11/15/2018	0	Bobtail	16
Thursday	11/15/2018	0	Chassis	16
Thursday	11/15/2018	0	Lot 11	4
Thursday	11/15/2018	0	Lot 12	8
Thursday	11/15/2018	0	Lot 8	20
Thursday	11/15/2018	0	Main	92
Thursday	11/15/2018	1	710	3
Thursday	11/15/2018	1	Bobtail	13
Thursday	11/15/2018	1	Chassis	13
Thursday	11/15/2018	1	Lot 11	2
Thursday	11/15/2018	1	Lot 12	10
Thursday	11/15/2018	1	Lot 8	18
Thursday	11/15/2018	1	Main	98
Thursday	11/15/2018	2	710	9
Thursday	11/15/2018	2	Bobtail	17
Thursday	11/15/2018	2	Chassis	5
Thursday	11/15/2018	2	Lot 11	8
Thursday	11/15/2018	2	Lot 12	13
Thursday	11/15/2018	2	Lot 8	21
Thursday	11/15/2018	2	Main	84
Thursday	11/15/2018	3	710	7
Thursday	11/15/2018	3	Bobtail	13
Thursday	11/15/2018	3	Chassis	5
Thursday	11/15/2018	3	Lot 11	8
Thursday	11/15/2018	3	Lot 12	19
Thursday	11/15/2018	3	Lot 8	21
Thursday	11/15/2018	3	Main	89
Thursday	11/15/2018	4	710	5
Thursday	11/15/2018	4	Bobtail	18
Thursday	11/15/2018	4	Chassis	6
Thursday	11/15/2018	4	Lot 11	22
Thursday	11/15/2018	4	Lot 12	29
Thursday	11/15/2018	4	Lot 8	38
Thursday	11/15/2018	4	Main	74
Thursday	11/15/2018	5	710	8
Thursday	11/15/2018	5	Bobtail	33
Thursday	11/15/2018	5	Chassis	13
Thursday	11/15/2018	5	Lot 11	21
Thursday	11/15/2018	5	Lot 12	30
Thursday	11/15/2018	5	Lot 8	56
Thursday	11/15/2018	5	Main	54
Thursday	11/15/2018	6	710	9
Thursday	11/15/2018	6	Bobtail	34
Thursday	11/15/2018	6	Chassis	17
Thursday	11/15/2018	6	Lot 11	23
Thursday	11/15/2018	6	Lot 12	29
Thursday	11/15/2018	6	Lot 8	59
Thursday	11/15/2018	6	Main	42
Thursday	11/15/2018	7	710	6
Thursday	11/15/2018	7	Bobtail	28
Thursday	11/15/2018	7	Chassis	10
Thursday	11/15/2018	7	Lot 11	36
Thursday	11/15/2018	7	Lot 12	27
Thursday	11/15/2018	7	Lot 8	50
Thursday	11/15/2018	7	Main	42
Thursday	11/15/2018	8	710	17
Thursday	11/15/2018	8	Bobtail	22
Thursday	11/15/2018	8	Chassis	4
Thursday	11/15/2018	8	Lot 11	37
Thursday	11/15/2018	8	Lot 12	22
Thursday	11/15/2018	8	Lot 8	75
Thursday	11/15/2018	8	Main	32

Saturday	11/17/2018	21	Lot 11	8
Saturday	11/17/2018	21	Lot 12	6
Saturday	11/17/2018	21	Lot 9	43
Saturday	11/17/2018	21	Main	21
Saturday	11/17/2018	22	Lot 11	7
Saturday	11/17/2018	22	Lot 12	3
Saturday	11/17/2018	22	Lot 9	29
Saturday	11/17/2018	22	Main	25
Saturday	11/17/2018	23	Lot 11	5
Saturday	11/17/2018	23	Lot 12	6
Saturday	11/17/2018	23	Lot 9	33
Saturday	11/17/2018	23	Main	19

Thursday	11/15/2018	9	710	38
Thursday	11/15/2018	9	Bobtail	18
Thursday	11/15/2018	9	Chassis	15
Thursday	11/15/2018	9	Lot 11	16
Thursday	11/15/2018	9	Lot 12	41
Thursday	11/15/2018	9	Lot 8	35
Thursday	11/15/2018	9	Main	79
Thursday	11/15/2018	10	710	51
Thursday	11/15/2018	10	Bobtail	22
Thursday	11/15/2018	10	Chassis	16
Thursday	11/15/2018	10	Lot 11	22
Thursday	11/15/2018	10	Lot 12	29
Thursday	11/15/2018	10	Lot 8	34
Thursday	11/15/2018	10	Main	104
Thursday	11/15/2018	11	710	32
Thursday	11/15/2018	11	Bobtail	25
Thursday	11/15/2018	11	Chassis	23
Thursday	11/15/2018	11	Lot 11	32
Thursday	11/15/2018	11	Lot 12	24
Thursday	11/15/2018	11	Lot 8	36
Thursday	11/15/2018	11	Main	126
Thursday	11/15/2018	12	710	28
Thursday	11/15/2018	12	Bobtail	33
Thursday	11/15/2018	12	Chassis	19
Thursday	11/15/2018	12	Lot 11	30
Thursday	11/15/2018	12	Lot 12	20
Thursday	11/15/2018	12	Lot 8	27
Thursday	11/15/2018	12	Main	136
Thursday	11/15/2018	13	710	26
Thursday	11/15/2018	13	Bobtail	18
Thursday	11/15/2018	13	Chassis	11
Thursday	11/15/2018	13	Lot 11	26
Thursday	11/15/2018	13	Lot 12	39
Thursday	11/15/2018	13	Lot 8	34
Thursday	11/15/2018	13	Main	112
Thursday	11/15/2018	14	710	27
Thursday	11/15/2018	14	Bobtail	18
Thursday	11/15/2018	14	Chassis	12
Thursday	11/15/2018	14	Lot 11	17
Thursday	11/15/2018	14	Lot 12	38
Thursday	11/15/2018	14	Lot 8	26
Thursday	11/15/2018	14	Main	113
Thursday	11/15/2018	15	710	25
Thursday	11/15/2018	15	Bobtail	14
Thursday	11/15/2018	15	Chassis	9
Thursday	11/15/2018	15	Lot 11	8
Thursday	11/15/2018	15	Lot 12	39
Thursday	11/15/2018	15	Lot 8	43
Thursday	11/15/2018	15	Main	108
Thursday	11/15/2018	16	710	28
Thursday	11/15/2018	16	Bobtail	15
Thursday	11/15/2018	16	Chassis	4
Thursday	11/15/2018	16	Lot 11	9
Thursday	11/15/2018	16	Lot 12	30
Thursday	11/15/2018	16	Lot 8	45
Thursday	11/15/2018	16	Main	104
Thursday	11/15/2018	17	710	17
Thursday	11/15/2018	17	Bobtail	9
Thursday	11/15/2018	17	Chassis	7
Thursday	11/15/2018	17	Lot 11	16
Thursday	11/15/2018	17	Lot 12	13
Thursday	11/15/2018	17	Lot 8	31
Thursday	11/15/2018	17	Main	87
Thursday	11/15/2018	18	710	18
Thursday	11/15/2018	18	Bobtail	21
Thursday	11/15/2018	18	Chassis	8

Thursday	11/15/2018	18	Lot 11	11
Thursday	11/15/2018	18	Lot 12	19
Thursday	11/15/2018	18	Lot 8	33
Thursday	11/15/2018	18	Main	78
Thursday	11/15/2018	19	710	14
Thursday	11/15/2018	19	Bobtail	26
Thursday	11/15/2018	19	Chassis	13
Thursday	11/15/2018	19	Lot 11	9
Thursday	11/15/2018	19	Lot 12	36
Thursday	11/15/2018	19	Lot 8	35
Thursday	11/15/2018	19	Main	82
Thursday	11/15/2018	20	710	3
Thursday	11/15/2018	20	Bobtail	18
Thursday	11/15/2018	20	Chassis	15
Thursday	11/15/2018	20	Lot 11	19
Thursday	11/15/2018	20	Lot 12	19
Thursday	11/15/2018	20	Lot 8	24
Thursday	11/15/2018	20	Main	70
Thursday	11/15/2018	21	710	8
Thursday	11/15/2018	21	Bobtail	21
Thursday	11/15/2018	21	Chassis	8
Thursday	11/15/2018	21	Lot 11	27
Thursday	11/15/2018	21	Lot 12	16
Thursday	11/15/2018	21	Lot 8	19
Thursday	11/15/2018	21	Main	64
Thursday	11/15/2018	22	710	4
Thursday	11/15/2018	22	Bobtail	20
Thursday	11/15/2018	22	Chassis	2
Thursday	11/15/2018	22	Lot 11	22
Thursday	11/15/2018	22	Lot 12	10
Thursday	11/15/2018	22	Lot 8	10
Thursday	11/15/2018	22	Main	72
Thursday	11/15/2018	23	710	4
Thursday	11/15/2018	23	Bobtail	12
Thursday	11/15/2018	23	Chassis	3
Thursday	11/15/2018	23	Lot 11	13
Thursday	11/15/2018	23	Lot 12	7
Thursday	11/15/2018	23	Lot 8	8
Thursday	11/15/2018	23	Main	45
Friday	11/16/2018	0	710	9
Friday	11/16/2018	0	Bobtail	20
Friday	11/16/2018	0	Chassis	4
Friday	11/16/2018	0	Lot 11	21
Friday	11/16/2018	0	Lot 12	4
Friday	11/16/2018	0	Lot 8	19
Friday	11/16/2018	0	Main	88
Friday	11/16/2018	1	710	8
Friday	11/16/2018	1	Bobtail	14
Friday	11/16/2018	1	Chassis	2
Friday	11/16/2018	1	Lot 11	7
Friday	11/16/2018	1	Lot 12	17
Friday	11/16/2018	1	Lot 8	13
Friday	11/16/2018	1	Main	99
Friday	11/16/2018	2	710	5
Friday	11/16/2018	2	Bobtail	10
Friday	11/16/2018	2	Chassis	7
Friday	11/16/2018	2	Lot 11	9
Friday	11/16/2018	2	Lot 12	23
Friday	11/16/2018	2	Lot 8	16
Friday	11/16/2018	2	Main	81
Friday	11/16/2018	3	710	8
Friday	11/16/2018	3	Bobtail	13
Friday	11/16/2018	3	Chassis	10
Friday	11/16/2018	3	Lot 11	6
Friday	11/16/2018	3	Lot 12	22
Friday	11/16/2018	3	Lot 8	12

Friday	11/16/2018	3	Main	63
Friday	11/16/2018	4	710	8
Friday	11/16/2018	4	Bobtail	17
Friday	11/16/2018	4	Chassis	13
Friday	11/16/2018	4	Lot 11	12
Friday	11/16/2018	4	Lot 12	27
Friday	11/16/2018	4	Lot 8	23
Friday	11/16/2018	4	Main	73
Friday	11/16/2018	5	710	6
Friday	11/16/2018	5	Bobtail	36
Friday	11/16/2018	5	Chassis	12
Friday	11/16/2018	5	Lot 11	18
Friday	11/16/2018	5	Lot 12	23
Friday	11/16/2018	5	Lot 8	36
Friday	11/16/2018	5	Main	54
Friday	11/16/2018	6	710	13
Friday	11/16/2018	6	Bobtail	41
Friday	11/16/2018	6	Chassis	15
Friday	11/16/2018	6	Lot 11	33
Friday	11/16/2018	6	Lot 12	35
Friday	11/16/2018	6	Lot 8	59
Friday	11/16/2018	6	Main	28
Friday	11/16/2018	7	710	6
Friday	11/16/2018	7	Bobtail	33
Friday	11/16/2018	7	Chassis	9
Friday	11/16/2018	7	Lot 11	26
Friday	11/16/2018	7	Lot 12	26
Friday	11/16/2018	7	Lot 8	56
Friday	11/16/2018	7	Main	53
Friday	11/16/2018	8	710	38
Friday	11/16/2018	8	Bobtail	29
Friday	11/16/2018	8	Chassis	7
Friday	11/16/2018	8	Lot 11	15
Friday	11/16/2018	8	Lot 12	33
Friday	11/16/2018	8	Lot 8	39
Friday	11/16/2018	8	Main	57
Friday	11/16/2018	9	710	47
Friday	11/16/2018	9	Bobtail	23
Friday	11/16/2018	9	Chassis	11
Friday	11/16/2018	9	Lot 11	17
Friday	11/16/2018	9	Lot 12	17
Friday	11/16/2018	9	Lot 8	29
Friday	11/16/2018	9	Main	85
Friday	11/16/2018	10	710	32
Friday	11/16/2018	10	Bobtail	36
Friday	11/16/2018	10	Chassis	19
Friday	11/16/2018	10	Lot 11	17
Friday	11/16/2018	10	Lot 12	23
Friday	11/16/2018	10	Lot 8	34
Friday	11/16/2018	10	Main	108
Friday	11/16/2018	11	710	42
Friday	11/16/2018	11	Bobtail	27
Friday	11/16/2018	11	Chassis	17
Friday	11/16/2018	11	Lot 11	21
Friday	11/16/2018	11	Lot 12	23
Friday	11/16/2018	11	Lot 8	31
Friday	11/16/2018	11	Main	100
Friday	11/16/2018	12	710	41
Friday	11/16/2018	12	Bobtail	25
Friday	11/16/2018	12	Chassis	15
Friday	11/16/2018	12	Lot 11	27
Friday	11/16/2018	12	Lot 12	30
Friday	11/16/2018	12	Lot 8	43
Friday	11/16/2018	12	Main	145
Friday	11/16/2018	13	710	22
Friday	11/16/2018	13	Bobtail	19

Friday	11/16/2018	13	Chassis	10
Friday	11/16/2018	13	Lot 11	24
Friday	11/16/2018	13	Lot 12	22
Friday	11/16/2018	13	Lot 8	34
Friday	11/16/2018	13	Main	120
Friday	11/16/2018	14	710	25
Friday	11/16/2018	14	Bobtail	21
Friday	11/16/2018	14	Chassis	6
Friday	11/16/2018	14	Lot 11	14
Friday	11/16/2018	14	Lot 12	31
Friday	11/16/2018	14	Lot 8	29
Friday	11/16/2018	14	Main	118
Friday	11/16/2018	15	710	29
Friday	11/16/2018	15	Bobtail	6
Friday	11/16/2018	15	Chassis	7
Friday	11/16/2018	15	Lot 11	23
Friday	11/16/2018	15	Lot 12	25
Friday	11/16/2018	15	Lot 8	30
Friday	11/16/2018	15	Main	119
Friday	11/16/2018	16	710	20
Friday	11/16/2018	16	Bobtail	11
Friday	11/16/2018	16	Chassis	16
Friday	11/16/2018	16	Lot 11	4
Friday	11/16/2018	16	Lot 12	32
Friday	11/16/2018	16	Lot 8	28
Friday	11/16/2018	16	Main	104
Friday	11/16/2018	17	710	14
Friday	11/16/2018	17	Bobtail	9
Friday	11/16/2018	17	Chassis	4
Friday	11/16/2018	17	Lot 11	8
Friday	11/16/2018	17	Lot 12	16
Friday	11/16/2018	17	Lot 8	21
Friday	11/16/2018	17	Main	89
Friday	11/16/2018	18	710	4
Friday	11/16/2018	18	Bobtail	9
Friday	11/16/2018	18	Chassis	2
Friday	11/16/2018	18	Lot 11	5
Friday	11/16/2018	18	Lot 12	20
Friday	11/16/2018	18	Lot 8	20
Friday	11/16/2018	18	Main	56
Friday	11/16/2018	19	710	6
Friday	11/16/2018	19	Bobtail	10
Friday	11/16/2018	19	Chassis	4
Friday	11/16/2018	19	Lot 11	7
Friday	11/16/2018	19	Lot 12	32
Friday	11/16/2018	19	Lot 8	27
Friday	11/16/2018	19	Main	73
Friday	11/16/2018	20	710	5
Friday	11/16/2018	20	Bobtail	8
Friday	11/16/2018	20	Chassis	2
Friday	11/16/2018	20	Lot 11	9
Friday	11/16/2018	20	Lot 12	11
Friday	11/16/2018	20	Lot 8	19
Friday	11/16/2018	20	Main	64
Friday	11/16/2018	21	710	7
Friday	11/16/2018	21	Bobtail	15
Friday	11/16/2018	21	Chassis	8
Friday	11/16/2018	21	Lot 11	16
Friday	11/16/2018	21	Lot 12	26
Friday	11/16/2018	21	Lot 8	27
Friday	11/16/2018	21	Main	88
Friday	11/16/2018	22	710	2
Friday	11/16/2018	22	Bobtail	12
Friday	11/16/2018	22	Chassis	5
Friday	11/16/2018	22	Lot 11	19
Friday	11/16/2018	22	Lot 12	14

Friday	11/16/2018	22	Lot 8	19
Friday	11/16/2018	22	Main	59
Friday	11/16/2018	23	710	2
Friday	11/16/2018	23	Bobtail	8
Friday	11/16/2018	23	Chassis	4
Friday	11/16/2018	23	Lot 11	19
Friday	11/16/2018	23	Lot 12	21
Friday	11/16/2018	23	Lot 8	15
Friday	11/16/2018	23	Main	52
Saturday	11/17/2018	0	710	9
Saturday	11/17/2018	0	Bobtail	19
Saturday	11/17/2018	0	Chassis	5
Saturday	11/17/2018	0	Lot 11	16
Saturday	11/17/2018	0	Lot 12	17
Saturday	11/17/2018	0	Lot 8	19
Saturday	11/17/2018	0	Main	100
Saturday	11/17/2018	1	710	5
Saturday	11/17/2018	1	Bobtail	3
Saturday	11/17/2018	1	Chassis	5
Saturday	11/17/2018	1	Lot 11	19
Saturday	11/17/2018	1	Lot 12	13
Saturday	11/17/2018	1	Lot 8	12
Saturday	11/17/2018	1	Main	110
Saturday	11/17/2018	2	710	2
Saturday	11/17/2018	2	Bobtail	3
Saturday	11/17/2018	2	Chassis	3
Saturday	11/17/2018	2	Lot 11	4
Saturday	11/17/2018	2	Lot 12	19
Saturday	11/17/2018	2	Lot 8	9
Saturday	11/17/2018	2	Main	74
Saturday	11/17/2018	3	710	7
Saturday	11/17/2018	3	Bobtail	7
Saturday	11/17/2018	3	Chassis	3
Saturday	11/17/2018	3	Lot 11	12
Saturday	11/17/2018	3	Lot 12	8
Saturday	11/17/2018	3	Lot 8	15
Saturday	11/17/2018	3	Main	79
Saturday	11/17/2018	4	710	9
Saturday	11/17/2018	4	Bobtail	9
Saturday	11/17/2018	4	Lot 11	16
Saturday	11/17/2018	4	Lot 12	6
Saturday	11/17/2018	4	Lot 8	8
Saturday	11/17/2018	4	Main	78
Saturday	11/17/2018	5	710	7
Saturday	11/17/2018	5	Bobtail	14
Saturday	11/17/2018	5	Chassis	5
Saturday	11/17/2018	5	Lot 11	8
Saturday	11/17/2018	5	Lot 12	8
Saturday	11/17/2018	5	Lot 8	13
Saturday	11/17/2018	5	Main	72
Saturday	11/17/2018	6	710	13
Saturday	11/17/2018	6	Bobtail	28
Saturday	11/17/2018	6	Chassis	15
Saturday	11/17/2018	6	Lot 11	24
Saturday	11/17/2018	6	Lot 12	9
Saturday	11/17/2018	6	Lot 8	24
Saturday	11/17/2018	6	Main	52
Saturday	11/17/2018	7	710	6
Saturday	11/17/2018	7	Bobtail	16
Saturday	11/17/2018	7	Chassis	10
Saturday	11/17/2018	7	Lot 11	29
Saturday	11/17/2018	7	Lot 12	17
Saturday	11/17/2018	7	Lot 8	30
Saturday	11/17/2018	7	Main	64
Saturday	11/17/2018	8	710	14
Saturday	11/17/2018	8	Bobtail	20

Saturday	11/17/2018	8	Chassis	14
Saturday	11/17/2018	8	Lot 11	28
Saturday	11/17/2018	8	Lot 12	8
Saturday	11/17/2018	8	Lot 8	25
Saturday	11/17/2018	8	Main	58
Saturday	11/17/2018	9	710	13
Saturday	11/17/2018	9	Bobtail	17
Saturday	11/17/2018	9	Chassis	12
Saturday	11/17/2018	9	Lot 11	23
Saturday	11/17/2018	9	Lot 12	20
Saturday	11/17/2018	9	Lot 8	19
Saturday	11/17/2018	9	Main	58
Saturday	11/17/2018	10	710	19
Saturday	11/17/2018	10	Bobtail	7
Saturday	11/17/2018	10	Chassis	13
Saturday	11/17/2018	10	Lot 11	22
Saturday	11/17/2018	10	Lot 12	16
Saturday	11/17/2018	10	Lot 8	25
Saturday	11/17/2018	10	Main	57
Saturday	11/17/2018	11	710	15
Saturday	11/17/2018	11	Bobtail	15
Saturday	11/17/2018	11	Chassis	17
Saturday	11/17/2018	11	Lot 11	14
Saturday	11/17/2018	11	Lot 12	18
Saturday	11/17/2018	11	Lot 8	27
Saturday	11/17/2018	11	Main	61
Saturday	11/17/2018	12	710	10
Saturday	11/17/2018	12	Bobtail	15
Saturday	11/17/2018	12	Chassis	7
Saturday	11/17/2018	12	Lot 11	15
Saturday	11/17/2018	12	Lot 12	10
Saturday	11/17/2018	12	Lot 8	28
Saturday	11/17/2018	12	Main	57
Saturday	11/17/2018	13	710	8
Saturday	11/17/2018	13	Bobtail	16
Saturday	11/17/2018	13	Chassis	5
Saturday	11/17/2018	13	Lot 11	17
Saturday	11/17/2018	13	Lot 12	11
Saturday	11/17/2018	13	Lot 8	19
Saturday	11/17/2018	13	Main	49
Saturday	11/17/2018	14	710	7
Saturday	11/17/2018	14	Bobtail	14
Saturday	11/17/2018	14	Chassis	10
Saturday	11/17/2018	14	Lot 11	8
Saturday	11/17/2018	14	Lot 12	11
Saturday	11/17/2018	14	Lot 8	14
Saturday	11/17/2018	14	Main	56
Saturday	11/17/2018	15	710	13
Saturday	11/17/2018	15	Bobtail	15
Saturday	11/17/2018	15	Chassis	8
Saturday	11/17/2018	15	Lot 11	9
Saturday	11/17/2018	15	Lot 12	11
Saturday	11/17/2018	15	Lot 8	8
Saturday	11/17/2018	15	Main	43
Saturday	11/17/2018	16	710	3
Saturday	11/17/2018	16	Bobtail	16
Saturday	11/17/2018	16	Chassis	5
Saturday	11/17/2018	16	Lot 11	9
Saturday	11/17/2018	16	Lot 12	14
Saturday	11/17/2018	16	Lot 8	13
Saturday	11/17/2018	16	Main	28
Saturday	11/17/2018	17	710	2
Saturday	11/17/2018	17	Bobtail	20
Saturday	11/17/2018	17	Chassis	2
Saturday	11/17/2018	17	Lot 11	6
Saturday	11/17/2018	17	Lot 12	3

Saturday	11/17/2018	17	Lot 8	17
Saturday	11/17/2018	17	Main	30
Saturday	11/17/2018	18	710	6
Saturday	11/17/2018	18	Bobtail	14
Saturday	11/17/2018	18	Chassis	9
Saturday	11/17/2018	18	Lot 11	7
Saturday	11/17/2018	18	Lot 12	7
Saturday	11/17/2018	18	Lot 8	13
Saturday	11/17/2018	18	Main	24
Saturday	11/17/2018	19	Bobtail	18
Saturday	11/17/2018	19	Chassis	3
Saturday	11/17/2018	19	Lot 11	11
Saturday	11/17/2018	19	Lot 12	9
Saturday	11/17/2018	19	Lot 8	9
Saturday	11/17/2018	19	Main	15
Saturday	11/17/2018	20	710	3
Saturday	11/17/2018	20	Bobtail	14
Saturday	11/17/2018	20	Chassis	2
Saturday	11/17/2018	20	Lot 11	11
Saturday	11/17/2018	20	Lot 12	3
Saturday	11/17/2018	20	Lot 8	17
Saturday	11/17/2018	20	Main	20
Saturday	11/17/2018	21	710	1
Saturday	11/17/2018	21	Bobtail	8
Saturday	11/17/2018	21	Chassis	3
Saturday	11/17/2018	21	Lot 11	9
Saturday	11/17/2018	21	Lot 12	5
Saturday	11/17/2018	21	Lot 8	13
Saturday	11/17/2018	21	Main	28
Saturday	11/17/2018	22	710	2
Saturday	11/17/2018	22	Bobtail	9
Saturday	11/17/2018	22	Chassis	1
Saturday	11/17/2018	22	Lot 11	6
Saturday	11/17/2018	22	Lot 12	3
Saturday	11/17/2018	22	Lot 8	13
Saturday	11/17/2018	22	Main	22
Saturday	11/17/2018	23	710	1
Saturday	11/17/2018	23	Bobtail	11
Saturday	11/17/2018	23	Chassis	1
Saturday	11/17/2018	23	Lot 11	5
Saturday	11/17/2018	23	Lot 12	6
Saturday	11/17/2018	23	Lot 8	10
Saturday	11/17/2018	23	Main	17

APPENDIX I: HOBART YARD TRIP DATA

Habart Yard - Truck Type Data Summary

	Tractor Trips (Chassis and Bobtail - 3-axel)	Tractor + Trailer Trips (Loads and Empties - 4-axel)
Enter	106,315	109,213
Exit	104,081	108,193
Total	**210,396**	**217,406**
Percent	49%	51%

November

Totals In

DOW	Chassis	Bobtail	Loads	Empties	Units	Total
Sunday	272	3,670	2,572	73	2,645	6,587
Monday	802	8,434	7,417	260	7,677	16,913
Tuesday	817	8,689	9,841	225	10,066	19,572
Wednesday	671	7,684	10,075	291	10,366	18,721
Thursday	574	8,655	10,213	276	10,489	19,718
Friday	516	8,813	9,351	202	9,553	18,882
Saturday	149	4,700	5,715	242	5,957	10,806
Total	**3,801**	**50,645**	**55,184**	**1,569**	**56,753**	**111,199**

Average In

DOW	Chassis	Bobtail	Loads	Empties	Units	Total
Sunday	68	918	643	18	661	1,647
Monday	201	2,109	1,854	65	1,919	4,228
Tuesday	204	2,172	2,460	56	2,517	4,893
Wednesday	168	1,921	2,519	73	2,592	4,680
Thursday	115	1,731	2,043	55	2,098	3,944
Friday	103	1,763	1,870	40	1,911	3,776
Saturday	37	1,175	1,429	61	1,489	2,702
Total	**896**	**11,788**	**12,818**	**368**	**13,186**	**25,870**

Totals Out

DOW	Chassis	Bobtail	Loads	Empties	Units	Total
Sunday	19	2,349	3,222	1,001	4,223	6,591
Monday	327	8,434	7,710	2,114	9,824	18,585
Tuesday	471	8,689	7,684	1,882	9,566	18,726
Wednesday	600	7,684	6,537	2,115	8,652	16,936
Thursday	596	8,655	6,782	2,444	9,226	18,477
Friday	606	8,813	6,724	2,498	9,222	18,641
Saturday	269	4,700	3,535	1,602	5,137	10,106
Total	**2,888**	**49,324**	**42,194**	**13,656**	**55,850**	**108,062**

Average Out

DOW	Chassis	Bobtail	Loads	Empties	Units	Total
Sunday	5	587	806	250	1,056	1,648
Monday	82	2,109	1,928	529	2,456	4,646
Tuesday	118	2,172	1,921	471	2,392	4,682
Wednesday	150	1,921	1,634	529	2,163	4,234
Thursday	119	1,731	1,356	489	1,845	3,695
Friday	121	1,763	1,345	500	1,844	3,728
Saturday	67	1,175	884	401	1,284	2,527
Total	**662**	**11,458**	**9,873**	**3,167**	**13,040**	**25,160**

December

Totals In

DOW	Chassis	Bobtail	Loads	Empties	Units	Total
Sunday	266	4,904	2,673	216	2,889	8,059
Monday	680	8,308	6,809	179	6,988	15,976
Tuesday	813	6,559	7,018	225	7,243	14,615
Wednesday	554	7,734	8,360	157	8,517	16,805
Thursday	532	7,654	8,645	192	8,837	17,023
Friday	417	7,396	9,272	272	9,544	17,357
Saturday	474	5,578	6,662	211	6,873	12,925
Total	**3,736**	**48,133**	**49,439**	**1,452**	**50,891**	**102,760**

Average In

DOW	Chassis	Bobtail	Loads	Empties	Units	Total
Sunday	53	981	535	43	578	1,612
Monday	136	1,662	1,362	36	1,398	3,195
Tuesday	203	1,640	1,755	56	1,811	3,654
Wednesday	139	1,934	2,090	39	2,129	4,201
Thursday	133	1,914	2,161	48	2,209	4,256
Friday	104	1,849	2,318	68	2,386	4,339
Saturday	95	1,116	1,332	42	1,375	2,585
Total	**863**	**11,094**	**11,553**	**333**	**11,885**	**23,842**

Totals Out

DOW	Chassis	Bobtail	Loads	Empties	Units	Total
Sunday	266	4,904	2,673	216	2,889	8,059
Monday	680	8,308	6,809	179	6,988	15,976
Tuesday	813	6,559	7,018	225	7,243	14,615
Wednesday	554	7,734	8,360	157	8,517	16,805
Thursday	532	7,654	8,645	192	8,837	17,023
Friday	417	7,396	9,272	272	9,544	17,357
Saturday	474	5,578	6,662	211	6,873	12,925
Total	**3,736**	**48,133**	**49,439**	**1,452**	**50,891**	**102,760**

Average Out

DOW	Chassis	Bobtail	Loads	Empties	Units	Total
Sunday	53	981	535	43	578	1,612
Monday	136	1,662	1,362	36	1,398	3,195
Tuesday	203	1,640	1,755	56	1,811	3,654
Wednesday	139	1,934	2,090	39	2,129	4,201
Thursday	133	1,914	2,161	48	2,209	4,256
Friday	104	1,849	2,318	68	2,386	4,339
Saturday	95	1,116	1,332	42	1,375	2,585
Total	**863**	**11,094**	**11,553**	**333**	**11,885**	**23,842**

Appendix J: ITE Trip Generation

No BIG Baseline Roadway Segment ADT Development

			Count ADTs [1]		Count ADTs 2023 [2]								No BIG SBTAM ADTs [3]											Plus BIG SBTAM+ ADTs									
	YEAR:				2023	Existing Fleet Mix						2023	2023	2048	2023	2023 No BIG Baseline SBTAM+ Fleet Mix									2023	2048	2048 Plus BIG SBTAM+ Fleet Mix									2048
	PCE Rate:								1	1.5	2	3								1	1.5	2	3							1	1.5	2	3	
Segment #	Roadway	Segment	Count Year	ADT Count	2021 to 2023 CAGR Assumption	ADT Count [Non-PCE]	PCE 1 (Class #1-3) [Percentage]	PCE 1.5 (Class #4-5) [Percentage]	PCE 2 (Class #6) [Percentage]	PCE 3 (Class #7-13) [Percentage]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	ADT Count [PCE]	SBTAM+ Segment Unique ID	SBTAM+ Segment Unique ID	2023 No BIG SBTAM+ ADT [Non-PCE]	PCE 1 (Class #1-3) [Percentage]	PCE 1.5 (Class #4-5) [Percentage]	PCE 2 (Class #6) [Percentage]	PCE 3 (Class #7-13) [Percentage]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	2023 No BIG SBTAM ADT [PCE]	2048 Plus BIG SBTAM+ ADT [Non-PCE]	PCE 1 (Class #1-3) [Percentage]	PCE 1.5 (Class #4-5) [Percentage]	PCE 2 (Class #6) [Percentage]	PCE 3 (Class #7-13) [Percentage]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	2048 Plus BIG SBTAM+ ADT [PCE]
1	Main Street	Hinkley Road to Country Club Drive	2021	3,610	0.0%	3,610	93.5%	4.6%	0.9%	1.0%	3,376	166	32	36	3,800	2782847	2772276	4,970	86%	3%	1%	10%	4,261	132	64	512	6,124	12,564	28%	8%	6%	58%	8,968	408	290	2,898	18,854
2	Main Street	Country Club Drive to Lenwood Road	2021	3,610	0.0%	3,610	93.5%	4.6%	0.9%	1.0%	3,376	166	32	36	3,800	122089	122089	5,378	87%	2%	1%	10%	4,665	134	65	514	6,537	13,025	33%	8%	5%	54%	9,425	410	290	2,900	19,320
3	Main Street	Lenwood Road to County/City Boundary	2023	9,642	0.0%	9,650	92.6%	4.6%	1.1%	1.8%	8,926	444	106	174	10,330	2782871	2773626	3,272	97%	1%	1%	1%	3,187	28	25	32	3,374	3,477	88%	3%	3%	6%	3,083	101	112	180	4,000
4	Main Street	County/City Boundary to SR 58 Eastbound Ramps	2023	9,642	0.0%	9,650	92.6%	4.6%	1.1%	1.8%	8,926	444	106	174	10,330	2782871	2773626	3,272	97%	1%	1%	1%	3,187	28	25	32	3,374	3,477	88%	3%	3%	6%	3,083	101	112	180	4,000
5	Main Street	SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	2021	8,316	0.0%	8,320	90.8%	4.6%	1.2%	3.4%	7,556	383	102	279	9,180	N/A	N/A	4,089	97%	1%	1%	1%	3,984	34	31	40	4,217	5,055	86%	3%	4%	6%	4,498	142	162	254	5,797
6	Main Street	SR 58 Westbound Ramps to L Street	2023	6,990	0.0%	6,990	88.5%	4.6%	1.4%	5.5%	6,186	322	98	384	8,020	99984	99984	4,906	97%	1%	1%	1%	4,781	40	37	48	5,060	6,634	85%	4%	4%	7%	5,913	182	211	327	7,590
7	Main Street	L Street to 1st Street	2021	12,794	0.0%	12,800	85.4%	13.4%	0.5%	0.7%	10,931	1,715	64	90	13,910	128574	128574	9,466	94%	1%	1%	4%	8,863	138	126	339	10,340	10,832	93%	2%	2%	4%	10,126	159	145	402	11,859
8	Main Street	1st Street to Barstow Road	2023	12,188	0.0%	12,190	88.6%	10.0%	0.8%	0.6%	10,800	1,219	98	73	13,050	2701760	2773989	3,505	98%	1%	1%	1%	3,429	29	27	19	3,585	4,311	98%	1%	1%	1%	4,237	25	18	31	4,404
9	Barstow Road	Main Street to I-15 Southbound Ramps	2023	11,062	0.0%	11,070	90.8%	8.5%	0.3%	0.4%	10,052	941	33	44	11,670	2782946	2771919	9,344	97%	1%	0%	2%	9,095	59	42	147	9,710	13,264	96%	1%	1%	2%	12,929	86	62	187	13,743
10	Barstow Road	I-15 Southbound Ramps to I-15 Northbound Ramps	2021	11,099	0.0%	11,100	90.6%	7.2%	0.5%	1.7%	10,062	799	61	184	11,940	N/A	N/A	8,045	97%	1%	0%	2%	7,769	80	40	156	8,437	15,187	92%	2%	1%	4%	14,573	159	93	362	16,084
11	Barstow Road	I-15 Northbound ramps to Rimrock Road	2021	11,136	0.0%	11,140	90.5%	5.9%	0.8%	2.9%	10,071	657	89	323	12,210	122516	122516	6,747	95%	2%	1%	2%	6,443	102	38	164	7,165	17,109	87%	3%	2%	8%	16,217	232	123	538	18,424
12	Lenwood Road	SR 58 Westbound Ramps to Community Boulevard	2021	1,289	0.0%	1,290	78.7%	10.6%	0.0%	10.8%	1,014	137	0	139	1,640	2767887	2768948	1,579	97%	1%	1%	2%	1,528	13	10	27	1,650	2,289	95%	1%	1%	3%	2,203	23	17	46	2,410
13	Lenwood Road	Community Boulevard to Agate Road	2021	1,289	0.0%	1,290	78.7%	10.6%	0.0%	10.8%	1,014	137	0	139	1,640	2752559	2752559	2,129	98%	1%	0%	1%	2,077	14	10	27	2,200	3,135	93%	2%	2%	3%	2,981	43	43	69	3,336
14	Lenwood Road	Agate Road to Jasper Road	2023	3,829	0.0%	3,830	82.3%	11.9%	0.3%	5.7%	3,240	489	16	86	4,270	N/A	N/A	3,732	98%	1%	0%	1%	3,647	22	15	48	3,854	7,205	62%	8%	9%	20%	5,797	301	347	761	9,226
15	Lenwood Road	Jasper Road to Main Street	2021	6,368	0.0%	6,370	85.9%	13.2%	0.5%	0.5%	5,465	841	32	32	6,890	2752569	2752569	5,336	98%	1%	0%	1%	5,217	30	20	69	5,508	11,274	50%	10%	12%	27%	8,612	559	650	1,453	15,110
16	Lenwood Road	Main Street to High Desert Road	2023	3,608	0.0%	3,610	82.8%	10.5%	0.5%	6.2%	2,989	379	18	224	4,270	2782873	2773778	10,164	92%	2%	1%	6%	9,307	156	81	619	11,562	24,152	44%	6%	5%	45%	18,495	602	501	4,555	34,064
17	Lenwood Road	High Desert Road to I-15 Southbound Off Ramp	2023	10,581	0.0%	10,590	87.6%	8.4%	0.9%	3.1%	9,277	890	95	328	11,790	2782856	2773107	13,436	92%	2%	1%	5%	12,379	218	141	698	15,081	29,589	56%	5%	4%	35%	23,681	675	572	4,662	39,823
18	Lenwood Road[8]	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	2021	8,972	0.0%	8,980	89.5%	7.0%	0.6%	2.9%	8,040	626	51	264	9,880	N/A	N/A	10,262	94%	1%	1%	4%	9,624	151	115	373	11,200	22,435	70%	4%	3%	23%	19,332	396	335	2,372	27,712
19	Hinkley Road	SR 58 Westbound Ramp to Project Driveway	2021	353	0.0%	360	84.7%	11.3%	1.1%	2.8%	305	41	4	10	410	2778340	2772275	33	99%	0%	0%	0%	33	0	0	0	34	29	98%	1%	0%	1%	29	0	0	0	30
20	Hinkley Road	Project Driveway to Main Street	2021	353	0.0%	360	84.7%	11.3%	1.1%	2.8%	305	41	4	10	410	2782843	2773865	188	84%	2%	2%	12%	157	4	4	22	238	148	87%	2%	2%	9%	123	4	3	17	187
21	Proposed Hinkley Rd	East of Jiggs Road	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
22	Proposed Hinkley Rd	East of Jiggs Road to West of B Street	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
23	Proposed Hinkley Rd	West of B Street	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
24	Proposed Hinkley Rd	Between B Street and C Street	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
25	Proposed Hinkley Rd	C Street to Lenwood Road	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
26		C St	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0
27		F St	N/A	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0

Footnotes:

1. Count roadway segment Average Daily Traffic Volumes (ADTs) refer to volumes from traffic counts taken between 2021 and 2023.
2. No growth factors were applied to counts taken before 2023, aligning the City's proposed General Plan assumptions, which did not project 2021 data forward due to observed negative growth. Passenger Car Equivalent (PCE) ADT volumes are developed using 2023 SBTAM+ fleet mix volumes.
3. No BIG San Bernardino Transportation Analysis Model Plus (SBTAM+) ADTs are taken from SBTAM+ model runs which exclude all BIG model inputs.
4. In order to take into consideration both the growth reflected in the SBTAM model and existing traffic volume data, Horizon Year 2048 Plus BIG volumes were calculated using:
   a) Traffic counts representing Existing No BIG Baseline conditions with 2023 as the initial year, and
   b) Existing No BIG Baseline volumes plus the numerical difference between 2050 Horizon Year With BIG and 2023 SBTAM+ volumes.
5. Horizon Year 2048 No BIG Baseline volumes were developed by subtracting the Horizon Year 2048 BIG volumes from the Horizon Year 2048 Plus BIG volumes described in Footnote 4.
6. Final, No BIG Baseline ADT volumes for Opening Year 2028 and Interim Year 2033 were calculated by interpolating between Horizon Year 2048 No BIG Baseline and Existing (2023) Conditions.
7. Rows highlighted in orange represent roadway segments between freeway ramps or counted segments. ADT volumes for these segments are determined by taking the average of the adjacent study segments on either side.
8. Roadway Segment 18 is bounded by only one study segment (Segment 17, on the north side). To determine the average using adjacent segments, roadway segment A1 from the Roadway Segment Count PCE Conversion sheet was used on the south side.

No BIG Baseline Roadway Segment ADT Development

			2023 Baseline to 2048 Plus BIG SBTAM+ Growth					HY 2048 Plus BIG [4]									HY 2048 BIG Trips					HY 2048 No BIG Baseline [5]								IY 2033 No BIG Baseline [6]							
		YEAR:	2023-2048	2023 Baseline to 2048 Plus BIG SBTAM+ Growth				2023-2048	2048	2048 Plus BIG Fleet Mix							2048	2048	HY 2048 BIG Fleet Mix				2048	2048	HY 2048 No BIG Baseline Fleet Mix							2048	2033	IY 2033 No BIG Baseline Fleet Mix							2033
		PCE Rate:		1	1.5	2	3			1	1.5	2	3	1	1.5	2	3								1	1.5	2	3	1	1.5	2	3								
Segment #	Roadway	Segment	2023 Base to 2048 Plus BIG SBTAM+ ADT Growth [Non-PCE]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	2023 Base to 2048 Plus BIG SBTAM+ ADT Growth [PCE]	HY 2048 Plus BIG ADT [Non-PCE]	PCE 1 (Class #1-3) [Percentage]	PCE 1.5 (Class #4-5) [Percentage]	PCE 2 (Class #6) [Percentage]	PCE 3 (Class #7-13) [Percentage]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	HY 2048 Plus BIG ADT [PCE]	HY 2048 BIG ADT [Non-PCE]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	HY 2048 BIG ADT [PCE]	HY 2048 No BIG Baseline ADT [Non-PCE]	PCE 1 (Class #1-3) [Percent-Adj]	PCE 1.5 (Class #4-5) [Percent-Adj]	PCE 2 (Class #6) [Percent-Adj]	PCE 3 (Class #7-13) [Percent-Adj]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	HY 2048 No BIG Baseline ADT [PCE]	IY 2033 No BIG Baseline ADT [Non-PCE]	PCE 1 (Class #1-3) [Non-PCE]	PCE 1.5 (Class #4-5) [Non-PCE]	PCE 2 (Class #6) [Non-PCE]	PCE 3 (Class #7-13) [Non-PCE]	IY 2033 No BIG Baseline ADT [PCE]
1	Main Street	Hinkley Road to Country Club Drive	7,595	4,707	276	226	2,386	12,730	11,300	72%	4%	2%	21%	8,179	442	258	2,422	16,630	518	518	0	0	0	518	10,790	48%	4%	3%	45%	7,668	442	258	2,422	16,112	6,482	5,091	277	123	991	8,726
2	Main Street	Country Club Drive to Lenwood Road	7,648	4,760	276	226	2,386	12,783	11,300	72%	4%	2%	21%	8,179	442	258	2,422	16,630	3,370	2,740	0	315	315	4,315	7,880	43%	5%	0%	51%	5,332	442	0	2,107	12,315	5,319	4,157	277	20	865	7,208
3	Main Street	Lenwood Road to County/City Boundary	205	0	74	87	148	730	10,000	90%	5%	2%	3%	8,967	518	193	322	11,100	1,902	1,832	0	35	35	2,007	8,101	78%	9%	3%	9%	7,138	518	158	287	9,093	9,031	8,210	474	127	220	9,835
4	Main Street	County/City Boundary to SR 58 Eastbound Ramps	205	0	74	87	148	730	10,000	89.7%	5.2%	1.9%	3.2%	8,967	518	193	322	11,100	1,902	1,832	0	35	35	2,007	8,101	78%	9%	3%	9%	7,138	518	158	287	9,093	9,031	8,210	474	127	220	9,835
5	Main Street[7]	SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	966	566	108	131	214	1,632	9,400	87.1%	5.2%	2.5%	5.2%	8,183	491	233	493	10,870	3,177	3,307	0	35	35	3,282	6,229	67%	10%	5%	18%	5,082	491	198	458	7,588	7,484	6,565	427	141	351	8,541
6	Main Street	SR 58 Westbound Ramps to L Street	1,727	1,132	142	175	279	2,530	8,800	84.1%	5.3%	3.1%	7.5%	7,401	464	273	663	10,640	2,589	2,589	0	0	0	2,589	6,221	60%	9%	7%	25%	4,822	464	273	663	8,051	6,683	5,640	379	168	496	8,033
7	Main Street	L Street to 1st Street	1,366	1,263	21	18	63	1,520	14,200	86%	12%	1%	1%	12,229	1,736	82	153	15,460	1,424	1,424	0	0	0	1,424	12,780	77%	19%	1%	3%	10,809	1,736	82	153	14,036	12,793	10,881	1,724	72	116	13,959
8	Main Street	1st Street to Barstow Road	807	808	0	0	12	844	13,100	89%	9%	1%	1%	11,698	1,219	98	85	13,980	777	777	0	0	0	777	12,325	83%	14%	1%	2%	10,923	1,219	98	85	13,203	12,245	10,850	1,219	98	78	13,109
9	Barstow Road	Main Street to I-15 Southbound Ramps	3,920	3,834	27	20	39	4,033	15,000	93%	6%	0%	1%	13,896	968	53	83	15,710	518	518	0	0	0	518	14,488	88%	10%	1%	2%	13,383	968	53	83	15,192	12,438	11,384	952	42	60	13,076
10	Barstow Road	I-15 Southbound Ramps to I-15 Northbound Ramps	7,142	6,804	78	53	207	7,648	18,300	92.4%	4.8%	0.6%	2.1%	16,918	877	114	391	19,640	712	712	0	0	0	712	17,594	86%	7%	1%	6%	16,212	877	114	391	18,928	13,698	12,517	831	83	267	14,731
11	Barstow Road	I-15 Northbound ramps to Rimrock Road	10,362	9,774	129	85	374	11,259	21,600	92%	4%	1%	3%	19,944	786	174	697	23,570	129	129	0	0	0	129	21,481	85%	5%	1%	9%	19,824	786	174	697	23,441	15,277	13,971	709	124	473	16,702
12	Lenwood Road	SR 58 Westbound Ramps to Community Boulevard	710	674	10	7	19	760	2,100	85%	7%	0%	8%	1,789	147	7	158	2,500	957	541	0	208	208	1,581	846	76%	24%	0%	0%	699	147	0	0	919	1,113	888	141	0	84	1,352
13	Lenwood Road	Community Boulevard to Agate Road	1,006	904	28	33	41	1,136	2,300	84%	7%	1%	8%	1,922	165	33	180	2,780	1,734	1,318	0	208	208	2,358	339	41%	59%	0%	0%	174	165	0	0	422	910	677	149	0	84	1,153
14	Lenwood Road	Agate Road to Jasper Road	3,473	2,150	279	331	713	5,370	7,400	74.0%	10.4%	4.7%	10.9%	5,436	768	347	799	9,680	3,028	2,612	0	208	208	3,652	4,323	47%	19%	5%	29%	2,825	768	139	591	6,028	4,028	3,073	601	66	288	4,971
15	Lenwood Road	Jasper Road to Main Street	5,939	3,395	529	630	1,384	9,602	12,400	72%	11%	5%	11%	8,952	1,370	662	1,416	16,580	8,235	7,521	0	357	357	9,306	4,166	20%	28%	8%	44%	1,431	1,370	305	1,059	7,274	5,489	3,851	1,053	142	443	7,044
16	Lenwood Road	Main Street to High Desert Road	13,989	9,188	445	420	3,936	22,503	17,600	69%	5%	2%	24%	12,179	824	438	4,160	26,770	6,787	6,343	0	222	222	7,453	10,814	30%	6%	2%	61%	5,836	824	216	3,938	19,317	6,492	4,126	558	98	1,710	10,289
17	Lenwood Road	High Desert Road to I-15 Southbound Off Ramp	16,354	11,301	457	432	3,964	24,742	26,800	77%	5%	2%	16%	20,635	1,347	527	4,292	36,590	5,493	5,049	0	222	222	6,159	21,313	51%	7%	2%	40%	15,592	1,347	305	4,070	30,431	14,880	11,803	1,073	179	1,825	19,246
18	Lenwood Road[8]	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	12,173	9,708	245	220	1,999	16,513	21,200	83.9%	4.1%	1.3%	10.7%	17,795	871	271	2,263	26,440	2,487	2,265	0	111	111	2,820	18,721	66%	6%	1%	27%	15,538	871	160	2,152	23,620	12,877	11,038	724	95	1,020	15,374
19	Hinkley Road	SR 58 Westbound Ramp to Project Driveway	0	0	0	0	0	1	400	86%	10%	1%	3%	345	41	4	10	450	106	106	0	0	0	106	299	71%	18%	2%	9%	244	41	4	10	344	336	278	42	5	11	384
20	Hinkley Road	Project Driveway to Main Street	0	0	0	0	0	0	400	86%	10%	1%	3%	345	41	4	10	450	0	0	0	0	0	0	406	78%	14%	2%	7%	351	41	4	10	450	379	324	41	4	10	424
21	Proposed Hinkley Rd	East of Jaggs Road	0	0	0	0	0	0	106	100.0%	0.0%	0.0%	0.0%	106	0	0	0	110	106	106	0	0	0	106	0					0	0	0	0	0	0	0	0	0	0	0
22	Proposed Hinkley Rd	East of Jaggs Road to West of B Street	0	0	0	0	0	0	4,370	97.2%	0.0%	1.4%	1.4%	4,248	0	61	61	4,560	4,370	4,248	0	61	61	4,553	0					0	0	0	0	0	0	0	0	0	0	0
23	Proposed Hinkley Rd	West of B Street	0	0	0	0	0	0	6,446	97.2%	0.0%	1.4%	1.4%	6,266	0	90	90	6,720	6,446	6,266	0	90	90	6,716	0					0	0	0	0	0	0	0	0	0	0	0
24	Proposed Hinkley Rd	Between B Street and C Street	0	0	0	0	0	0	7,864	97.2%	0.0%	1.4%	1.4%	7,646	0	109	109	8,200	7,864	7,646	0	109	109	8,191	0					0	0	0	0	0	0	0	0	0	0	0
25	Proposed Hinkley Rd	C Street to Lenwood Road	0	0	0	0	0	0	10,814	97.2%	0.0%	1.4%	1.4%	10,514	0	150	150	11,270	10,814	10,514	0	150	150	11,264	0					0	0	0	0	0	0	0	0	0	0	0
26	C St	North of Hinkley Road to F Street	0	0	0	0	0	0	2,947	97.3%	0.0%	1.4%	1.4%	2,867	0	40	40	3,070	2,947	2,867	0	40	40	3,067	0					0	0	0	0	0	0	0	0	0	0	0
27	F St	East of C Street	0	0	0	0	0	0	1,966	97.3%	0.0%	1.4%	1.4%	1,912	0	27	27	2,050	1,966	1,912	0	27	27	2,047	0					0	0	0	0	0	0	0	0	0	0	0

Footnotes:

1. Count roadway segment Average Daily Traffic Volumes (ADTs) refer to volumes from traffic counts taken between 2021 and 2023.
2. No growth factors were applied to counts taken before 2023, aligning the City's proposed General Plan assumptions, which did not project 2021 data forward due to observed negative growth. Passenger Car Equivalent (PCE) ADT volumes are developed using 2023 SBTAM+ fleet mix volumes.
3. No BIG San Bernardino Transportation Analysis Model Plus (SBTAM+) ADTs are taken from SBTAM+ model runs which exclude all BIG model inputs.
4. In order to take into consideration both the growth reflected in the SBTAM model and existing traffic volume data, Horizon Year 2048 Plus BIG volumes were calculated using:
   a) Traffic counts representing Existing No BIG Baseline conditions with 2023 as the initial year, and
   b) Existing No BIG Baseline volumes plus the numerical difference between 2050 Horizon Year With BIG and 2023 SBTAM+ volumes.
5. Horizon Year 2048 No BIG Baseline volumes were developed by subtracting the Horizon Year 2048 BIG volumes from the Horizon Year 2048 Plus BIG volumes described in Footnote 4.
6. Final, No BIG Baseline ADT volumes for Opening Year 2028 and Interim Year 2033 were calculated by interpolating between Horizon Year 2048 No BIG Baseline and Existing (2023) Conditions.
7. Rows highlighted in orange represent roadway segments between freeway ramps or counted segments. ADT volumes for these segments are determined by taking the average of the adjacent study segments on either side.
8. Roadway Segment 18 is bounded by only one study segment (Segment 17, on the north side). To determine the average using adjacent segments, roadway segment A1 from the Roadway Segment Count PCE Conversion sheet was used on the south side.

No BIG Baseline Roadway Segment ADT Development

			IY 2033 BIG Trips					*IY 2033 Plus BIG*									*OY 2028 No BIG Baseline*[6]					*OY 2028 BIG Trips*					*OY 2028 Plus BIG*								
		YEAR:	*2033*	*IY 2033 BIG Fleet Mix*				*2033*	*2033*	*2033 Plus BIG Fleet Mix*							*2033*	*2028*	*OY 2028 No BIG Baseline Fleet Mix*				*2028*	*2028*	*OY 2028 BIG Fleet Mix*				*2028*	*2028*	*2028 Plus BIG Fleet Mix*					*2028*
		PCE Rate:							*1*	*1.5*	*2*	*3*	*1*	*1.5*	*2*	*3*			*1*	*1.5*	*2*	*3*			*1*	*1.5*	*2*	*3*			*1*	*1.5*	*2*	*3*		
Segment #	**Roadway**	**Segment**	**IY 2033 BIG ADT [Non-PCE]**	**PCE 1 (Class #1-3) [Non-PCE]**	**PCE 1.5 (Class #4-5) [Non-PCE]**	**PCE 2 (Class #6) [Non-PCE]**	**PCE 3 (Class #7-13) [Non-PCE]**	**IY 2033 BIG ADT [PCE]**	**IY 2033 Plus BIG ADT [PCE]**	**PCE 1 (Class #1-3) [Percentage]**	**PCE 1.5 (Class #4-5) [Percentage]**	**PCE 2 (Class #6) [Percentage]**	**PCE 3 (Class #7-13) [Percentage]**	**PCE 1 (Class #1-3) [Non-PCE]**	**PCE 1.5 (Class #4-5) [Non-PCE]**	**PCE 2 (Class #6) [Non-PCE]**	**PCE 3 (Class #7-13) [Non-PCE]**	**IY 2033 Plus BIG ADT [PCE]**	**OY 2028 No BIG Baseline ADT [Non-PCE]**	**PCE 1 (Class #1-3) [Non-PCE]**	**PCE 1.5 (Class #4-5) [Non-PCE]**	**PCE 2 (Class #6) [Non-PCE]**	**PCE 3 (Class #7-13) [Non-PCE]**	**OY 2028 No BIG Baseline ADT [PCE]**	**OY 2028 BIG ADT [Non-PCE]**	**PCE 1 (Class #1-3) [Non-PCE]**	**PCE 1.5 (Class #4-5) [Percentage]**	**PCE 2 (Class #6) [Percentage]**	**PCE 3 (Class #7-13) [Percentage]**	**OY 2028 BIG ADT [PCE]**	**OY 2028 Plus BIG ADT [Non-PCE]**	**PCE 1 (Class #1-3) [Percentage]**	**PCE 1.5 (Class #4-5) [Percentage]**	**PCE 2 (Class #6) [Percentage]**	**PCE 3 (Class #7-13) [Percentage]**	**PCE 1 (Class #1-3) [Non-PCE]**	**PCE 1.5 (Class #4-5) [Non-PCE]**	**PCE 2 (Class #6) [Non-PCE]**	**PCE 3 (Class #7-13) [Non-PCE]**	**OY 2028 Plus BIG ADT [PCE]**
1	Main Street	Hinkley Road to Country Club Drive	452	452	0	0	0	452	6,934	80%	4%	2%	14%	5,543	277	123	991	9,178	5,046	4,235	222	78	514	6,263	350	350	0	0	0	350	5,396	85%	4%	1%	10%	4,585	222	78	514	6,613
2	Main Street	Country Club Drive to Lenwood Road	2,973	2,477	0	248	248	3,717	8,292	80%	3%	3%	13%	6,634	277	268	1,113	10,925	4,465	3,768	222	26	451	5,503	2,477	2,077	0	200	200	3,077	6,942	84%	3%	3%	9%	5,845	222	226	651	8,581
3	Main Street	Lenwood Road to County/City Boundary	1,661	1,605	0	28	28	1,745	10,692	92%	4%	1%	2%	9,815	474	155	248	11,580	9,341	8,569	459	117	197	10,083	1,304	1,260	0	22	22	1,370	10,645	92%	4%	1%	2%	9,829	459	139	219	11,452
4	Main Street	County/City Boundary to SR 58 Eastbound Ramps	1,661	1,605	0	28	28	1,745	10,692	92%	4%	1%	2%	9,815	474	155	248	11,580	9,341	8,569	459	117	197	10,083	1,304	1,260	0	22	22	1,370	10,645	92%	4%	1%	2%	9,829	459	139	219	11,452
5	Main Street	SR 58 Eastbound Off Ramps to SR 58 Westbound Ramps	2,766	2,710	0	28	28	2,850	10,250	90%	4%	2%	4%	9,275	427	169	379	11,391	7,902	7,062	405	122	315	8,859	2,139	2,095	0	22	22	2,205	10,041	91%	4%	1%	3%	9,157	405	144	337	11,062
6	Main Street	SR 58 Westbound Ramps to L Street	2,258	2,258	0	0	0	2,258	8,941	88%	4%	2%	6%	7,898	379	168	496	10,291	6,837	5,914	351	133	440	8,027	1,746	1,746	0	0	0	1,746	8,583	89%	4%	2%	5%	7,660	351	133	440	9,772
7	Main Street	L Street to 1st Street	1,186	1,186	0	0	0	1,186	13,979	86%	12%	1%	1%	12,067	1,724	72	116	15,145	12,797	10,907	1,720	68	103	13,932	873	873	0	0	0	873	13,670	86%	13%	0%	1%	11,780	1,720	68	103	14,804
8	Main Street	1st Street to Barstow Road	791	791	0	0	0	791	13,036	89%	9%	1%	1%	11,641	1,219	98	78	13,900	12,218	10,825	1,219	98	76	13,078	699	699	0	0	0	699	12,917	89%	9%	1%	1%	11,524	1,219	98	76	13,777
9	Barstow Road	Main Street to I-15 Southbound Ramps	509	509	0	0	0	509	12,947	92%	7%	0%	0%	11,893	952	42	60	13,585	11,754	10,719	947	38	52	12,372	437	437	0	0	0	437	12,191	91%	8%	0%	0%	11,156	947	38	52	12,807
10	Barstow Road	I-15 Southbound Ramps to I-15 Northbound Ramps	650	650	0	0	0	650	14,348	92%	6%	1%	2%	13,167	831	83	267	15,381	12,399	11,292	815	72	226	13,337	524	524	0	0	0	524	12,923	91%	6%	1%	2%	11,816	815	72	226	13,855
11	Barstow Road	I-15 Northbound ramps to Rimrock Road	113	113	0	0	0	113	15,390	92%	5%	1%	3%	14,084	709	124	473	16,815	13,209	12,022	683	107	398	14,455	88	88	0	0	0	88	13,297	91%	5%	1%	3%	12,110	683	107	398	14,542
12	Lenwood Road	SR 58 Westbound Ramps to Community Boulevard	914	586	0	164	164	1,406	2,027	73%	7%	8%	12%	1,474	141	164	248	2,758	1,202	952	139	0	112	1,497	806	542	0	132	132	1,202	2,008	74%	7%	7%	12%	1,494	139	132	244	2,698
13	Lenwood Road	Community Boulevard to Agate Road	1,648	1,320	0	164	164	2,140	2,558	78%	6%	6%	10%	1,997	149	164	248	3,293	1,100	847	143	0	112	1,398	1,417	1,153	0	132	132	1,813	2,517	79%	6%	5%	10%	2,000	143	132	244	3,209
14	Lenwood Road	Agate Road to Jasper Road	2,833	2,505	0	164	164	3,325	6,861	81%	9%	3%	7%	5,578	601	230	452	8,296	3,929	3,157	545	41	187	4,618	2,377	2,113	0	132	132	2,773	6,306	84%	9%	3%	5%	5,270	545	173	319	7,390
15	Lenwood Road	Jasper Road to Main Street	6,977	6,391	0	293	293	7,856	12,466	82%	3%	6%	10%	10,242	1,053	435	736	14,900	5,930	4,659	947	87	238	6,968	5,236	4,776	0	230	230	5,926	11,166	84%	8%	3%	4%	9,435	947	317	468	12,893
16	Lenwood Road	Main Street to High Desert Road	5,622	5,250	0	186	186	6,180	12,114	77%	5%	2%	16%	9,376	558	284	1,896	16,469	5,051	3,559	469	58	967	7,280	4,128	3,840	0	144	144	4,560	9,179	81%	5%	2%	12%	7,399	469	202	1,111	11,838
17	Lenwood Road	High Desert Road to I-15 Southbound Off Ramp	4,945	4,573	0	186	186	5,503	19,825	83%	5%	2%	10%	16,376	1,073	365	2,011	24,749	12,735	10,540	982	137	1,077	15,518	3,954	3,666	0	144	144	4,386	16,689	85%	6%	2%	7%	14,206	982	281	1,221	19,903
18	Lenwood Road[4]	I-15 Southbound Off Ramp to I-15 Northbound Off Ramp	2,106	1,920	0	93	93	2,385	14,983	86%	5%	1%	7%	12,958	724	188	1,113	17,759	10,929	9,540	675	73	642	12,625	1,584	1,440	0	72	72	1,800	12,513	88%	5%	1%	6%	10,980	675	145	714	14,424
19	Hinkley Road	SR 58 Westbound Ramp to Project Driveway	93	93	0	0	0	93	429	86%	10%	1%	3%	371	42	5	11	477	348	293	42	5	11	399	70	70	0	0	0	70	418	86%	10%	1%	3%	363	42	5	11	466
20	Hinkley Road	Project Driveway to Main Street	0	0	0	0	0	0	379	85%	11%	1%	3%	324	41	4	10	424	370	315	41	4	10	415	0	0	0	0	0	0	370	85%	11%	1%	3%	315	41	4	10	415
21	Proposed Hinkley Rd	East of Jiggs Road	93	93	0	0	0	93	93	100.0%	0.0%	0.0%	0.0%	93	0	0	0	93	0	0	0	0	0	0	70	70	0	0	0	70	70	100.0%	0.0%	0.0%	0.0%	70	0	0	0	70
22	Proposed Hinkley Rd	East of Jiggs Road to West of B Street	3,788	3,682	0	53	53	3,947	3,788	97.2%	0.0%	1.4%	1.4%	3,682	0	53	53	3,947	0	0	0	0	0	0	2,865	2,785	0	40	40	2,985	2,865	97.2%	0.0%	1.4%	1.4%	2,785	0	40	40	2,985
23	Proposed Hinkley Rd	West of B Street	5,587	5,431	0	78	78	5,821	5,587	97.2%	0.0%	1.4%	1.4%	5,431	0	78	78	5,821	0	0	0	0	0	0	4,226	4,108	0	59	59	4,403	4,226	97.2%	0.0%	1.4%	1.4%	4,108	0	59	59	4,403
24	Proposed Hinkley Rd	Between B Street and C Street	6,817	6,627	0	95	95	7,102	6,817	97.2%	0.0%	1.4%	1.4%	6,627	0	95	95	7,102	0	0	0	0	0	0	5,157	5,013	0	72	72	5,373	5,157	97.2%	0.0%	1.4%	1.4%	5,013	0	72	72	5,373
25	Proposed Hinkley Rd	C Street to Lenwood Road	9,370	9,112	0	129	129	9,757	9,370	97.2%	0.0%	1.4%	1.4%	9,112	0	129	129	9,757	0	0	0	0	0	0	7,089	6,893	0	98	98	7,383	7,089	97.2%	0.0%	1.4%	1.4%	6,893	0	98	98	7,383
26	C St	North of Hinkley Road to F Street	2,556	2,486	0	35	35	2,661	2,556	97.3%	0.0%	1.4%	1.4%	2,486	0	35	35	2,661	0	0	0	0	0	0	1,934	1,880	0	27	27	2,015	1,934	97.2%	0.0%	1.4%	1.4%	1,880	0	27	27	2,015
27	F St	East of C Street	1,705	1,657	0	24	24	1,777	1,705	97.2%	0.0%	1.4%	1.4%	1,657	0	24	24	1,777	0	0	0	0	0	0	1,290	1,254	0	18	18	1,344	1,290	97.2%	0.0%	1.4%	1.4%	1,254	0	18	18	1,344

Footnotes:

1. Count roadway segment Average Daily Traffic Volumes (ADTs) refer to volumes from traffic counts taken between 2021 and 2023.
2. No growth factors were applied to counts taken before 2023, aligning the City's proposed General Plan assumptions, which did not project 2021 data forward due to observed negative growth. Passenger Car Equivalent (PCE) ADT volumes are developed using 2023 SBTAM+ fleet mix volumes.
3. No BIG San Bernardino Transportation Analysis Model Plus (SBTAM+) ADTs are taken from SBTAM+ model runs which exclude all BIG model inputs.
4. In order to take into consideration both the growth reflected in the SBTAM model and existing traffic volume data, Horizon Year 2048 Plus BIG volumes were calculated using:
   a) Traffic counts representing Existing No BIG Baseline conditions with 2023 as the initial year, and
   b) Existing No BIG Baseline volumes plus the numerical difference between 2050 Horizon Year With BIG and 2023 SBTAM+ volumes.
5. Horizon Year 2048 No BIG Baseline volumes were developed by subtracting the Horizon Year 2048 BIG volumes from the Horizon Year 2048 Plus BIG volumes described in Footnote 4.
6. Final, No BIG Baseline ADT volumes for Opening Year 2028 and Interim Year 2033 were calculated by interpolating between Horizon Year 2048 No BIG Baseline and Existing (2023) Conditions.
7. Rows highlighted in orange represent roadway segments between freeway ramps or counted segments. ADT volumes for these segments are determined by taking the average of the adjacent study segments on either side.
8. Roadway Segment 18 is bounded by only one study segment (Segment 17, on the north side). To determine the average using adjacent segments, roadway segment A1 from the Roadway Segment Count PCE Conversion sheet was used on the south side.

Land Use: 154
High-Cube Transload and Short-Term Storage Warehouse

Description

A high-cube warehouse (HCW) is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical HCW has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the HCW. A high-cube warehouse can be free-standing or located in an industrial park.

The HCWs included in this land use include transload and short-term storage facilities. A transload facility has the primary function of consolidation and distribution of pallet loads (or larger) for manufacturers, wholesalers, or retailers. A transload facility typically has little storage duration, high throughput, and its operations are high efficiency. A short-term HCW is a distribution facility often with custom/special features built into the structure for the movement of large volumes of freight with only short-term storage of products.

Some limited assembly and repackaging may occur within the facility.

A high-cube warehouse may contain a mezzanine. In a HCW setting, a mezzanine is a free-standing, semi-permanent structure that is commonly supported by structural steel columns and that is lined with racks or shelves. The gross floor area (GFA) values for the study sites in the database for this land use do NOT include the floor area of the mezzanine. The GFA values represent only the permanent ground-floor square footage.

The amount of office/employee welfare space that is provided within a HCW can be highly variable but is typically an insignificant portion of the overall building square footage. Within the trip generation database, common values are between 3,000 and 5,000 square feet for a Cold Storage HCW and between 5,000 and 10,000 square feet for Transload, Fulfillment Center, and Parcel Hub HCW (all of which are less than one percent of total GFA for a site). Therefore, for the trip generation data plots, any office space that is part of the normal operation of the warehouse is included in the total GFA.

Warehousing (Land Use 150), high-cube fulfillment center warehouse (Land Use 155), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related land uses.

The number of dock doors at a HCW is a potential independent variable. Future data submissions should include that information.

Additional Data

The High-Cube Warehouse/Distribution Center-related land uses underwent specialized consideration through a commissioned study titled “High-Cube Warehouse Vehicle Trip Generation Analysis,” published in October 2016. The results of this study are posted on the ITE website at http://library.ite.org/pub/a3e6679a-e3a8-bf38-7f29-2961becdd498.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Michigan, New Jersey, Texas, and Washington.

Source Numbers

331, 605, 619, 642, 645, 649, 739, 750, 752, 903, 904, 941, 942, 943, 969

High-Cube Transload and Short-Term Storage Warehouse (154)

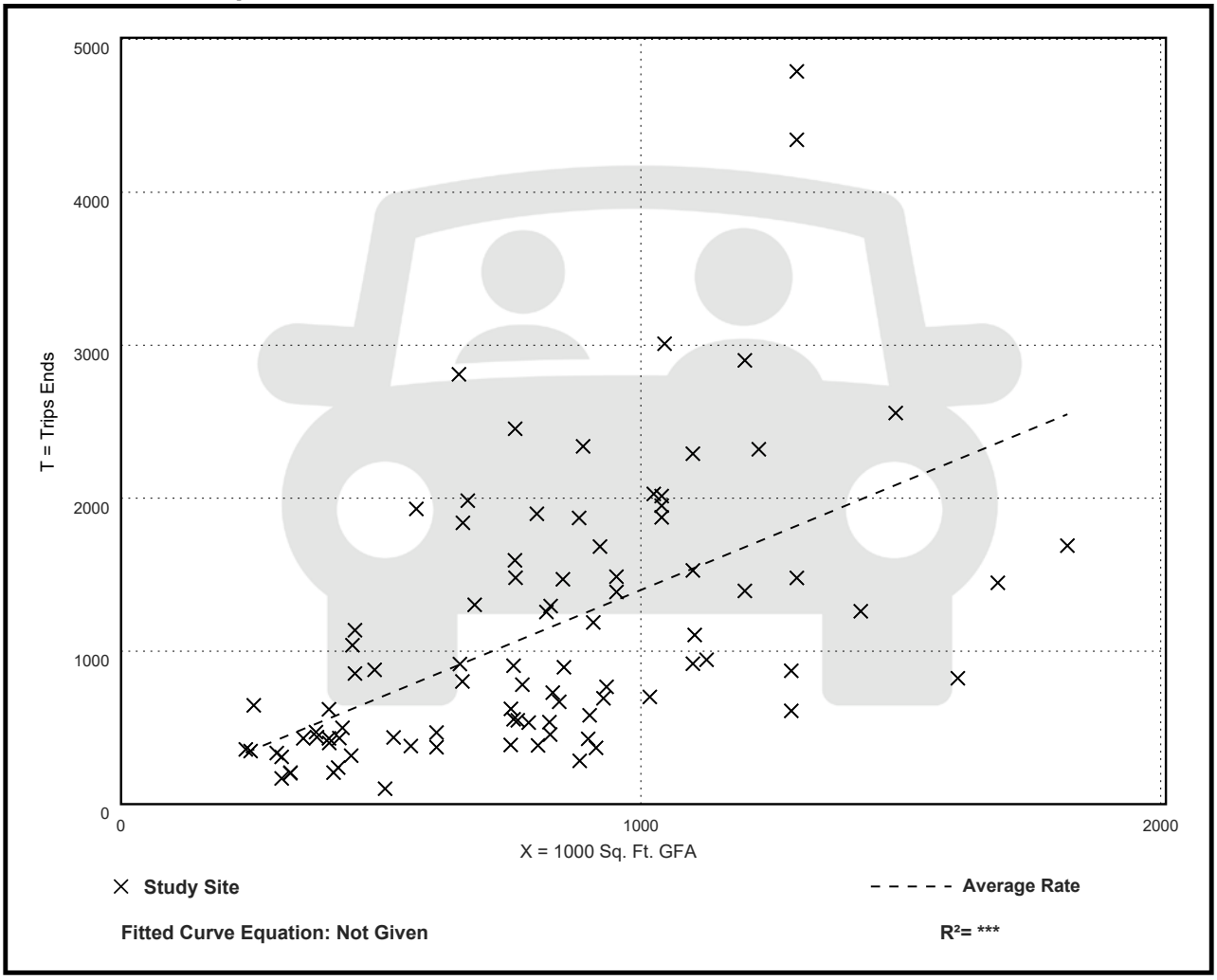
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 91
Avg. 1000 Sq. Ft. GFA: 798
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.40	0.20 - 4.32	0.86

Data Plot and Equation



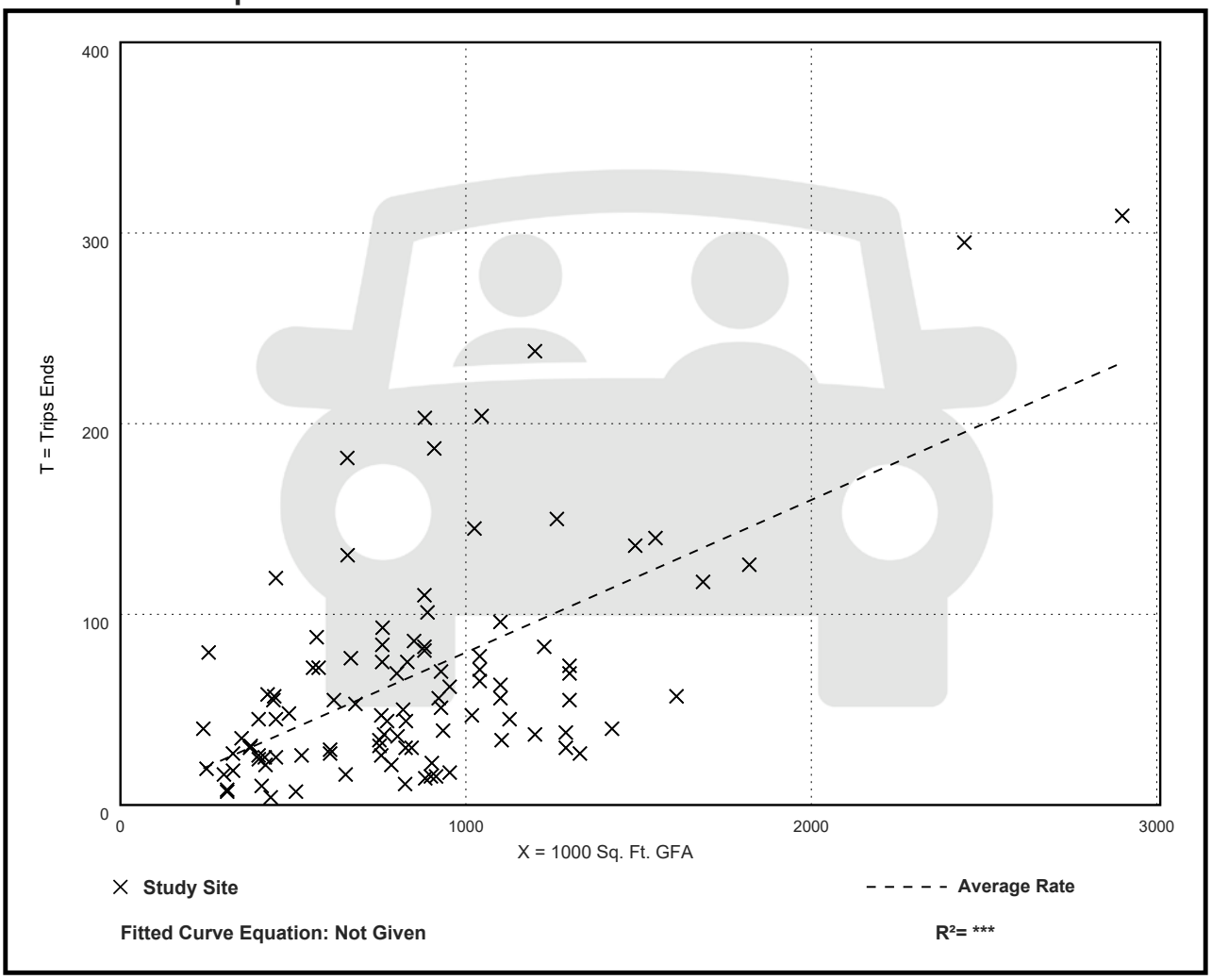
High-Cube Transload and Short-Term Storage Warehouse (154)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 102
Avg. 1000 Sq. Ft. GFA: 846
Directional Distribution: 77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.08	0.01 - 0.31	0.05

Data Plot and Equation



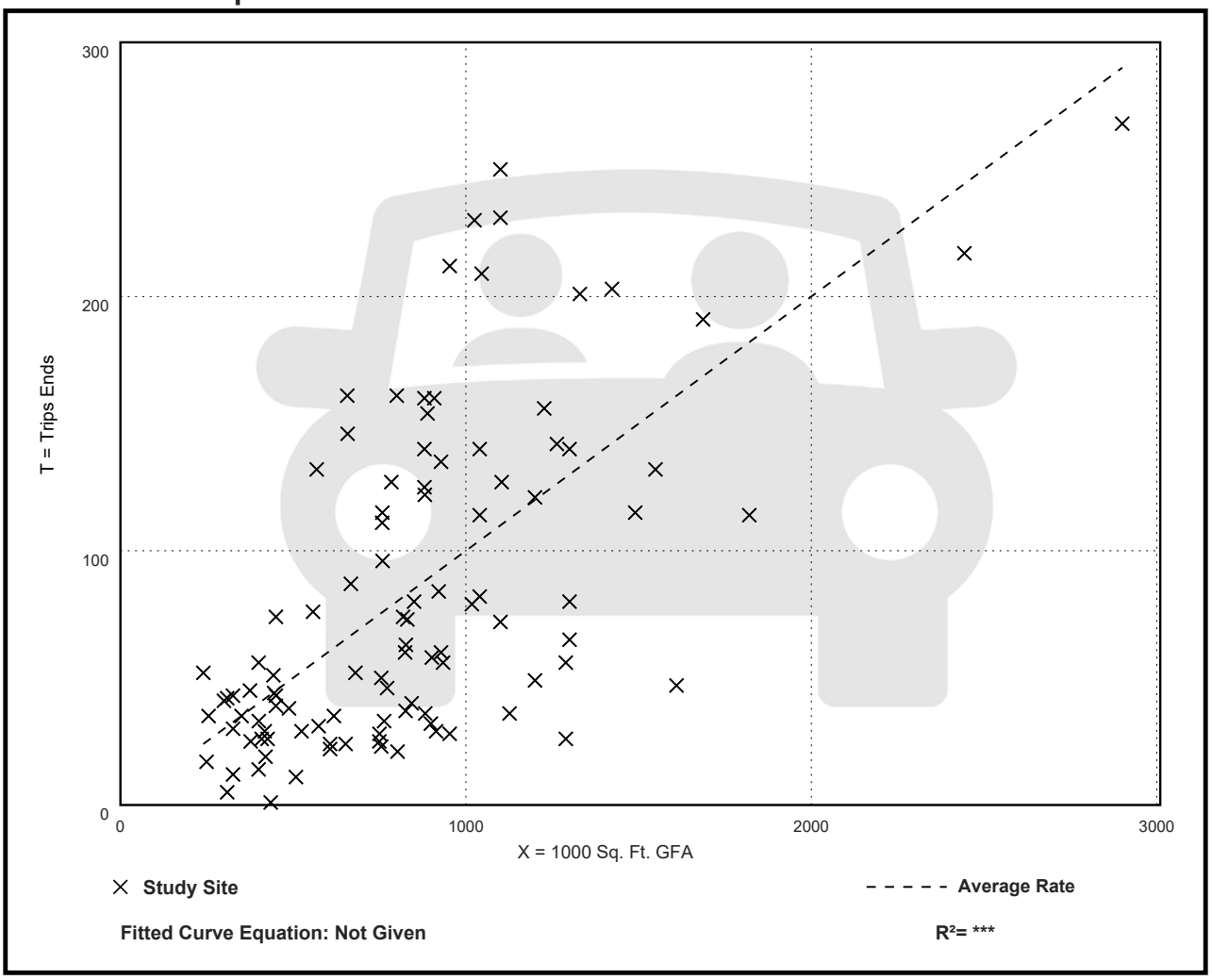
High-Cube Transload and Short-Term Storage Warehouse (154)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 103
Avg. 1000 Sq. Ft. GFA: 840
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.10	0.00 - 0.25	0.06

Data Plot and Equation



High-Cube Transload and Short-Term Storage Warehouse (154)

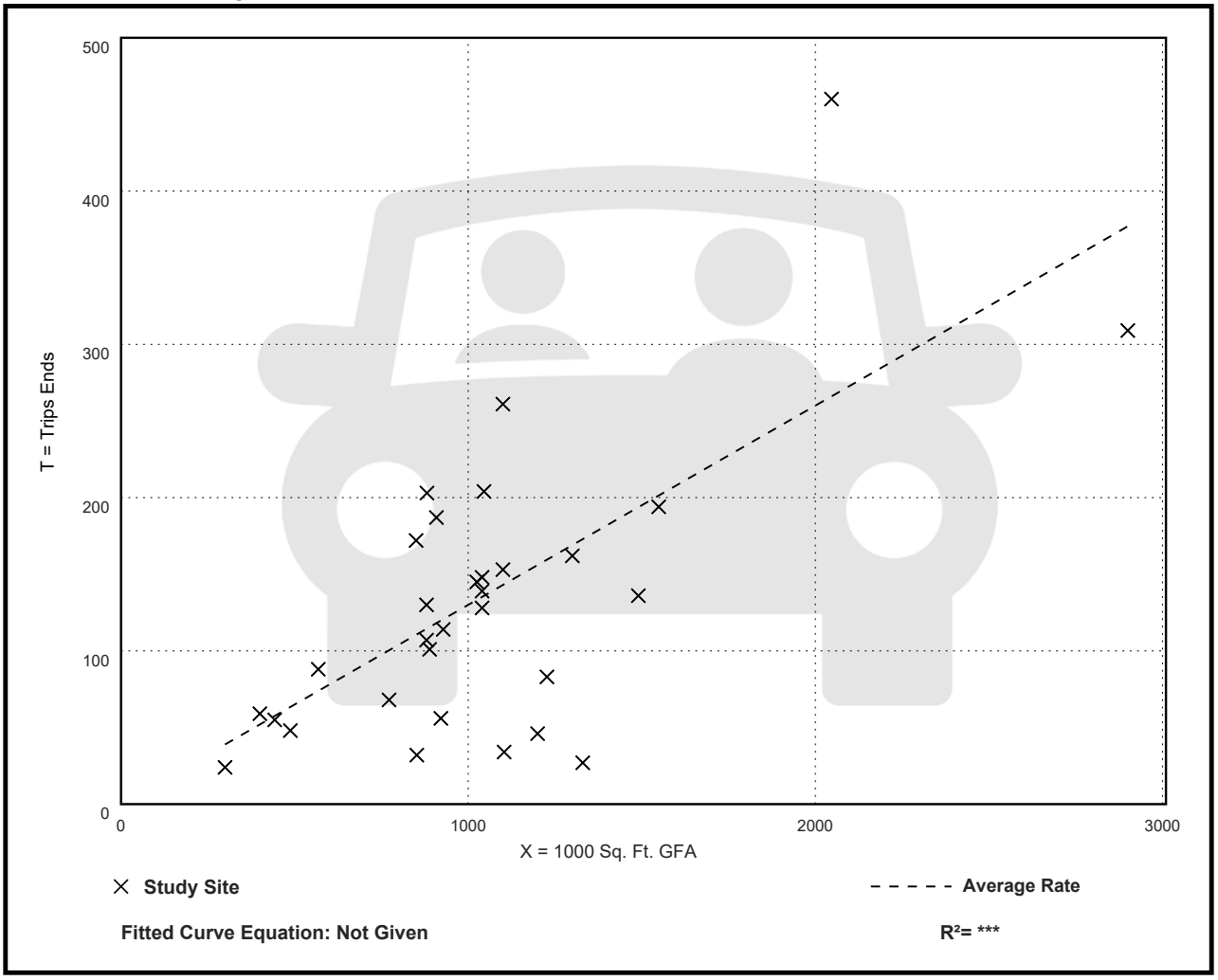
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 31
Avg. 1000 Sq. Ft. GFA: 1048
Directional Distribution: 78% entering, 22% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.13	0.02 - 0.24	0.06

Data Plot and Equation



High-Cube Transload and Short-Term Storage Warehouse (154)

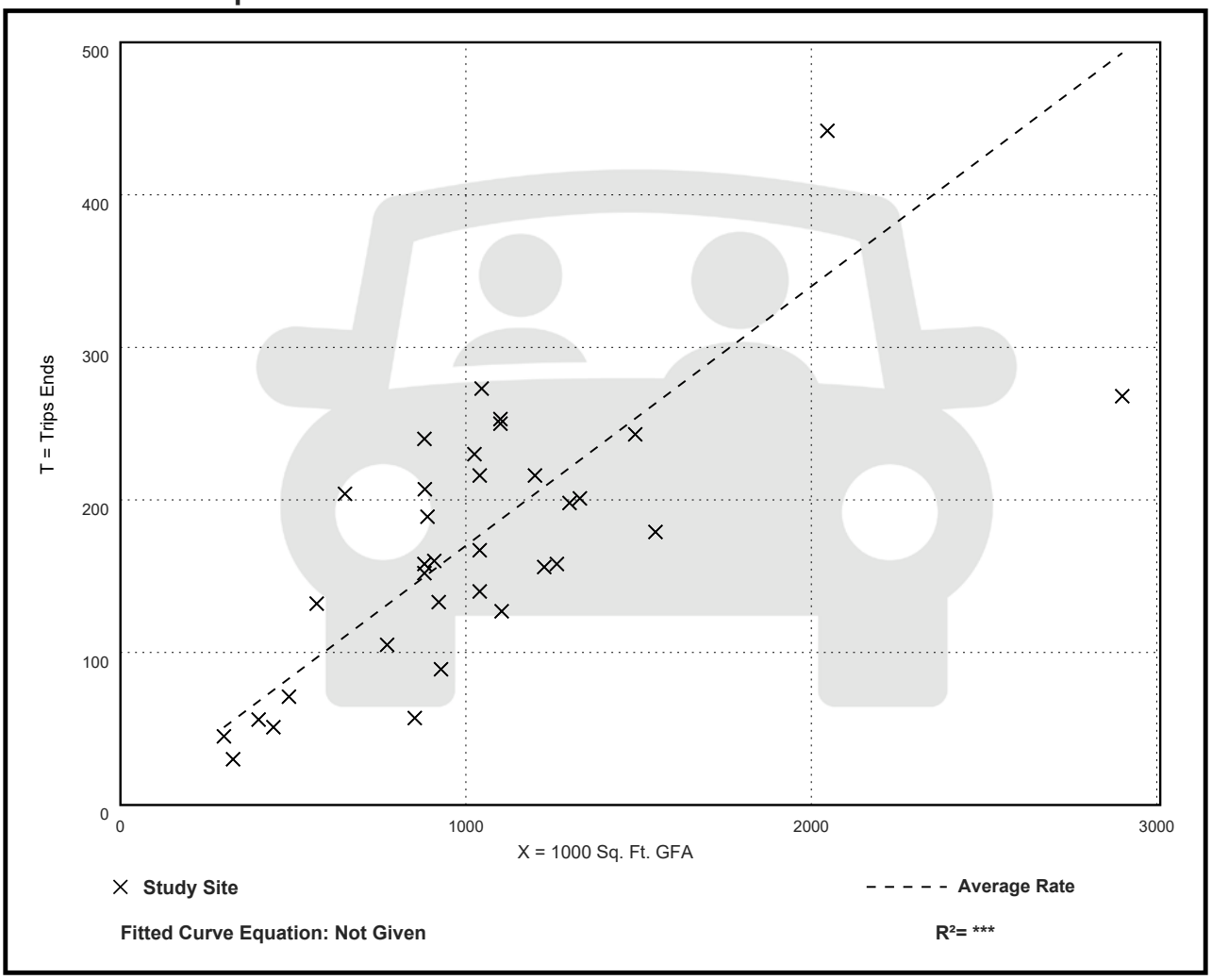
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 34
Avg. 1000 Sq. Ft. GFA: 1023
Directional Distribution: 34% entering, 66% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.07 - 0.31	0.06

Data Plot and Equation



High-Cube Transload and Short-Term Storage Warehouse (154)

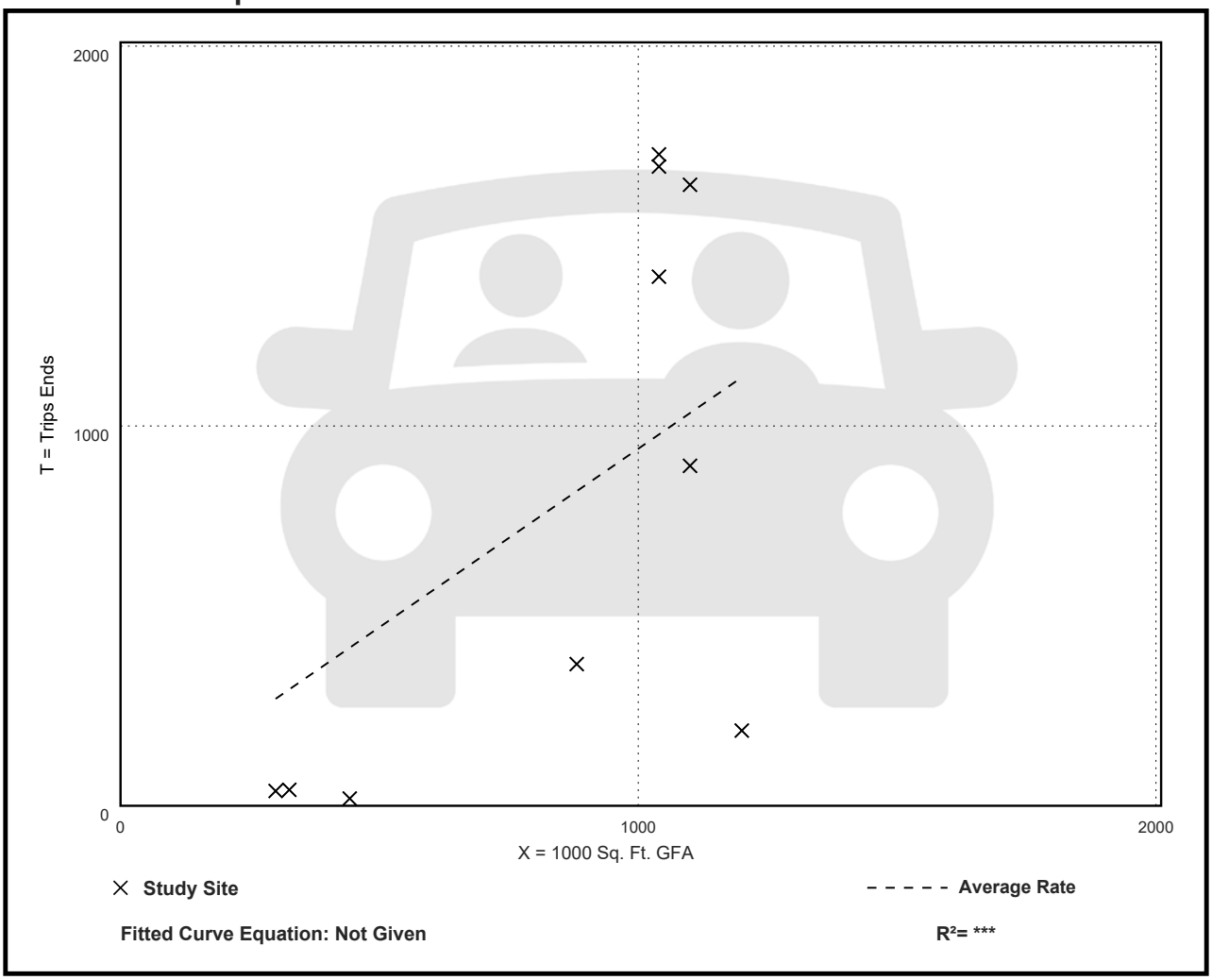
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday

Setting/Location: General Urban/Suburban
Number of Studies: 10
Avg. 1000 Sq. Ft. GFA: 847
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.94	0.04 - 1.65	0.65

Data Plot and Equation



HIGH-CUBE WAREHOUSE VEHICLE TRIP GENERATION ANALYSIS

PREPARED FOR

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

AND

NATIONAL ASSOCIATION OF INDUSTRIAL AND OFFICE PROPERTIES

PREPARED BY

INSTITUTE OF TRANSPORTATION ENGINEERS

WASHINGTON, DC

OCTOBER 2016

ACKNOWLEDGEMENT AND DISCLAIMER

This report was prepared as a result of work sponsored, paid for, in whole or in part, by the South Coast Air Quality Management District (SCAQMD) and NAIOP (National Association of Industrial and Office Properties (NAIOP). The report is the product of a collaborative process by which ITE, SCAQMD, and NAIOP embarked upon an effort to better understand vehicle trip generation rates at high-cube warehouse facilities.

The opinions, findings, conclusions, and recommendations are those of the author and do not necessarily represent the views of SCAQMD or NAIOP. SCAQMD, NAIOP, their officers, employees, contractors, and subcontractors make no warranty, expressed or implied, and assume no legal liability for the information in this report. SCAQMD and NAIOP have not approved or disapproved this report, nor has SCAQMD or NAIOP passed upon the accuracy or adequacy of the information contained herein.

The NAIOP Inland Empire and Southern California Chapters provided direct input for various items of the report, including a suggested high-cube warehouse classification system.

EXECUTIVE SUMMARY

Purpose – South Coast Air Quality Management District (SCAQMD) and NAIOP (National Association of Industrial and Office Properties) provided funding to the Institute of Transportation Engineers (ITE) to help in the establishment of national guidance for the estimation of vehicle trip generation at what are commonly called high-cube warehouse distribution centers (HCW).

Definition of High-Cube Warehouse – A high-cube warehouse is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical HCW has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the HCW. For the purpose of this trip generation analysis, HCWs are grouped into five types: fulfillment center, parcel hub, cold storage facility, transload facility, and short-term storage facility.

Data Sources – The analysis contained herein is based on data from 15 separate data sources, including recent data collected under the sponsorship of SCAQMD and NAIOP. The database includes trip generation information from 107 individual sites.

Findings – The HCW market continues to evolve as individual tenants/owners implement different e-commerce business plans. For example, some deliver goods to the customer within two days and others deliver orders to the nearest store for customer pick-up. As business plans and technology continue to evolve, these should continue to be monitored. Although the tenant or its planned operations are often unknown at the time of site development review, for the purpose of estimating vehicle trip generation, it may be as important to know the tenant as much as other facility factors.

For transload, short-term storage, and cold storage HCWs, the proportionate mix of types of vehicles (i.e., cars versus trucks) accessing the site is very consistent, both daily and during the AM and PM peak hours.

For a cold storage HCW, the currently available data demonstrates a useable, direct correlation between building size and vehicle trip generation.

The single data points for fulfillment centers and parcel hubs indicate that they have significantly different vehicle trip generation characteristics compared to other HCWs. However, there are insufficient data from which to derive useable trip generation rates.

For transload and short-term storage HCW sites, additional data sites and additional information on past sites are needed in order to derive useable trip generation rates.

Recommendations (Action Plan) – A strategically-developed data collection program is needed that targets each type of HCW individually. The strategy should include a prioritized plan for collecting additional data at five classifications of HCWs that are representative of the types of facilities expected to be commonly developed in coming years. The data should be collected at mature facilities, each of which clearly fits within one HCW classification, during periods of typical levels of activity based on the types of facilities and businesses served.

All future data collection should seek to acquire an enhanced set of site descriptive information that will enable development of better predictive models than are currently available.

STUDY PURPOSE AND PROCESS

South Coast Air Quality Management District (SCAQMD) and NAIOP (National Association of Industrial and Office Properties) provided funding to the Institute of Transportation Engineers (ITE) to help in the establishment of consensus-based national guidance for the estimation of trip generation at what are commonly called high-cube warehouses (HCW). This report documents the results of that effort to develop a credible and defensible procedure for collecting and analyzing site trip generation data for use in transportation impact analyses (TIA) and air quality/vehicular emissions analyses (AQA[1]) for HCW-type facilities.

ITE convened a meeting of practitioner-based experts at ITE Headquarters on April 1, 2015. The meeting participants are listed in Table 1. At the meeting's conclusion, several individuals were tasked with development of specific products, including the following:

- An overall work plan for this report and for subsequent data collection and analysis
- A clear and consistent definition of HCW for this report and for future studies and analysis
- A vehicle classification scheme that satisfies ultimate data requirements for TIA and AQA and complies with reasonable data collection capabilities and budgets

ITE staff assumed responsibility for compilation and analysis of existing HCW trip generation data.

The full expert panel provided comments and suggestions on each interim product that eventually became part of this complete report. Nevertheless, responsibility for content completeness and data analysis accuracy rests with ITE staff.

Table 1. Expert Panel for High-Cube Warehouse Trip Generation Study

Mr. Brian Bochner	Texas A&M Transportation Institute, College Station, Texas
Mr. Paul Basha	City of Scottsdale, Arizona
Mr. Milton Carrasco	Transoft Solutions, Inc., Richmond, British Columbia
Dr. Kelly Clifton	Portland State University, Portland, Oregon
Mr. Henry Hogo (for Mr. Barry Wallerstein)	South Coast Air Quality Management District, Diamond Bar, California
Mr. Kim Snyder	Prologis, Cerritos, California
Ms. Cecilia Ho	Federal Highway Administration, Washington, DC
Mr. Ian Macmillan	South Coast Air Quality Management District, Diamond Bar, California
Mr. Thomas Phelan	VHB, Newark, New Jersey
Mr. Jeremy Raw	Federal Highway Administration, Washington, DC
Mr. Erik Ruehr	VRPA Technologies, San Diego, California
Mr. Frank Sherkow	Southstar Engineering and Consulting, Inc., Yachats, Oregon
Mr. Joe Zietsman	Texas A&M Transportation Institute, College Station, Texas
Mr. Tom Brahms	Institute of Transportation Engineers, Washington, DC
Mr. Kevin Hooper	Institute of Transportation Engineers, Washington, DC
Ms. Lisa Tierney	Institute of Transportation Engineers, Washington, DC

[1] In California, when a new warehouse project is proposed, it undergoes environmental review pursuant to the California Environmental Quality Act (CEQA). Air quality analyses conducted pursuant to CEQA typically compare project emissions against local air district thresholds to determine the potential significance of the project's air quality impacts. These emission estimates rely on trip generation rates to determine the volume of cars and trucks that could visit the proposed project site.

HIGH-CUBE WAREHOUSE DEFINITION

A high-cube warehouse (HCW) is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical HCW has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the HCW.[2]

A classification scheme for different types of HCWs is presented in Table 2 along with their distinctive characteristics. The characteristics of a typical standard warehouse are provided for comparative purposes. The five types of HCW are the following:

- Transload – usually pallet loads or larger handling products of manufacturers, wholesalers/distributors, or retailers with little or no storage durations
- Short-Term Storage – products held on-site for a short time
- Cold Storage – HCW with permanent cold storage in at least part of the building
- Fulfillment Center – storage and direct distribution of e-commerce product to end users
- Parcel Hub – transload function for a parcel delivery company

[2] High-cube warehouses are classified as Land Use Code 152 in ITE *Trip Generation Manual*, 9th Edition. The definition provided in *Trip Generation Manual* for HCW is as follows:

> "High-cube warehouses/distribution centers are used for the storage of materials, goods and merchandise prior to their distribution to retail outlets, distribution centers or warehouses. These facilities are typically characterized by ceiling heights of at least 24 feet with small employment counts due to a high level of mechanization. High-cube warehouses/distribution centers generally consist of large steel or masonry shell buildings and may be occupied by or multiple tenants. A small ancillary office use component may be included and some limited assembly and repackaging may occur within these facilities.
>
> "High-cube warehouses/distribution centers may be located in industrial parks or be free-standing. Intermodal truck terminal (Land Use 030), industrial park (Land Use 130), manufacturing (Land Use 140) and warehousing (Land Use 150) are related uses."

When the 10th edition of *Trip Generation Manual* is developed, the findings and recommendations of this report will be reflected in an updated definition for high-cube warehouses.

Table 2. High-Cube Warehouse Classifications

	Standard Warehouse/ Storage	Transload Facility	Short-Term Storage	Cold Storage	Fulfillment Center	Parcel Hub
Description and Key Warehouse Functions						
Typical Functions	Products stored on-site typically for more than one month	Focus on consolidation and distribution of pallet loads (or larger) of manufacturers, wholesalers, or retailers; little storage duration; high throughput and high-efficiency	Focus on warehousing/ distribution with distribution space operated at high efficiency; often with custom/special features built into structure for movement of large volumes of freight	Temperature-controlled for frozen food or other perishable products stored in any type of HCW; building built with substantial insulation, including foundation, walls, and roof[3]	Storage and direct distribution of e-commerce product to end users; smaller packages and quantities than for other types of HCW; often multiple mezzanine levels for product storage and picking	Regional and local freight-forwarder facility for time-sensitive shipments via air freight and ground (e.g., UPS, FedEx, USPS); site often includes truck maintenance, wash, or fueling facilities
Break-Bulk or Assembly	Can include break-bulk and assembly activities	Very limited pick-and-pack area within facility	May or may not include break-bulk, repack or assembly activities	Limited or no break-bulk, repack or assembly activities	Pick-and-pack area comprises majority of space	Limited or no break-bulk, repack or assembly activities
Place in Supply Chain		Usually for final distribution to retail stores but can be for manufacturer to wholesale distribution		Typically, late in the supply chain for final distribution to retail stores or local, smaller distribution centers	Typically, freight for final consumption (business-to-business and consumers)	Can be situated at multiple points in the supply chain (intermediate or final delivery)

[3] Cold storage products (e.g., flowers and other perishables) that are not frozen must be shipped within hours or a few days. Cold storage products that are frozen may take a long time to ship. Products in these facilities may be treated more like typical HCW products.

	Standard Warehouse/ Storage	Transload Facility	Short-Term Storage	Cold Storage	Fulfillment Center	Parcel Hub
Location	Typically in an industrial area within urban area or urban periphery	Typically in an area with convenient freeway access; often in rural or urban periphery area	Typically in an area with convenient freeway access	Depends on supply and demand markets	Often near a parcel hub or USPS facility, due to time sensitivity of freight	Typically in close proximity to airport; often stand-alone
Overall Site Layout						
Employee Parking		Smaller employee parking ratio (per facility square foot) than fulfillment center or parcel hub	Smaller employee parking ratio (per facility square foot) than fulfillment center or parcel hub		Larger parking supply ratio than for all other HCW types	Larger employee parking ratios; truck drivers often based at facility (i.e., parking may be for both site employees and drivers)
Truck & Trailer Parking	Limited truck parking area; increases with distance to major distribution hub	Large, open trailer parking area surrounding facility; produces high land to building ratio	Ratio of truck parking spaces to docks can vary between 0.5:1 and 1.5:1, with 1:1 being very common	Can vary with whether products are frozen or perishable[4]	Significantly higher truck parking ratios than for other HCWs	Very high truck parking ratios to dock positions, often 2:1 or more
Loading Dock Location	Either on one side or on two adjacent sides	Minimum of two sides (adjacent or opposite); can be on four sides	On either one or two sides			Usually on both long sides of building; can be on four sides
Building Dimensions						
Length vs. Depth		Typical length vs. depth ranges between 3:1 and 2:1; shallower than Standard	Typical length vs. depth is 2:1; shallower than Standard			Typical configuration is cross-dock; building typically more shallow (150-300 feet across) than other HCWs

[4] Cold storage product handling must be done quickly. Any product stored in a trailer on the site requires either an idling truck or an external power supply to maintain the temperature within the required ranges.

	Standard Warehouse/ Storage	Transload Facility	Short-Term Storage	Cold Storage	Fulfillment Center	Parcel Hub
Ceiling Height	Typically between 28 and 40 feet	Typically, lower than for other HCW	Typically between 28 and 34 feet, with some facilities in excess of 40 feet	Typically higher (70-100 feet) to maximize efficiency of refrigeration; frozen food tends to have a higher ceiling than produce handling	Often as high as 40 feet in order to accommodate up to three levels of interior mezzanines	Typically not as tall as other HCW; commonly between 18 and 20 feet range; racking not usually provided (i.e. floor-stack only)
Number of Docks	Low number of dock positions to overall facility, 1:20,000 square feet or lower	Typical dock-high loading door ratio is 1:10,000 square feet; common range between 1:5,000 & 1:15,000 square feet	Typically, 1:10,000 square feet or lower			
Automation						
Material Handling Systems	Little or no automation; mechanization limited to pallet jacks and forklifts	Very highly-mechanized material handling systems	Very highly-mechanized material handling systems; high ratio of material handling equipment to overall floor area	Very high clear height requires sophisticated material handling equipment	High levels of automation in material handling equipment	High levels of automation in material handling equipment
Conveying Systems	Little or no automation	Usually automated mechanized conveying	Usually limited automated conveying	Very high clear height requires a sophisticated conveyance system	High levels of automation in conveying systems	High levels of automation in conveying systems
Warehouse Mgmt Systems (WMS)		Some facilities use ASRS (Automated Storage and Retrieval Systems)			High levels of automation; some use of ASRS	High levels of automation

Table 2. Additional Descriptive Features

Typical Floor Area Ratios range between 35 and 60 percent. Standard, Fulfillment Center, and Parcel Hub sites tend to have higher values than Transload and Short-Term Storage HCW.

Office/Employee Welfare[5] Space is highly variable and is insignificant within overall building square footage. Common values are between 3,000 and 5,000 square feet for Cold Storage and between 5,000 and 10,000 square feet for Transload Facility, Fulfillment Center, and Parcel Hub.

Movement of Goods in Trucks – For a Transload site, typical truck movements are comprised of full load, large trailers, both inbound and outbound. For some "last mile" or local distribution centers, long-haul trucks or international containers can arrive loaded and depart empty, while local delivery trucks arrive empty and depart loaded. For national and regional distribution centers, trucks can come in loaded and re-load with different product mix and depart loaded.

Hours of Operation and Peak Periods – Peak truck movement activity is often outside the peak commuting period on the adjacent street system. HCW operations are often 24 hours per day, every day of the year. For a Standard site, there is a greater likelihood that the site peak period of traffic operations may coincide with or be near the street peak period.

Truck Sizes – Truck size can vary significantly between similar sites. Sizes and types are a function of the origins and destinations of the goods processed at the facility (i.e., location in the supply chain). Local deliveries to business/residential customers are commonly made with smaller trucks (except warehouses that, for example, deliver bulky items to a home improvement store). Longer distance travel or deliveries at early stages in the supply chain are typically with larger trailers. For Cold Storage and Fulfillment Center, the outbound trucks are often smaller because of cargo weight and last-mile distribution needs. Intermediate hubs accommodate large trucks on both the inbound and outbound side (e.g., FedEx Ground). "Final delivery" hubs have small trucks on the outbound side (e.g., FedEx Overnight).

[5] Employee welfare area includes restrooms, locker rooms, and break rooms.

High-Cube Transload and Short-Term Storage Warehouse (154)

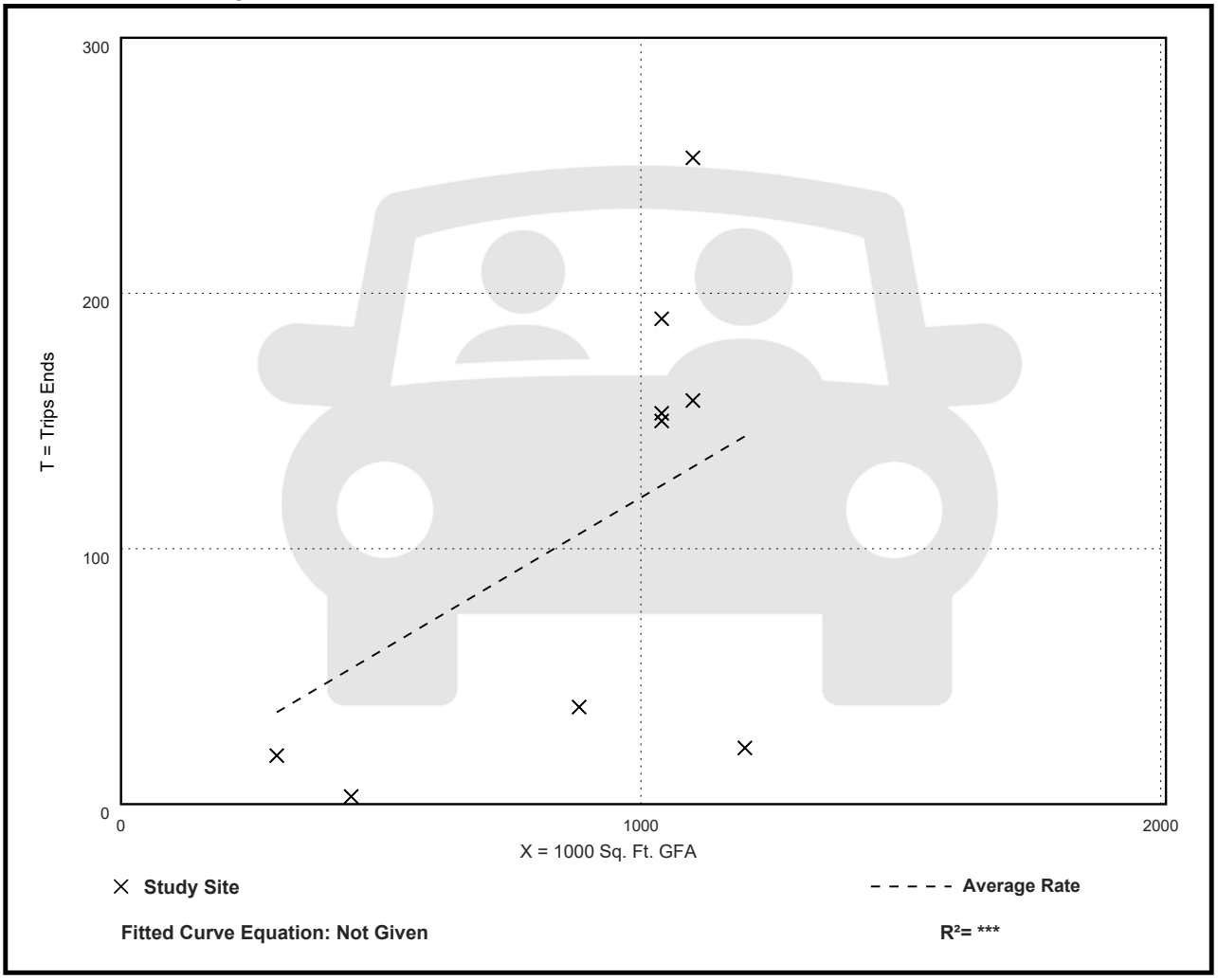
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 9
Avg. 1000 Sq. Ft. GFA: 905
Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.12	0.01 - 0.23	0.08

Data Plot and Equation



A simple and straightforward correlation between "markets" and the 13 FHWA classifications is as follows:

1. Facility Access: includes Classes 2 and 3 (passenger cars and light trucks), and Classes 1 and 4 (motorcycles and buses) if observed
2. Local Goods Movement: includes Classes 5 through 7 (two-, three-, and four-axle single-unit trucks)
3. Long Distance Goods Movement: includes Classes 8 through 13 (multi-unit trucks)

A significant limitation to this classification scheme is the growing disconnect between truck size and trip length over time. They do not correlate as well for many carriers as they did in the past. There is a wide range of practices in deliveries and many prominent retail chains currently use trucks in Classes 8 and 9, for example, for local deliveries. In other words, a Class 8-13 vehicle is not necessarily a long-distance truck trip.

The primary advantage of mapping these vehicle types to the FHWA classification scheme is that commercially available automated monitoring equipment is generally capable of reporting the FHWA vehicle classes without specialized data interpretation.

Encouraging agencies to develop local counts of these facilities will also be more successful if the agencies can use standard automated counters without specialized software, even at the expense of occasional misclassification relative to "ideal" categories for a warehouse trip generation study. Video detection could make more information available, but at greater expense for data processing.

It is also important to recognize that counting equipment manufacturers (and often representatives of a public agency) are able to reprogram automated counters to use an alternate classification scheme. For example, if there is a specific axle configuration commonly used for domestic container freight versus international container freight at a particular data collection site, it may be feasible to detect. Such schemes are relatively easy to share among agencies using the same types of equipment.

As noted above, the observed physical vehicle type based on a FHWA class may not provide sufficient information on its own to identify the "purpose" of the truck trip. The classification scheme may need to be adjusted to reflect the specific trip-making to and from a subject warehouse site. The following are examples of refinements that could be necessary given the particular characteristics of a warehouse site:

1. Even in a standard traffic monitoring application, the distinction between a passenger car (Class 2) and a light truck (Class 3: pickups, large SUVs, vans) has limited benefit and is difficult to establish decisively. For the warehouse trip generation application, the merging of these classes should improve overall accuracy.
2. Local goods movement may also include Class 3 vehicles (specifically two-axle vans). If separate driveways are used for goods movement and general facility access, the Class 3 vehicles in the goods movement driveway can be considered local goods movement vehicles.
3. It is sometimes difficult for automated equipment to distinguish between a Class 4 vehicle (bus) and a Class 5/6 truck. In the rare circumstance where a bus enters or exits a warehouse site driveway, a manual count or simple reference to a published transit service schedule may be necessary.
4. Class 5 vehicles include "dualie" pickups which may operate as personal vehicles for facility access or as larger panel trucks often used for local goods delivery. The presence of and use of separate driveways for goods movement and general facility access may be the only means to distinguish between the two types of uses.

DATA NEEDS FOR TIA AND AQA

Typical data requirements for TIA and AQA are listed in Table 3. Some measures are used to classify a building type. Some measures can be used as independent variables with a direct relationship to the quantity of vehicle trips generated by a site (by vehicle type).

Table 3. Data Needs for HCW Trip Generation Analysis

Vehicle Trip Data	TIA	AQA
Vehicle Trips by Vehicle Classification		
• 2 classifications – car, truck	√	
• 4 classifications – personal passenger vehicle, parcel delivery, single unit truck, tractor-trailer combination	*[6]	√
Vehicle Trips by Time-of-Day (by vehicle classification)		
• Directional 15-minute volumes on a weekday (typically Tuesday, Wednesday, or Thursday)		
o AM peak hour for generator	√	
o AM peak hour for adjacent street	√	
o PM peak hour for generator	√	
o PM peak hour for adjacent street	√	
• Non-directional 24-hour volume on a weekday		√
Vehicle Trips by Driveway (if employees and freight delivery use separate driveways)	√	√
Vehicle Trips within Context of Seasonal Variations		
• Daily Variations	√	√
• Monthly Variations		√
• Highest Day of Year		√
Independent Variable Data		
Building Size		
Building GSF[7] (total, office, retail, manufacturing/enhancements, storage/distribution)	√	√
Building Volume (cubic feet)	√	√
Building Shape (length-to-depth ratio)		√
Number of High-Loading docks	√	√
Building Function		
Cold Storage Provided	√	√
NAICS Industrial Code	√	√
Employees	√	√
Commodity type (retail, manufacturing, other)	√	√
Where in Supply Chain (parts, manufacturer/assembly, wholesale/distributor, retailer)		√
Site Size		
Site acres	√	√
Floor area ratio (FAR)	√	√
Parking spaces (employee/visitor, truck/trailer)	√	√
Site Context		
Area type (urban, suburban, rural)	√	√
Distance to port (seaport, intermodal center, regional air cargo)	√	√

[6] Some TIA may require truck classification information.

[7] GSF is gross square footage of the building.

ASSEMBLY AND CLASSIFICATION OF CURRENTLY AVAILABLE DATA

Data from the following studies were compiled and analyzed for possible use in the trip generation analysis for the High-Cube Warehouse study:

- Warehouse Truck Trip Study, Data Results and Usage, South Coast Air Quality Management District, Diamond Bar, CA 2014
- Trip Generation Analysis for High-Cube Warehouse Distribution Center, prepared for NAIOP by Kunzman Associates, Laguna Hills, CA 2011
- Trip Generation Characteristics of Discount/Home Improvement Superstores, Major Distribution Centers, and Small Box Stores, prepared for Florida Department of Transportation by Wilbur Smith Associates 2011
- Western Riverside County Warehouse/Distribution Center Trip Generation Study, prepared for NAIOP by Crain & Associates, Los Angeles, CA 2008
- Westside Industrial Park Warehouse Trip Generation, prepared for Premier Airport Park by King Engineering Associates, Jacksonville, FL 2008
- Trip Generation Study, Existing High-Cube Warehouse Facilities, Visalia CA, prepared for The Allen group by Peters Engineering Group, Clovis CA 2008
- Large-Scale Retail Distribution Centers, prepared for Walmart Sores, Inc. by Kimley-Horn and Associates, Tampa, FL 2007
- Trip Generation Study, High-Cube Warehouse Buildings, Fresno, California, prepared for Diversified Development Group by Peters Engineering Group, Clovis CA 2007
- Trip Generation Study, High Cube Warehouse, prepared by Schoor Depalma, Manalapan, NJ 2006
- San Bernardino/Riverside County Warehouse/Distribution Center Vehicle Trip Generation Study, prepared for NAIOP by Crain & Associates, Los Angeles, CA 2005
- Truck Trip Generation Study, prepared for City of Fontana (CA) by Transportation Engineering and Planning, Inc. 2003
- Trip Generation Analysis for High-Cube Warehouses, prepared for City of Livermore, CA by Fehr & Peers Associates, Lafayette, CA 1989

The data also includes site trip generation data provided by Texas A&M Transportation Institute (2008-2009), Randall Parker (2007), and Washington State Department of Transportation (2002).

The data were reviewed for their applicability and only acceptable sites with appropriate data are used in the analysis presented in the following section of this report. Some of the purported high-cube warehouses are instead standard storage warehouses or multi-building industrial parks. Some of the high-cube warehouse data for individual sites could not be used due to unexplained data characteristics (e.g., a significant imbalance in inbound and outbound daily vehicle trips).

The final current database of HCW sites contains 107 data records with varying degrees of vehicle classification data and of daily and peak hour traffic counts.

HIGH-CUBE WAREHOUSE TRIP GENERATION DATA ANALYSIS[8]

Classification of Individual Data Records

Each record in the database of HCW sites was classified as one of five building types, defined earlier in this report. The criteria used to classify the sites represent information that is likely to be available at the time of site development review.

The database includes one fulfillment center, one parcel hub, and nine HCWs with a significant cold storage component[9]. The remaining 95 HCWs were separated into transload and short-term storage HCW based on two building configuration criteria:

- A transload building is assumed to have a length-to-depth ratio of at least 2:1 and has loading docks on at least two sides (either opposite or adjacent); there are 56 transload data points
- The remaining HCW sites (i.e., those that are not considered transload, cold storage, fulfillment center, or parcel hub) are classified as short-term storage HCWs; they total 39 sites

Building configuration is known at the time of site development review but has the limitation of not necessarily being indicative of the function of the HCW activities. If additional characteristics can be identified that (1) are predictive of the HCW function and (2) are available at the time of site development review, the database can be reexamined and potentially reclassified and reanalyzed.

Key Findings – Cars vs. Total Vehicles

There is a significant correlation between the number of cars that enter and exit a HCW site and the total number of vehicles that enter and exit a HCW site.

Table 4 lists the weighted averages for cars as a percentage of the total site-generated traffic at the five types of HCW. At short-term storage, transload, and cold storage HCWs, nearly 68 percent of the total daily site-generated vehicle trips are cars. During the AM peak hour, the measured percentage of cars is markedly similar (69 percent) to the daily (68 percent). During the PM peak hour, the measured percentage of cars is significantly higher (78 percent) than the daily value. The higher car percentage (and therefore, the lower truck percentage) is likely due to truck operations avoiding the afternoon peak period.

The fulfillment center has a significantly higher percentage of cars during the AM and PM peak hours and daily (due largely to the significantly higher number of employees at a fulfillment center compared to the other types of HCWs). The parcel hub has a significantly lower percentage of cars (and therefore a higher percentage of trucks) during the AM and PM peak hours and daily.

Table 4. Weighted Averages for Percentage of Total Daily Vehicles that are Cars, by Type of HCW

Type of High-Cube Warehouse	Cars as Percentage of Total Vehicles		
	Daily	AM Peak Hour	PM Peak Hour
Short-Term Storage, Transload & Cold Storage (100)	67.8%	69.2%	78.3%
Fulfillment Center (1)	91.2	97.2	98.2
Parcel Hub (1)	62.3	50.3	70.7

Note: The values in parentheses represent the number of data collection sites for HCW type.

[8] This section presents key analysis findings. Appendix A presents additional analyses of the HCW data.

[9] Sites were classified as cold storage either through self-categorization by data submitter (e.g., Walmart), by type of tenant (e.g., Ralphs, Publix), or by online site description (e.g., Americold, Millard Refrigeration Services).

High-Cube Transload and Short-Term Storage Warehouse (154)

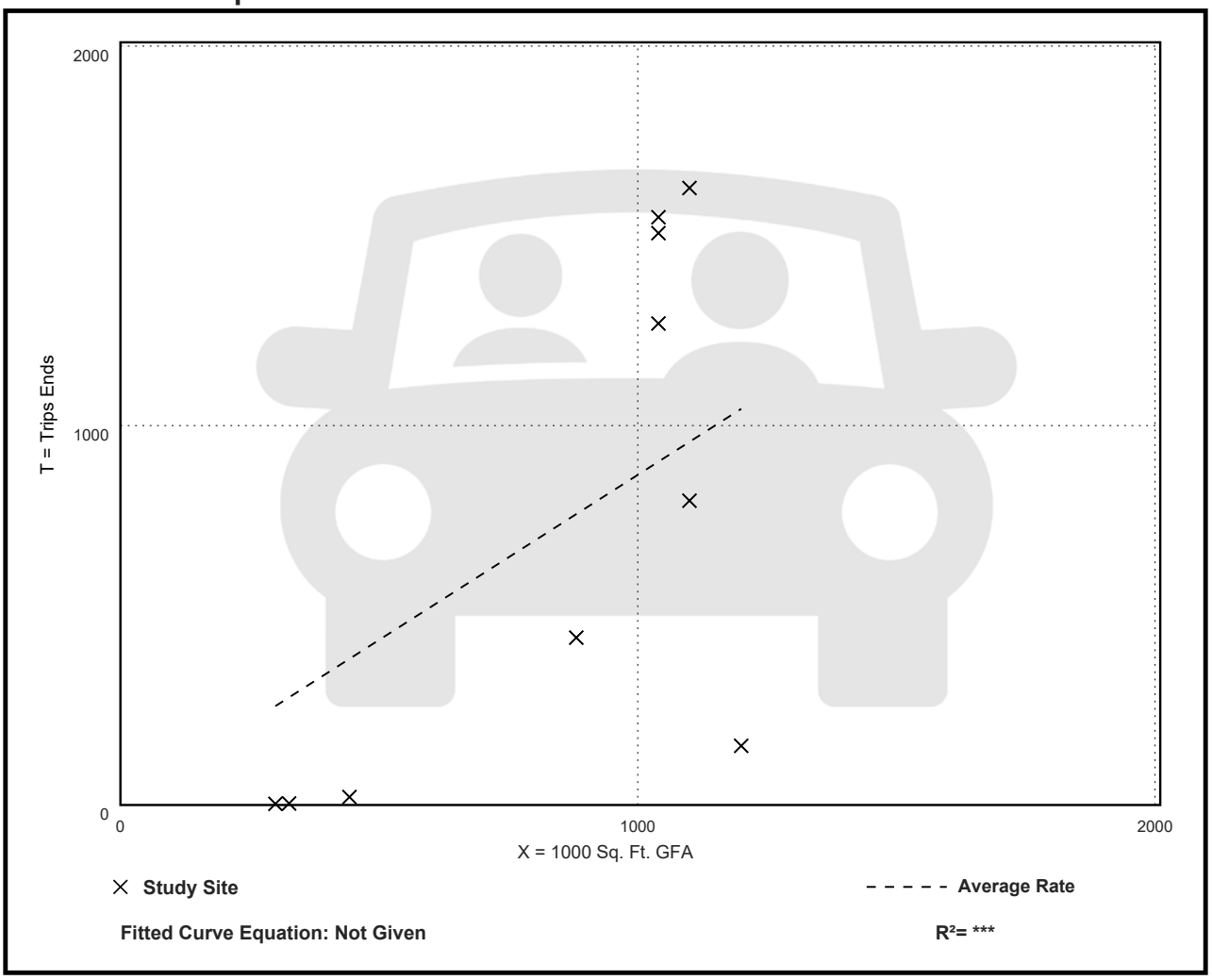
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Sunday

Setting/Location: General Urban/Suburban
Number of Studies: 10
Avg. 1000 Sq. Ft. GFA: 847
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.87	0.01 - 1.49	0.61

Data Plot and Equation



High-Cube Transload and Short-Term Storage Warehouse (154)

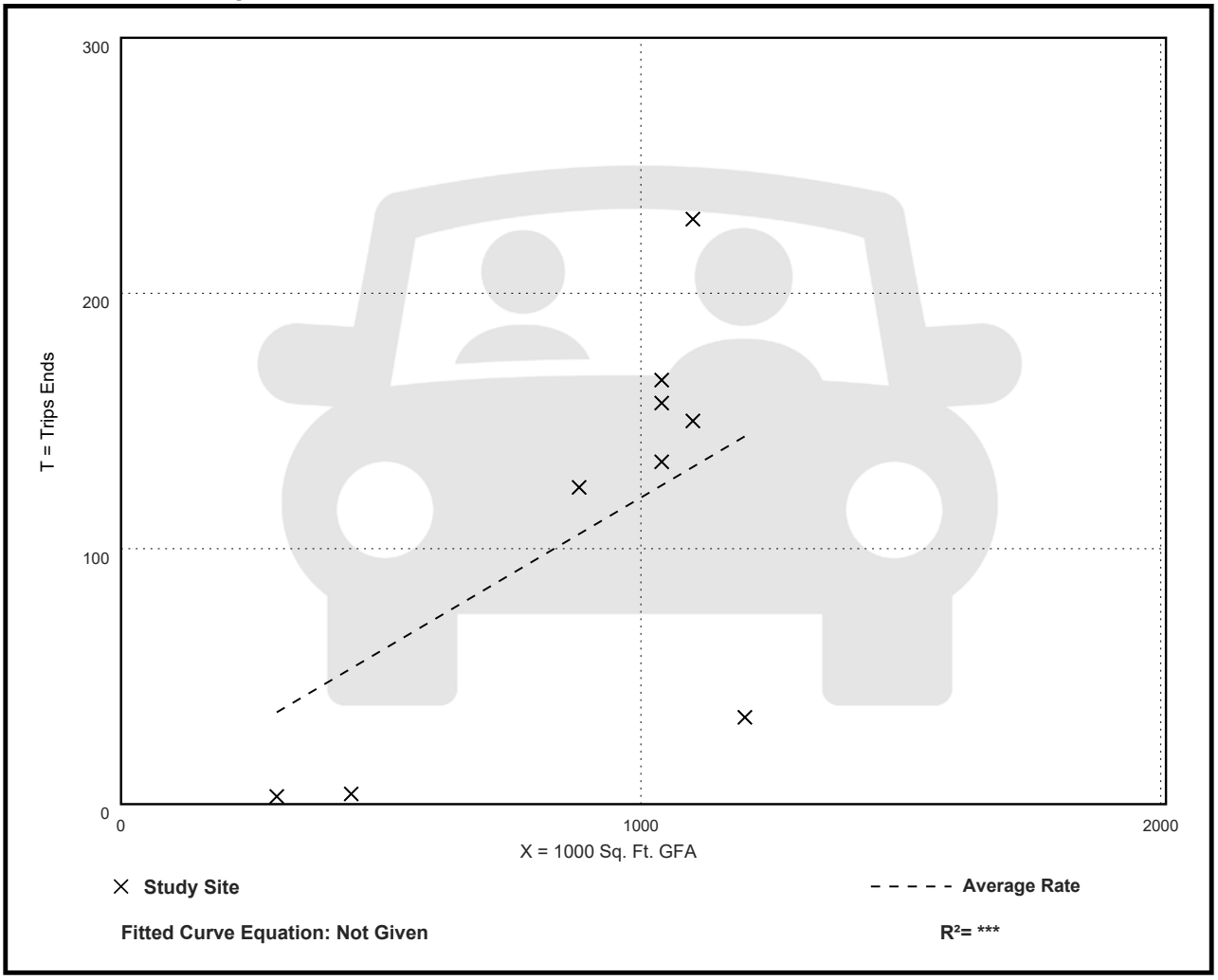
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Sunday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 9
Avg. 1000 Sq. Ft. GFA: 905
Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.12	0.01 - 0.21	0.07

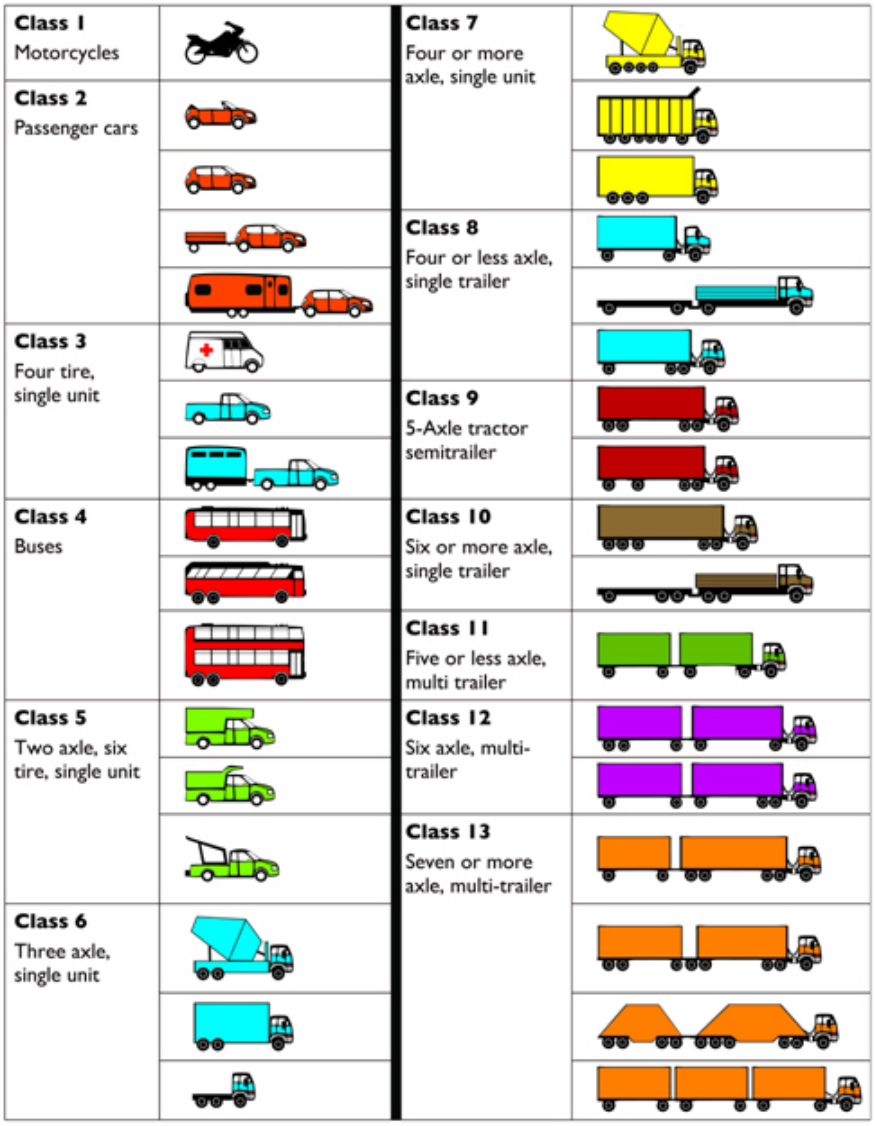
Data Plot and Equation



VEHICLE CLASSIFICATION FOR WAREHOUSE TRIP GENERATION DATA

The preferred vehicle classification scheme should satisfy both the ultimate needs for TIA and AQA analysis and comply with reasonable data collection capabilities and budgets. FHWA maintains a 13-category classification system for motorized vehicles (presented in Figure 1 and maintained at the following website: http://www.fhwa.dot.gov/policyinformation/tmguide/tmg_2013/vehicle-types.cfm).

Figure 1. FHWA Vehicle Classification Types

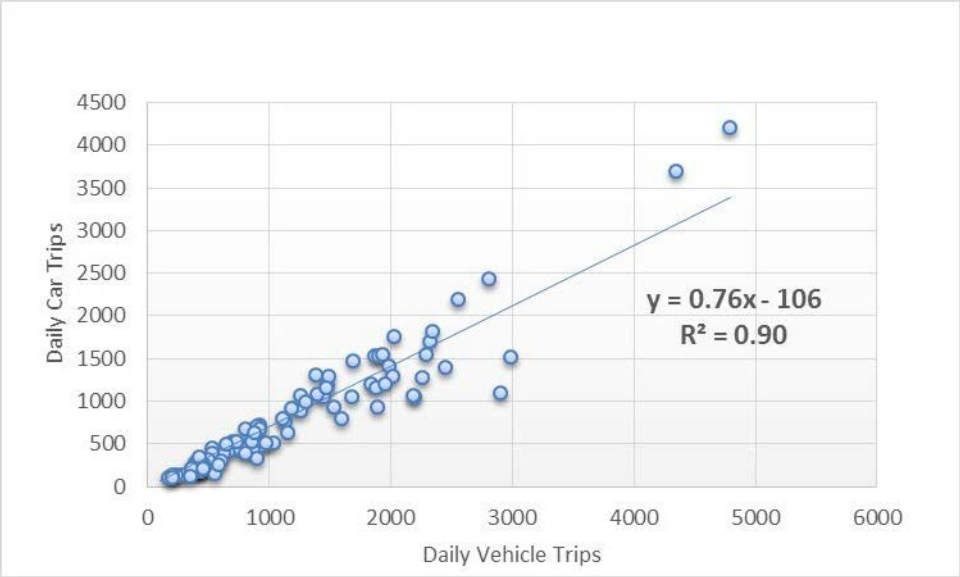


The vehicle types that enter and exit a HCW site can be separated to correspond to individual "markets:"

- Vehicles used for employee and facility service access (i.e., for goods and services consumed on site)
- Vehicles used for local delivery access (e.g., wholesale and retail delivery for consumption in the local metropolitan area)
- Vehicles used for high-volume transfer (e.g., long-distance freight, relay distribution to other distribution or warehouse facilities)

Figure 2 is a plot of daily car trips versus daily vehicle trips generated at transload, short-term storage, and cold storage HCWs. The plot demonstrates strong correlation between the two trip-making characteristics of HCW sites. The data yields a linear fitted curve equation with an R^2 value of 0.90. The correlation between the daily truck trips and daily vehicle trips is not as strong and yields a linear fitted curve equation R^2 value that is less than the ITE acceptability threshold of 0.50.

Figure 2. Correlation between Daily Cars and Total Daily Traffic at Transload, Short-Term Storage and Cold Storage HCW Sites



Key Findings – Daily Trip Generation

Table 5 compares daily trip rates for the five different types of HCWs. The table includes weighted average rates for all vehicles, cars, trucks, and 5-or-more-axle trucks. The table also includes the weighted average rate for daily vehicle trips contained in ITE *Trip Generation Manual* 9th Edition, for high-cube warehouses (land use code 152). The single fulfillment center count was taken during a holiday shopping season when activity would be expected to be higher than an annual average.

Table 5. Weighted Average Rates for Daily Trips at High-Cube Warehouses

Type of High-Cube Warehouse	Weighted Average for Daily Trips per 1,000 GSF[10]			
	All Vehicles	Cars	Trucks	5+ Axle Trucks
Transload & Short-Term Storage (91)	1.432	1.000	0.454	0.233
Cold Storage (9)	2.115	1.282	0.836	0.749
Fulfillment Center (1)	8.178	7.461	0.717	0.242
Parcel Hub (1)	10.638	6.631	4.007	0.982
ITE *Trip Generation Manual* – 9th Edition	1.68	--	--	--

Note: The values in parentheses represent the number of data collection sites for HCW type.

[10] The weighted average rates for cars and trucks may not sum to match the "all vehicle" rates because some data sources collected total vehicle trips and did not separate cars and trucks.

Key Findings – Peak Hour Trip Generation

Tables 6 and 7 list the weighted average rates for the AM and PM peak hours, respectively, for the five types of HCWs. The tables also include the weighted average rate for peak hour vehicle trips contained in ITE *Trip Generation Manual* 9th Edition, for high-cube warehouse (land use code 152).

Table 6. Weighted Average Rates for AM Peak Hour Trips at High-Cube Warehouses

Type of High-Cube Warehouse	Weighted Average for AM Peak Hour Trips per 1,000 GSF			
	All Vehicles	Cars	Trucks	5+ Axle Trucks
Transload & Short-Term Storage (94)	0.082	0.057	0.024	0.015
Cold Storage (9)	0.103	0.061	0.038	0.027
Fulfillment Center (1)	0.841	0.818	0.023	0.009
Parcel Hub (1)	0.851	0.428	0.423	0.041
ITE *Trip Generation Manual* – 9th Edition	0.11	--	--	--

Note: The values in parentheses represent the number of data collection sites for HCW type.

Table 7. Weighted Average Rates for PM Peak Hour Trips at High-Cube Warehouses

Type of High-Cube Warehouse	Weighted Average for PM Peak Hour Trips per 1,000 GSF			
	All Vehicles	Cars	Trucks	5+ Axle Trucks
Transload & Short-Term Storage (95)	0.108	0.086	0.023	0.010
Cold Storage (9)	0.129	0.087	0.042	0.031
Fulfillment Center (1)	1.979	1.944	0.035	0.013
Parcel Hub (1)	0.803	0.568	0.235	0.009
ITE *Trip Generation Manual* – 9th Edition	0.12	--	--	--

Note: The values in parentheses represent the number of data collection sites for HCW type.

Fulfillment Center

The single surveyed fulfillment center HCW has a significantly higher rate for passenger cars during both the AM and PM peak hours (as is the case for daily trips at the fulfillment center). The single fulfillment center count was taken during the December holiday shopping season.

The single surveyed parcel hub HCW has significantly higher rates for both cars and trucks during both the AM and PM peak hours (as is the case for daily trips at the fulfillment center).

Cold Storage

For cold storage HCW, fitted curve equations can be developed for estimating total vehicles during the AM and PM peak hours. The equations are:

- AM peak hour: $y = 0.17x - 40$ ($R^2 = 0.82$)
- PM peak hour: $y = 0.17x - 35$ ($R^2 = 0.83$)

The cold storage HCW weighted average rates during the AM and PM peak hours are, respectively, 0.103 and 0.129 total vehicle trips per 1,000 GSF. Both rates are close to the ITE *Trip Generation Manual* 9th Edition rate for all high-cube warehouses (land use code 152).

Transload and Short-Term Storage

Data plots for the AM and PM peak hours (not presented in this report) are comparable to the daily plot in terms of data scatter and little correlation. The weighted average rates for the AM and PM peak hours are:

- 0.082 total vehicles per 1,000 GSF during the AM peak hour
- 0.108 total vehicles per 1,000 GSF during the PM peak hour

As points of comparison, these rates are lower than the AM and PM weighted average rates of 0.11 and 0.12, respectively, provided in ITE *Trip Generation Manual* 9th Edition for the High-Cube Warehouse land use.

The weighted average rates for truck trips at transload and short-term storage HCWs during the AM and PM peak hours are:

- 0.024 trucks per 1,000 GSF during the AM peak hour
- 0.023 trucks per 1,000 GSF during the PM peak hour

RECOMMENDATIONS

The preceding analysis of available HCW trip generation data identified significant weaknesses in the ability to forecast vehicle trips with confidence. The following recommendations present a plan of action for quantifying necessary vehicle trip estimates to an acceptable level of precision for all types of HCWs.

Fulfillment Center HCW

The single available data point indicates that the trip generation characteristics (total vehicle trips and trips by vehicle type) for a fulfillment center HCW are significantly different from those for all other types of HCWs. A targeted data collection effort should be undertaken (as described below) to achieve a total of at least six sites. Included should be circulation of a Call for Data by ITE that specifically requests data for fulfillment centers. If future analysis reveals an unacceptable level of stability in the trip generation relationships, data should be collected at additional sites.

Parcel Hub HCW

The single available data point indicates that the trip generation characteristics (total vehicle trips and trips by vehicle type) for a parcel hub HCW are significantly different from those for all other types of HCWs. It is recommended that ITE circulate a Call for Data that specifically requests data for parcel hubs. A targeted data collection effort should be undertaken (as described below) to achieve a total of at least six sites. If future analysis reveals an unacceptable level of stability in the trip generation relationships, data should be collected at additional sites.

Cold Storage HCW

The limited data available for cold storage facilities produce acceptable levels of statistical precision for the estimation of vehicle trips. However, vehicle trip generation rates based on recently collected data are higher than those derived from data collected at least 10 years ago. It is recommended that (1) further investigation be made into the existing data and (2) additional data be collected.

The cold storage sites in the database are classified as such based on the interpretation of the data submitter. Confirmation of the applicability of the cold storage classification can be completed through determination of the proportion of the HCW building space devoted to cold storage. This information will also help in the development of a clear definition of cold storage facilities and their characteristics.

If some of the cold storage sites are reclassified, a targeted data collection effort should be undertaken (as described below) to achieve a total of at least six sites. Included should be circulation of a Call for Data by ITE that specifically requests data for cold storage facilities. If future analysis reveals an unacceptable level of stability in the trip generation relationships, data should be collected at additional sites.

Transload and Short-Term Storage HCW

The current database of sites for this subset of HCW types has been separated in accordance with building and dock configurations specified earlier in this report. To use a metaphor, it is possible that instead of separating the sites into apples and oranges, the sites have been separated into two sets that each contain both apples and oranges. The result is a pair of databases that (1) are not significantly different from each other in terms of trip generation and (2) do not yield satisfactory levels of correlation between building gross square footage and vehicle trips. It is possible that a more accurate allocation of the available data points between the two types of HCWs could produce better predictive relationships.

It is recommended that an analysis and evaluation of potential stratifications be undertaken and an appropriate set of data (along with a weighted average rate) be selected for use as interim rates until further study is complete (as described below).

Overall

It is recommended that a targeted data collection plan be undertaken in an attempt to further define and identify relationships between potential independent variables and vehicle trips generated at each type of HCW. A six-step process is presented below.

Step 1: Select 15 Sites[12] with Similar Characteristics for Data Collection and Further Analysis

- For each site, compile the data specified earlier in Table 3
- If the Table 3 data are available for the sites at which SCAQMD or NAIOP collected data, these sites and their data can be considered part of the initial 15
- Limit sites to one or two metropolitan regions. Preference should be given to a region with an existing freight model that disaggregates truck trips and commodity flow to the county or traffic analysis zone level, for cross-referencing purposes.

Step 2: Collect Data at the Initial 15 Sites

- Collect the vehicle volume data specified in Table 8

Step 3: Analyze Complete Data for Consistency and Correlation with One or More Independent Variables

- If consistency and correlations are found, skip to Step 5

Step 4: Identify 15 Additional Sites and Undertake Data Collection

- Summarize and analyze results, assessing consistency
- The results will set an approximate expectation for future data. They may be described statistically and/or in other clear terms.
- If variability is still considered significantly high by ITE standards, assess probable causes, further partition data into more subgroups, and reanalyze data. Use results to determine how to classify warehouse types for future data collection.

Step 5: Identify 15 Sites and Collect Data for Next Priority HCW Classification

- 15-30 sites (including usable existing data) in at least two metropolitan regions (may be selected to reflect funding sources)
- 3 year-long counts
- Compare year-long counts from second HCW type with those from first HCW type to determine if additional year-long counts are needed to show variability in different types of HCWs

[12] For a database with substantial uniformity in the characteristics that influence trip generation, a relatively small number of sites can produce predictive relationships with excellent statistical reliability (for example, perhaps the cold storage facilities). However, for sites with substantial variability, a database total of approximately 30 sites is typically recommended based on the central limit theorem. The theorem states that the sampling distribution of the means will approach that of a normal distribution with that quantity of data points even if the population being sampled is not normally distributed.

Step 6: Summarize and analyze data for each type of HCW, developing rates and equations where correlation is suitable. Identify patterns, trends, and other findings relevant to estimating HCW trip generation for use in TIAs and AQAs. Assess how many HCW types are needed/justified.

Table 8. Minimum Data Collection for Each HCW Type

• 15 sites including those for which there are usable existing data
• One or two metropolitan regions – preference should be for a region with an existing freight model that disaggregates truck trips and commodity flow to the county or TAZ level, for cross-referencing purposes
• Similar site characteristics (to minimize variability of results (desirably most common in metro region where data to be collected)
• 1-2 NAICS industrial codes – we may need to loosen this requirement in order to find 15 acceptable sites in a single metropolitan area; we may need to use data from sites in multiple metropolitan areas; should be used in site selection process, not as a prescriptive requirement
• Year-long count at 3 sites
• All counts by video; all files to be retained for possible future use; examine via simultaneous video and tube counts what the discrepancy rates might be for purpose classification based physical vehicle types and standard FHWA classes versus actually seeing the trucks on video
• All counts to follow ITE site trip generation count procedures with counts being made directionally by vehicle classification and recorded by driveway, by direction, and by 15 minute period so they can be checked (and reconstructed if necessary)

APPENDIX A. SUPPLEMENTAL DETAILED DATA ANALYSIS

Data Analysis Process

The database of 106 HCWs with vehicle trip generation data consists of one fulfillment center, one parcel hub, nine cold storage, 56 transload, and 39 short-term storage.

For each data record, a range of traffic count data is available.

- For many records, a daily count is provided. For many records, AM and PM peak hour traffic counts are provided.
- For some data records, the count data is reported simply as total vehicles. In some records, the vehicle counts are classified as cars or trucks. In some records, the vehicle counts are classified as cars and trucks, disaggregated by number of axles.

The data were disaggregated and aggregated in a variety of ways to help determine the effects of certain potential variables on vehicle trip generation.

- The entire database for each facility type
- Only the recent SCAQMD-sponsored data collection sites
- Only the recent NAIOP-sponsored data collection sites
- The combination of the recent SCAQMD- and NAIOP-sponsored data collection sites
- All data except for the recent SCAQMD- and NAIOP-sponsored data collection sites
- Sites with at least 500,000 gross square footage
- Sites with at least 800,000 gross square footage
- Sites with at least 1 million gross square footage
- Sites with data collected prior to 2007
- Sites with data collected after 2006
- Sites with data collected prior to 2010
- Sites with data collected after 2009
- Only California sites
- Only sites with close proximity to major port facilities

The vehicle count data were analyzed separately for the fulfillment center, parcel hub, cold storage, transload, and short-term storage HCWs.

- The results for fulfillment center, parcel hub, and cold storage are distinctly different from each other and are addressed separately below
- The results for transload and short-term storage HCWs are not substantially different from each other and are treated in combination below

The database enabled the compilation of over 1,500 subsets of HCW trip generation data that reflect:

- 7 different combinations of building types,
- 6 different sets for individual vehicle classifications or combinations,
- 13 different subsets of the database, and
- 3 different time periods (daily, AM, PM)

Weighted averages of vehicles per 1,000 gross square feet in the building were computed for each subset. Data plots with best fit linear curves were prepared for each subset. Examination of the data yields very few definitive relationships between site characteristics and vehicle trip generation. Key findings from these analyses are presented below.

Cars vs. Total Vehicles

Table A1 presents the weighted averages for cars, trucks, and 5+ axle trucks as a percentage of total daily vehicles measured at HCW sites. Separate calculations are presented for the entire database and for13 different subsets. When the complete set is included, the overall average is approximately 68 percent cars and 32 percent trucks of the total daily vehicles. There is minimal variation between the most recent data sources (SCAQMD and NAIOP) or between different building sizes. However, the more recent average data (post-2006 and post-2009) has a higher proportion of cars than does the older data collection sites.

Table A1. Weighted Averages for Percentage of Total Daily Vehicles for Cars and Trucks

Data Site Subset	Percentage of Total Daily Vehicles		
	Cars	Trucks	5+ Axle Trucks
All	67.8%	32.2%	19.4%
SCAQMD	69.0	31.0	17.7
NAIOP	68.6	31.4	21.8
SCAQMD & NAIOP	68.8	31.2	19.0
Non-SCAQMD or NAIOP	66.6	33.4	---
More than 500,000 GSF	68.7	31.3	19.2
More than 800,000 GSF	69.4	30.6	18.5
More than 1,000,000 GSF	70.3	29.7	21.2
Pre-2007	62.1	37.9	---
Post-2006	70.1	29.9	19.5
Pre-2010	60.9	39.1	28.2
Post-2009	70.7	29.3	19.0
California Only	67.6	32.4	18.9

Cold Storage HCW

If the cold storage HCW data are restricted to only include data collected under sponsorship of SCAQMD and NAIOP within the past eight years, the correlation between daily total vehicles and site gross square footage can be improved beyond the full dataset correlation. Figure A1 presents the data plot and associated fitted curve[13]. As recommended in ITE *Trip Generation Handbook* 3rd Edition, the fitted curve should be considered acceptable only within the building site size range in the dataset.

[13] Granted, the improved correlation in Figure A3 is due in part to requiring correlation to only four data points.

Fulfillment Center and Parcel Hub

Based on data from single data points, it is likely that vehicle trip generation rates for fulfillment centers and parcel hubs are significantly different from those at other HCW sites.

The single fulfillment center has a substantially higher vehicle trip generation rate than transload, short-term storage, and cold storage HCW sites. The higher rate is due both to a higher number of passenger cars (i.e., employees) entering and exiting the site and to the count being conducted in December during the holiday shopping season.

The single parcel hub HCW has a rate that is higher than even the fulfillment center for all vehicles. The rate for trucks (both total and 5+ axle) is substantially higher than for the other HCW types.

Cold Storage

For the relatively small number of data points in the HCW database that are classified as cold storage facilities, there is a strong correlation between vehicle trips and building gross square footage.

Figure 3 is a plot of daily total vehicle trips versus building gross square footage at all cold storage facilities in the database. The data yields a linear fitted curve equation with an R^2 value of 0.69. As recommended in ITE *Trip Generation Handbook* 3rd Edition, the fitted curve should be considered acceptable only within the building site size range in the dataset[11]. The weighted average rate (shown above in Table 5) is 2.115 total vehicles per 1,000 GSF for a cold storage HCW site.

Figure 3. Correlation between Daily Total Vehicles and Cold Storage GSF (All Sites)

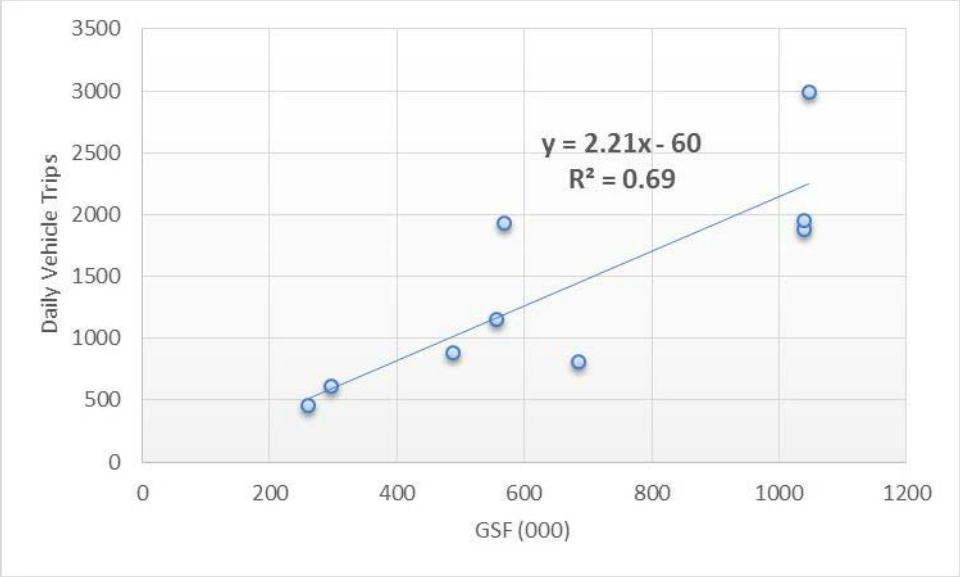
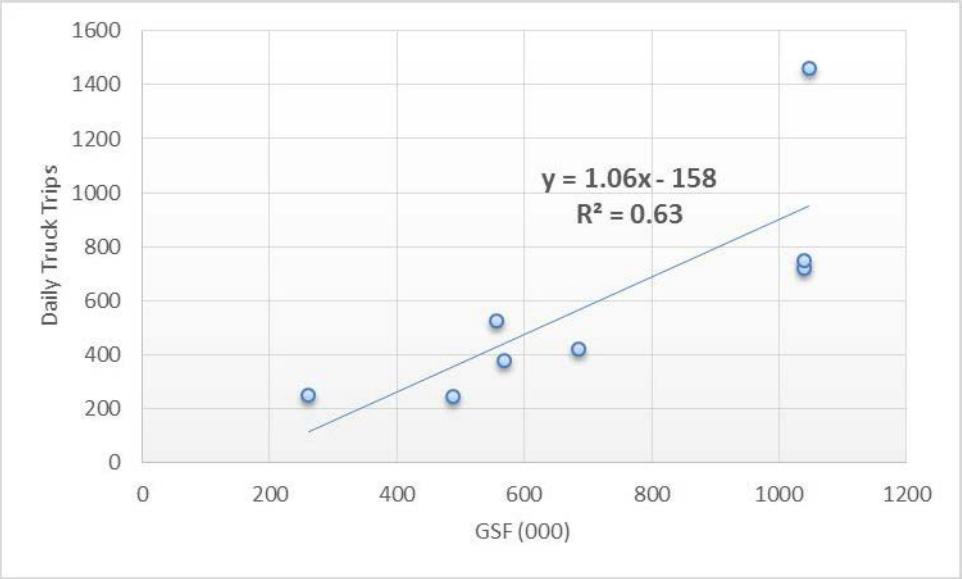


Figure 4 presents the data plot for daily trucks. The plot includes a fitted curve equation with an acceptable R^2 value. The weighted average rate for daily trucks at a cold storage HCW is 0.836 trucks per 1,000 GSF.

[11] The best correlation is found for sites with gross square footage of 500,000 or less, with greater data scatter for larger buildings. Nevertheless, there are several sites with gross square footage of more than 500,000 that have daily vehicle trip generation rates that mirror the small sites.

Figure 4. Correlation between Daily Trucks and Cold Storage GSF (SCAQMD & NAIOP Sites)



Transload and Short-Term Storage

It would be expected that a transload site could generate a different number of vehicle trips than a short-term storage HCW. But, as currently classified in this report, the sites that fall into the two categories show very little difference between the two. Therefore, the two types are analyzed together in this report. If an appropriate building characteristic can be identified at the time of site development review, the sites in the database can be re-examined and potentially reclassified and the trip-generating characteristics reanalyzed.

For this combination of HCW types, the relationship between building gross square footage and vehicle trips does not produce an acceptable level of correlation to develop a fitted curve equation. Figure 5 presents a plot of daily vehicle trips against building square footage.

The weighted average rate for transload and short-term storage HCW sites is 1.432 daily vehicle trips per 1,000 GSF (listed earlier in Table 5). As a point of comparison, this rate is lower than the weighted average rate of 1.68 provided in ITE *Trip Generation Manual* 9th Edition, for the High-Cube Warehouse land use.

The transload and short-term storage HCW dataset is much larger than the other HCW datasets. This larger dataset exhibits much greater scatter than the smaller datasets. This circumstance suggests that more data for the other HCW facility types are necessary to determine if the small dataset high correlations are accurate and justified.

Table A2. Weighted Average Rates for Daily Trips at Cold Storage Facilities

Data Site Subset (Cold Storage)	Weighted Average for Daily Trips per 1,000 GSF			
	All Vehicles	Cars	Trucks	5+ Axle Trucks
All (9)	2.115	1.282	0.836	0.749 (4)
SCAQMD (3)	2.466	1.265	1.201	0.858
NAIOP (1)	1.179	0.564	0.615	0.455
SCAQMD & NAIOP (4)	2.120	1.077	1.043	0.749
Non-SCAQMD or NAIOP (5)	2.111	1.449	0.667	---
More than 500,000 GSF (5)	2.009	1.121	0.888	0.772
More than 800,000 GSF (3)	2.179	1.242	0.938	0.968
More than 1,000,000 GSF (3)	2.179	1.242	0.938	0.968
Pre-2007 (3)	1.868	1.134	0.706	---
Post-2006 (6)	2.278	1.368	0.910	0.749
Pre-2010 (3)	1.868	1.134	0.706	---
Post-2009 (6)	2.278	1.368	0.910	0.749
California Only (5)	2.114	1.077	1.043	0.749
Port Only (5)	2.114	1.077	1.043	0.749

Note: The values in parentheses represent the number of data collection sites for that particular subset of cold storage sites.

Tables A3 and A4 repeat the information presented in Table A2, but for the AM and PM peak hours, respectively.

Table A3. Weighted Average Rates for AM Peak Hour Trips at Cold Storage Facilities

Data Site Subset (Cold Storage)	Weighted Average for AM Peak Hour Trips per 1,000 GSF			
	All Vehicles	Cars	Trucks	5+ Axle Trucks
All (9)	0.103	0.061	0.038	0.027
SCAQMD (3)	0.124	0.070	0.054	0.026
NAIOP (1)	0.071	0.039	0.032	0.029
SCAQMD & NAIOP (4)	0.110	0.062	0.048	0.027
Non-SCAQMD or NAIOP (5)	0.098	0.061	0.030	---
More than 500,000 GSF (5)	0.092	0.054	0.038	0.028
More than 800,000 GSF (3)	0.099	0.058	0.041	0.030
More than 1,000,000 GSF (3)	0.099	0.058	0.041	0.030
Pre-2007 (3)	0.084	0.046	0.025	---
Post-2006 (6)	0.115	0.070	0.045	0.027
Pre-2010 (3)	0.084	0.046	0.025	---
Post-2009 (6)	0.115	0.070	0.045	0.027
California Only (5)	0.116	0.062	0.048	0.027
Port Only (5)	0.116	0.062	0.048	0.027

Note: The values in parentheses represent the number of data collection sites for that particular subset of cold storage sites.

Table A4. Weighted Average Rates for PM Peak Hour Trips at Cold Storage Facilities

Data Site Subset (Cold Storage)	Weighted Average for PM Peak Hour Trips per 1,000 GSF			
	All Vehicles	Cars	Trucks	5+ Axle Trucks
All (9)	0.117	0.080	0.037	0.029
SCAQMD (3)	0.129	0.087	0.042	0.031
NAIOP (1)	0.089	0.050	0.039	0.026
SCAQMD & NAIOP (4)	0.118	0.077	0.041	0.029
Non-SCAQMD or NAIOP (5)	0.117	0.083	0,034	---
More than 500,000 GSF (5)	0.106	0.069	0.037	0.029
More than 800,000 GSF (3)	0.116	0.079	0.037	0.029
More than 1,000,000 GSF (3)	0.116	0.079	0.037	0.029
Pre-2007 (3)	0.097	0.058	0.037	---
Post-2006 (6)	0.131	0.093	0.038	0.029
Pre-2010 (3)	0.097	0.058	0.037	---
Post-2009 (6)	0.131	0.093	0.038	0.029
California Only (5)	0.117	0.077	0.041	0.029
Port Only (5)	0.117	0.077	0.041	0.029

Note: Values in parentheses represent the number of data collection sites for that particular subset.

Transload and Short-Term Storage HCW

Weighted average rates for daily trips at transload and short-term storage HCWs are listed in Table A5 for four vehicle classifications (all vehicles, car, truck, and 5+ axle truck) and for the complete database plus 13 subsets. One observation about the data is that the more recent data sites have, on average, lower daily trip generation rates (for all vehicle types) than the older sites[14]. This relationship is also found for the AM and PM peak hours presented in Tables A6 and A7.

Table A5. Weighted Average Rates for Daily Trips at Transload and Short-Term Storage HCW

Data Site Subset (Transload & Short-Term Storage)	Weighted Average for Daily Trips per 1,000 GSF			
	All Vehicles	Cars	Trucks	5+ Axle Trucks
All	1.432	1.000	0.454	0.233
SCAQMD	1.412	1.006	0.406	0.217
NAIOP	1.069	0.749	0.339	0.276
SCAQMD & NAIOP	1.275	0.901	0.374	0.221
Non-SCAQMD or NAIOP	1.701	1.183	0.603	---
More than 500,000 GSF	1.433	1.008	0.431	0.223
More than 800,000 GSF	1.417	0.978	0.405	0.200
More than 1,000,000 GSF	1.493	1.044	0.392	0.257
Pre-2007	1.653	1.203	0.732	---
Post-2006	1.397	0.994	0.402	0.233
Pre-2010	1.621	1.097	0.708	0.614
Post-2009	1.347	0.970	0.377	0.221
California Only	1.226	0.871	0.388	0.221
Port Only	1.258	0.871	0.388	0.221
ITE *Trip Generation Manual* – 9th Edition	1.68	--	--	--

[14] A decline in HCW auto traffic is likely because of a reduction in employee density as HCWs have become more automated. The reduction in truck trips does not have a clear explanation. Continued data collection is recommended to enable the development of current trip generation rates that do not need to rely on older data.

Tables A6 and A7 list the weighted average rates for the AM and PM peak hours, respectively.

Table A6. Weighted Average Rates for AM Peak Hour Trips at Transload and Short-Term Storage HCW

Data Site Subset (Transload & Short-Term Storage)	Weighted Average for AM Peak Hour Trips per 1,000 GSF			
	All Vehicles	Cars	Trucks	5+ Axle Trucks
All	0.082	0.057	0.024	0.015
SCAQMD	0.073	0.049	0.024	0.013
NAIOP	0.060	0.040	0.019	0.016
SCAQMD & NAIOP	0.068	0.046	0.022	0.014
Non-SCAQMD or NAIOP	0.100	0.075	0.028	0.022
More than 500,000 GSF	0.078	0.055	0.023	0.014
More than 800,000 GSF	0.074	0.050	0.022	0.014
More than 1,000,000 GSF	0.078	0.049	0.025	0.022
Pre-2007	0.110	0.087	0.032	0.016
Post-2006	0.079	0.057	0.022	0.015
Pre-2010	0.101	0.073	0.032	0.022
Post-2009	0.072	0.051	0.021	0.014
California Only	0.067	0.045	0.023	0.014
Port Only	0.071	0.046	0.023	0.014
ITE *Trip Generation Manual* – 9th Edition	0.11			

Table A7. Weighted Average Rates for PM Peak Hour Trips at Transload and Short-Term Storage HCW

Data Site Subset (Transload & Short-Term Storage)	Weighted Average for PM Peak Hour Trips per 1,000 GSF			
	All Vehicles	Cars	Trucks	5+ Axle Trucks
All	0.108	0.086	0.023	0.010
SCAQMD	0.081	0.060	0.021	0.010
NAIOP	0.091	0.075	0.016	0.010
SCAQMD & NAIOP	0.085	0.066	0.019	0.010
Non-SCAQMD or NAIOP	0.135	0.117	0.028	0.015
More than 500,000 GSF	0.108	0.087	0.022	0.010
More than 800,000 GSF	0.110	0.087	0.022	0.009
More than 1,000,000 GSF	0.120	0.097	0.019	0.010
Pre-2007	0.145	0.133	0.031	0.012
Post-2006	0.107	0.086	0.020	0.010
Pre-2010	0.141	0.122	0.031	0.015
Post-2009	0.091	0.072	0.019	0.010
California Only	0.082	0.063	0.019	0.010
Port Only	0.086	0.065	0.019	0.010
ITE *Trip Generation Manual* – 9th Edition	0.12			

Tables A5, A6, and A7 also include the ITE *Trip Generation Manual* 9th Edition, weighted average rate for high-cube warehouses (land use code 152). The data analyzed in this report generally produce lower rates than contained in *Trip Generation Manual*.

Appendix K: HCS Worksheets

HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2028
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2028 WP-Lenwood-Agate_Jasper-AM NB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	556	Opposing Demand Flow Rate, veh/h	394
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.33

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.73523	Speed Power Coefficient (p)	0.49787
PF Slope Coefficient (m)	-1.23425	PF Power Coefficient (p)	0.80383
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	59.7

Vehicle Results			
Average Speed, mi/h	59.7	Percent Followers, %	53.7
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	5.0
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2028
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2028 WP-Lenwood-Agate_Jasper-AM SB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	394	Opposing Demand Flow Rate, veh/h	556
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.77393	Speed Power Coefficient (p)	0.47501
PF Slope Coefficient (m)	-1.25151	PF Power Coefficient (p)	0.79614
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	60.1

Vehicle Results			
Average Speed, mi/h	60.1	Percent Followers, %	44.9
Segment Travel Time, minutes	0.99	Adj. Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2028
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2028 WP-Lenwood-Agate_Jasper-PM NB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	700	Opposing Demand Flow Rate, veh/h	509
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.41

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.76341	Speed Power Coefficient (p)	0.48089
PF Slope Coefficient (m)	-1.24721	PF Power Coefficient (p)	0.79821
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	59.3

Vehicle Results			
Average Speed, mi/h	59.3	Percent Followers, %	60.9
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	7.2
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2028
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2028 WP-Lenwood-Agate_Jasper-PM SB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	509	Opposing Demand Flow Rate, veh/h	700
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.80383	Speed Power Coefficient (p)	0.45965
PF Slope Coefficient (m)	-1.26208	PF Power Coefficient (p)	0.79033
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	59.7

Vehicle Results			
Average Speed, mi/h	59.7	Percent Followers, %	52.3
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	4.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2033
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2033 WP-Lenwood-Agate_Jasper-AM NB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	584	Opposing Demand Flow Rate, veh/h	421
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.74225	Speed Power Coefficient (p)	0.49347
PF Slope Coefficient (m)	-1.23768	PF Power Coefficient (p)	0.80242
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	59.6

Vehicle Results			
Average Speed, mi/h	59.6	Percent Followers, %	55.3
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	5.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2033
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2033 WP-Lenwood-Agate_Jasper-AM SB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	421	Opposing Demand Flow Rate, veh/h	584
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.78010	Speed Power Coefficient (p)	0.47167
PF Slope Coefficient (m)	-1.25389	PF Power Coefficient (p)	0.79493
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	60.0

Vehicle Results			
Average Speed, mi/h	60.0	Percent Followers, %	46.8
Segment Travel Time, minutes	0.99	Adj. Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2033
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2033 WP-Lenwood-Agate_Jasper-PM NB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	8
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	761	Opposing Demand Flow Rate, veh/h	498
Peak Hour Factor	1.00	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.45

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	63.6
Speed Slope Coefficient (m)	3.83676	Speed Power Coefficient (p)	0.48234
PF Slope Coefficient (m)	-1.23714	PF Power Coefficient (p)	0.80241
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	60.5

Vehicle Results			
Average Speed, mi/h	60.5	Percent Followers, %	63.0
Segment Travel Time, minutes	0.98	Adj. Follower Density, followers/mi/ln	7.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2033
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2033 WP-Lenwood-Agate_Jasper-PM SB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	524	Opposing Demand Flow Rate, veh/h	801
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.82294	Speed Power Coefficient (p)	0.45089
PF Slope Coefficient (m)	-1.26754	PF Power Coefficient (p)	0.78666
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	59.6

Vehicle Results			
Average Speed, mi/h	59.6	Percent Followers, %	53.4
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	4.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2033
Jurisdiction	Barstow	Time Analyzed	
Project Description	16-BIG-2033 WP-Lenwood-Main_High Desert-AM NB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	11500
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	50	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	729	Opposing Demand Flow Rate, veh/h	448
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.43

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	55.3
Speed Slope Coefficient (m)	3.41809	Speed Power Coefficient (p)	0.48931
PF Slope Coefficient (m)	-1.28412	PF Power Coefficient (p)	0.75356
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	500	-	-	52.6
2	Horizontal Curve	2400	1500	0.0	52.6
3	Tangent	3000	-	-	52.6
4	Horizontal Curve	2600	1900	0.0	52.6
5	Tangent	3000	-	-	52.6

Vehicle Results			
Average Speed, mi/h	52.6	Percent Followers, %	63.7
Segment Travel Time, minutes	2.49	Adj. Follower Density, followers/mi/ln	8.8
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2033
Jurisdiction	Barstow	Time Analyzed	
Project Description	16-BIG-2033 WP-Lenwood-Main_High Desert-AM SB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	11500
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	50	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	448	Opposing Demand Flow Rate, veh/h	729
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	55.3
Speed Slope Coefficient (m)	3.47855	Speed Power Coefficient (p)	0.45695
PF Slope Coefficient (m)	-1.31291	PF Power Coefficient (p)	0.74226
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	500	-	-	53.2
2	Horizontal Curve	2400	1500	0.0	53.2
3	Tangent	3000	-	-	53.2
4	Horizontal Curve	2600	1900	0.0	53.2
5	Tangent	3000	-	-	53.2

Vehicle Results			
Average Speed, mi/h	53.2	Percent Followers, %	51.5
Segment Travel Time, minutes	2.46	Adj. Follower Density, followers/mi/ln	4.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2033
Jurisdiction	Barstow	Time Analyzed	
Project Description	16-BIG-2033 WP-Lenwood-Main_High Desert-PM NB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	11500
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	50	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	605	Opposing Demand Flow Rate, veh/h	759
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.36

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	55.3
Speed Slope Coefficient (m)	3.48415	Speed Power Coefficient (p)	0.45437
PF Slope Coefficient (m)	-1.31512	PF Power Coefficient (p)	0.74123
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	500	-	-	52.7
2	Horizontal Curve	2400	1500	0.0	52.7
3	Tangent	3000	-	-	52.7
4	Horizontal Curve	2600	1900	0.0	52.7
5	Tangent	3000	-	-	52.7

Vehicle Results			
Average Speed, mi/h	52.7	Percent Followers, %	59.6
Segment Travel Time, minutes	2.48	Adj. Follower Density, followers/mi/ln	6.8
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2033
Jurisdiction	Barstow	Time Analyzed	
Project Description	16-BIG-2033 WP-Lenwood-Main_High Desert-PM SB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	11500
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	50	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	759	Opposing Demand Flow Rate, veh/h	605
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.45

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	55.3
Speed Slope Coefficient (m)	3.45361	Speed Power Coefficient (p)	0.46931
PF Slope Coefficient (m)	-1.30210	PF Power Coefficient (p)	0.74688
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	500	-	-	52.5
2	Horizontal Curve	2400	1500	0.0	52.5
3	Tangent	3000	-	-	52.5
4	Horizontal Curve	2600	1900	0.0	52.5
5	Tangent	3000	-	-	52.5

Vehicle Results			
Average Speed, mi/h	52.5	Percent Followers, %	65.3
Segment Travel Time, minutes	2.49	Adj. Follower Density, followers/mi/ln	9.5
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	1-BIG-2048 WP-Main-Hinkley_Country Club-AM EB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	19020
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	631	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.37

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	59.6
Speed Slope Coefficient (m)	3.86582	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37081	PF Power Coefficient (p)	0.68008
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2100	-	-	56.6
2	Horizontal Curve	620	2800	0.0	56.6
3	Tangent	1330	-	-	56.6
4	Horizontal Curve	770	2000	0.0	56.6
5	Tangent	14200	-	-	56.6

Vehicle Results			
Average Speed, mi/h	56.6	Percent Followers, %	63.3
Segment Travel Time, minutes	3.82	Adj. Follower Density, followers/mi/ln	7.0
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	1-BIG-2048 WP-Main-Hinkley_Country Club-AM WB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	19020
Lane Width, ft	13	Shoulder Width, ft	3
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	368	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	60.2
Speed Slope Coefficient (m)	3.89834	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36548	PF Power Coefficient (p)	0.68152
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2100	-	-	57.9
2	Horizontal Curve	620	2800	0.0	57.9
3	Tangent	1330	-	-	57.9
4	Horizontal Curve	770	2000	0.0	57.9
5	Tangent	14200	-	-	57.9

Vehicle Results			
Average Speed, mi/h	57.9	Percent Followers, %	49.9
Segment Travel Time, minutes	3.73	Adj. Follower Density, followers/mi/ln	3.2
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	1-BIG-2048 WP-Main-Hinkley_Country Club-PM EB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	19020
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	386	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	59.6
Speed Slope Coefficient (m)	3.86582	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37081	PF Power Coefficient (p)	0.68008
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2100	-	-	57.3
2	Horizontal Curve	620	2800	0.0	57.3
3	Tangent	1330	-	-	57.3
4	Horizontal Curve	770	2000	0.0	57.3
5	Tangent	14200	-	-	57.3

Vehicle Results			
Average Speed, mi/h	57.3	Percent Followers, %	51.2
Segment Travel Time, minutes	3.77	Adj. Follower Density, followers/mi/ln	3.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	1-BIG-2048 WP-Main-Hinkley_Country Club-PM WB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	19020
Lane Width, ft	13	Shoulder Width, ft	3
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1296	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.76

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	60.2
Speed Slope Coefficient (m)	3.89834	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36548	PF Power Coefficient (p)	0.68152
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	18.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2100	-	-	56.0
2	Horizontal Curve	620	2800	0.0	56.0
3	Tangent	1330	-	-	56.0
4	Horizontal Curve	770	2000	0.0	56.0
5	Tangent	14200	-	-	56.0

Vehicle Results			
Average Speed, mi/h	56.0	Percent Followers, %	80.4
Segment Travel Time, minutes	3.86	Adj. Follower Density, followers/mi/ln	18.6
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2048 WP-Lenwood-Agate_Jasper-AM NB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	603	Opposing Demand Flow Rate, veh/h	440
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.74699	Speed Power Coefficient (p)	0.49056
PF Slope Coefficient (m)	-1.23991	PF Power Coefficient (p)	0.80147
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	59.5

Vehicle Results			
Average Speed, mi/h	59.5	Percent Followers, %	56.3
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	5.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2048 WP-Lenwood-Agate_Jasper-AM SB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	440	Opposing Demand Flow Rate, veh/h	603
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.78413	Speed Power Coefficient (p)	0.46954
PF Slope Coefficient (m)	-1.25539	PF Power Coefficient (p)	0.79415
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	59.9

Vehicle Results			
Average Speed, mi/h	59.9	Percent Followers, %	48.0
Segment Travel Time, minutes	0.99	Adj. Follower Density, followers/mi/ln	3.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2048 WP-Lenwood-Agate_Jasper-PM NB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	876	Opposing Demand Flow Rate, veh/h	546
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.52

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.77184	Speed Power Coefficient (p)	0.47616
PF Slope Coefficient (m)	-1.25068	PF Power Coefficient (p)	0.79655
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	58.9

Vehicle Results			
Average Speed, mi/h	58.9	Percent Followers, %	67.5
Segment Travel Time, minutes	1.01	Adj. Follower Density, followers/mi/ln	10.1
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	8/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	14-BIG-2048 WP-Lenwood-Agate_Jasper-PM SB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	5240
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	546	Opposing Demand Flow Rate, veh/h	876
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient (m)	3.83632	Speed Power Coefficient (p)	0.44524
PF Slope Coefficient (m)	-1.27075	PF Power Coefficient (p)	0.78410
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5240	-	-	59.5

Vehicle Results			
Average Speed, mi/h	59.5	Percent Followers, %	54.7
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	5.0
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	16-BIG-2048 WP-Lenwood-Main_High Desert-AM NB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	11500
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	50	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1003	Opposing Demand Flow Rate, veh/h	745
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.59

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	55.3
Speed Slope Coefficient (m)	3.48157	Speed Power Coefficient (p)	0.45555
PF Slope Coefficient (m)	-1.31411	PF Power Coefficient (p)	0.74170
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	500	-	-	52.0
2	Horizontal Curve	2400	1500	0.0	52.0
3	Tangent	3000	-	-	52.0
4	Horizontal Curve	2600	1900	0.0	52.0
5	Tangent	3000	-	-	52.0

Vehicle Results			
Average Speed, mi/h	52.0	Percent Followers, %	73.2
Segment Travel Time, minutes	2.51	Adj. Follower Density, followers/mi/ln	14.1
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	16-BIG-2048 WP-Lenwood-Main_High Desert-AM SB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	11500
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	50	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	745	Opposing Demand Flow Rate, veh/h	1003
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.44

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	55.3
Speed Slope Coefficient (m)	3.52690	Speed Power Coefficient (p)	0.43698
PF Slope Coefficient (m)	-1.32938	PF Power Coefficient (p)	0.73337
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	500	-	-	52.4
2	Horizontal Curve	2400	1500	0.0	52.4
3	Tangent	3000	-	-	52.4
4	Horizontal Curve	2600	1900	0.0	52.4
5	Tangent	3000	-	-	52.4

Vehicle Results			
Average Speed, mi/h	52.4	Percent Followers, %	65.8
Segment Travel Time, minutes	2.49	Adj. Follower Density, followers/mi/ln	9.4
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	16-BIG-2048 WP-Lenwood-Main_High Desert-PM NB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	11500
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	50	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1044	Opposing Demand Flow Rate, veh/h	1085
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.61

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	55.3
Speed Slope Coefficient (m)	3.54007	Speed Power Coefficient (p)	0.43245
PF Slope Coefficient (m)	-1.33282	PF Power Coefficient (p)	0.73095
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	15.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	500	-	-	51.8
2	Horizontal Curve	2400	1500	0.0	51.8
3	Tangent	3000	-	-	51.8
4	Horizontal Curve	2600	1900	0.0	51.8
5	Tangent	3000	-	-	51.8

Vehicle Results			
Average Speed, mi/h	51.8	Percent Followers, %	74.7
Segment Travel Time, minutes	2.52	Adj. Follower Density, followers/mi/ln	15.1
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	SC	Date	08/20/2025
Agency		Analysis Year	2048
Jurisdiction	Barstow	Time Analyzed	
Project Description	16-BIG-2048 WP-Lenwood-Main_High Desert-PM SB	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	11500
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	50	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1085	Opposing Demand Flow Rate, veh/h	1044
Peak Hour Factor	0.95	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.64

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	55.3
Speed Slope Coefficient (m)	3.53355	Speed Power Coefficient (p)	0.43465
PF Slope Coefficient (m)	-1.33118	PF Power Coefficient (p)	0.73215
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	15.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	500	-	-	51.8
2	Horizontal Curve	2400	1500	0.0	51.8
3	Tangent	3000	-	-	51.8
4	Horizontal Curve	2600	1900	0.0	51.8
5	Tangent	3000	-	-	51.8

Vehicle Results			
Average Speed, mi/h	51.8	Percent Followers, %	75.7
Segment Travel Time, minutes	2.52	Adj. Follower Density, followers/mi/ln	15.9
Vehicle LOS	E		

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Appendix L: Traffic Signal Warrant Analysis

Traffic Signal Warrant Methodology

Six intersections, identified below, were evaluated to determine whether installation of a traffic signal would be warranted based on the 8-hour, 4-hour and peak-hour criteria outlined in the 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD)[1]. The analysis focuses on these locations because two are proposed as the access points to BIG, while the remaining four are identified to result in LOS deficiency due to the addition of BIG traffic.

ID	Intersection	Ex. Control	Jurisdiction	Remarks
2	Main Street & Country Club Drive/Main Street Driveway	One-Way Stop	City	BIG Access Proposed in 2028
14	Main Street & Pettit Road	One-Way Stop	City	LOS Deficiency Proposed in 2033
17	Lenwood Road & Love's Travel Stop Driveway	Two-Way Stop	City	LOS Deficiency Proposed in 2048
18	Lenwood Road & High Desert Road	Two-Way Stop	City	LOS Deficiency Proposed in 2033
19	Lenwood Rd & Chevron Driveway	Two-Way Stop	City	LOS Deficiency Proposed in 2033
23	Lenwood Road & Jasper Road/Lenwood Road Driveway	Two-Way Stop	City/County	BIG Access Proposed in 2028

- Traffic Signal Warrant #1 – The Eight-Hour Vehicular Volume warrant is met when traffic levels on major and minor intersection approaches exceed the defined thresholds for eight hours within a day.
- Traffic Signal Warrant #2 – The Four-Hour Vehicular Volume warrant is met when traffic volumes on major and minor approaches exceed the set criteria for four hours in a day.
- Traffic Signal Warrant #3 – The Peak Hour Vehicular Volume warrant is met when traffic volumes on major and minor approaches exceed the threshold for one hour in a day. This warrant is intended for atypical situations, such as office complexes, manufacturing plants, industrial sites, or facilities that generate a concentrated amount of traffic during a short period. It is recommended that this warrant only be considered at Intersections #2 and #23, as these provide direct access to BIG.

[1] *California Manual on Uniform Traffic Control Devices,* (FHWA's MUTCD 2009 Edition, including Revisions 1, 2 & 3 as amended for use in California), 2014 Edition, Revision 9 (April 1, 2025)

In May 2025, 24-hour roadway and intersection counts were collected at the six intersections identified for potential signalization. BIG's hourly traffic volumes, projected for the Opening Year (2028), Interim Year (2033), and Horizon Year (2048), were calculated using ITE's time-of-day (TOD) distribution percentages or based on BIG's proposed shift schedules, per the trip generation assumptions:

- Transload Warehouse
    - Passenger Vehicles: TOD allocation based on ITE Trip Generation Manual for warehouse use.
    - Heavy Vehicles: Distribution based on trip generation assumptions during peak AM and PM periods; evenly distributed outside peak hours.
- Rail Yard
    - Passenger Vehicles: Allocated according to AM and PM peak period assumptions; evenly distributed outside peak hours.
    - Heavy Vehicles: Distribution based on trip generation assumptions during peak AM and PM periods; evenly distributed outside peak hours.

Results & Recommendations

Int. #2 – Main Street & Country Club Drive/Main Street Driveway

Signalization is not warranted under Opening Year (2028) Plus BIG conditions based on the CA MUTCD Traffic Signal Warrant 1 (Eight-Hour Vehicular Volume), Warrant 2 (Four-Hour Vehicular Volume), and Warrant 3 (Peak Hour). Signalization is warranted under Interim Year (2033) and Horizon Year (2048) conditions based on the CA MUTCD Warrant 2 (Four-Hour Vehicular Volume) and Warrant 3 (Peak Hour). Warrant 3 is recommended to be considered since this intersection provides direct access to BIG. The City should determine whether signalization should be implemented by the project under 2028 conditions, as recommended.

Int. #14 – Main Street & Pettit Road

Signalization is warranted under Interim Year (2033) Plus BIG and Horizon Year (2048) Plus BIG conditions based on the CA MUTCD Traffic Signal Warrant 1 (Eight-Hour Vehicular Volumes) and Warrant 2 (Four-Hour Vehicular Volume). The intersection meets Warrant 3 (Peak Hour); however, this warrant would not apply to this offsite intersection.

Int. #17 – Lenwood Road & Love's Travel Stop Driveway

Signalization is warranted under Horizon Year (2048) Plus BIG conditions based on the CA MUTCD Traffic Signal Warrant 1 (Eight-Hour Vehicular Volume) and Warrant 2 (Four-Hour

Vehicular Volume). The intersection meets Warrant 3 (Peak Hour); however, this warrant would not apply to this offsite intersection.

Int. #18 – Lenwood Road & High Desert Road

Signalization is not warranted under Interim Year (2033) Plus BIG conditions based on the CA MUTCD Traffic Signal Warrant (Eight-Hour Vehicular Volume) and Warrant 2 (Four-Hour Vehicular Volume). The intersection also does not meet Warrant 3, Peak Hour (not applicable to location). Signalization is warranted under Horizon Year (2048) conditions based on the CA MUTCD Traffic Signal Warrant 1 (Eight-Hour Vehicular Volume) and Warrant 2 (Four-Hour Vehicular Volume). The intersection meets Warrant 3 (Peak Hour); however, this warrant would not apply to this offsite intersection. The City should determine whether signalization should be implemented by the project under 2033 conditions, as recommended.

Int. #19 – Lenwood Rd & Chevron Driveway

Signalization is not warranted under Interim Year (2033) Plus BIG conditions based on the CA MUTCD Traffic Signal Warrant (Eight-Hour Vehicular Volume) and Warrant 2 (Four-Hour Vehicular Volume). The intersection also does not meet Warrant 3, Peak Hour (not applicable to location). Signalization is warranted under Horizon Year (2048) Plus BIG conditions based on the CA MUTCD Warrant 2 (Four-Hour Vehicular Volume). The intersection meets Warrant 3 (Peak Hour); however, this warrant would not apply to this offsite intersection. The City should determine whether signalization should be implemented by the project under 2033 conditions, as recommended.

Int. #23 – Lenwood Road & Jasper Road/Lenwood Road Driveway

Signalization is warranted under Opening Year (2028), Interim Year (2033), and Horizon Year (2048) conditions based on the CA MUTCD Traffic Signal Warrant 1, Eight-Hour Vehicular Volume, Warrant 2, Four-Hour Vehicular Volume, and Warrant 3, Peak Hour. Warrant 3 is recommended to be considered since this intersection provides direct access to BIG.

TPTO Tools

Signal Warrant Analysis Tool

Questions/Feedback
Click Here to Email

Date of Last Update
9/25/2024

All input cells are highlighted orange throughout this tool — **INPUT CELL**

SET UP WORKBOOK
Click to generate necessary analysis tabs based on inputs

RESET WORKBOOK
Click to re-hide all workbook tabs except "Home"

CLEAR USER INPUTS
Click to clear all user inputs on this tab

Study Information	
Intersection Name	Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction	Barstow, CA
85th-percentile speed or posted speed limit on the Major Street	45+ mph

Count Data Information	
Question	**Answer**
What year were counts collected?	2025
Counts in 15-minute or hourly increments?	Hourly
Counts by movement or by approach?	By Approach
Counts by vehicle class (heavy vehicles vs. passenger vehicles)?	Yes
Truck Factor (Passenger Car Equivalent)	1.8
Were pedestrian counts collected?	No
Were bicycle counts collected?	No
Do Not Enter Value	

Scenario Information

Scenario Name	Include Scenario?	Scenario Year	Vehicular Growth Rate (%)	Vehicular Growth Multiplier	Pedestrian Growth Rate (%)	Pedestrian Growth Multiplier	Number of Legs/ Approaches
OY with BIG	Y	2028	15.63%	1.546		1.00	4
IY with BIG	Y	2033	9.64%	2.088		1.00	4
HY with BIG	Y	2048	5.86%	3.708		1.00	4
				1.000		1.00	
				1.000		1.00	
Include ITE Trip Generation for any of the above scenarios?			Yes				

Warrant Information	
Warrant	**Show in Workbook?**
1 - Eight Hour Vehicular Volume	Yes
2 - Four Hour Vehicular Volume	Yes
3 - Peak Hour	Yes
4 - Pedestrian Volume	
5 - School Crossing	
6 - Coordinated Signal System	
7 - Crash Experience	
8 - Roadway Network	
9 - Intersection Near a Grade Crossing	

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: OY with BIG (2028)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**No**	
Warrant 2, Four-Hour Vehicular Volume	Yes	**No**	
Warrant 3, Peak Hour	Yes	**No**	
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
OY with BIG (2028)	No	No	No						
IY with BIG (2033)	No	Yes	Yes						
HY with BIG (2048)	No	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes:

Lanes	Adjusted Volumes			Condition A						Condition B						Combination A/B											
																Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%			70%			100%			70%			80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1	X	X	X	500	150	150	350	105	105	750	75	75	525	53	53	400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1				600	150	150	420	105	105	900	75	75	630	53	53	480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+				600	200	200	420	140	140	900	100	100	630	70	70	480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+	X			500	200	200	350	140	140	750	100	100	525	70	70	400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**	
WARRANT SATISFIED (8+ Hours)?				**NO**			**NO**			**NO**			**NO**			**NO**						**NO**					
12:00 AM	90	31	118																								
12:15 AM	31	22	55																								
12:30 AM	31	22	55																								
12:45 AM	31	22	55																								
1:00 AM	31	22	55																								
1:15 AM	31	11	42																								
1:30 AM	31	11	42																								
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9:45 AM	35	196	146																								
10:00 AM	35	196	146																								
10:15 AM	36	166	161																								
10:30 AM	36	166	161																								
10:45 AM	36	166	161																								
11:00 AM	36	166	161																								
11:15 AM	38	117	173																								
11:30 AM	38	117	173																								
11:45 AM	38	117	173																								

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes:

Lanes	Adjusted Volumes			Condition A						Condition B						Combination A/B											
																Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%			70%			100%			70%			80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1	X	X	X	500	150	150	350	105	105	750	75	75	525	53	53	400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1				600	150	150	420	105	105	900	75	75	630	53	53	480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+				600	200	200	420	140	140	900	100	100	630	70	70	480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+	X			500	200	200	350	140	140	750	100	100	525	70	70	400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**	
WARRANT SATISFIED (8+ Hours)?				**NO**			**NO**			**NO**			**NO**			**NO**						**NO**					
12:00 PM	38	117	173																								
12:15 PM	95	139	235																								
12:30 PM	95	139	235																								
12:45 PM	95	139	235																								
1:00 PM	95	139	235																								
1:15 PM	96	129	249																								
1:30 PM	96	129	249																								
1:45 PM	96	129	249																								
2:00 PM	96	129	249																								
2:15 PM	95	163	360																								
2:30 PM	95	163	360																								
2:45 PM	95	163	360																								
3:00 PM	95	163	360																								
3:15 PM	79	229	422																								
3:30 PM	79	229	422																								
3:45 PM	79	229	422																								
4:00 PM	79	229	422																								
4:15 PM	18	176	321																								
4:30 PM	18	176	321																								
4:45 PM	18	176	321																								
5:00 PM	18	176	321																								
5:15 PM	32	159	233																								
5:30 PM	32	159	233																								
5:45 PM	32	159	233																								
6:00 PM	32	159	233																								
6:15 PM	32	112	193																								
6:30 PM	32	112	193																								
6:45 PM	32	112	193																								
7:00 PM	32	112	193																								
7:15 PM	32	90	167																								
7:30 PM	32	90	167																								
7:45 PM	32	90	167																								
8:00 PM	32	90	167																								
8:15 PM	91	60	194																								
8:30 PM	91	60	194																								
8:45 PM	91	60	194																								
9:00 PM	91	60	194																								
9:15 PM	91	40	146																								
9:30 PM	91	40	146																								
9:45 PM	91	40	146																								
10:00 PM	91	40	146																								
10:15 PM	91	21	129																								
10:30 PM	91	21	129																								
10:45 PM	91	21	129																								
11:00 PM	91	21	129																								
11:15 PM	0	0	0																								
11:30 PM	0	0	0																								
11:45 PM	0	0	0																								

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

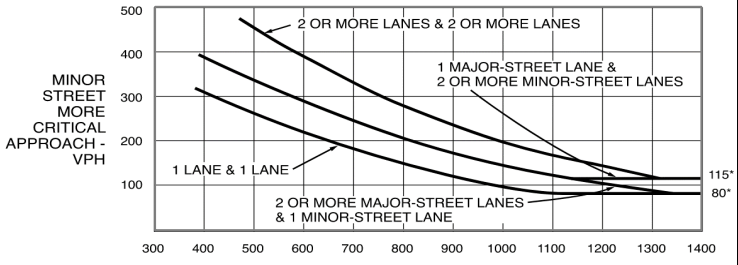
Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	0
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	2

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
12:00 AM	1	89	31	118	90		
12:15 AM	0	31	22	55	31		
12:30 AM	0	31	22	55	31		
12:45 AM	0	31	22	55	31		
1:00 AM	0	31	22	55	31		
1:15 AM	0	31	11	42	31		
1:30 AM	0	31	11	42	31		
1:45 AM	0	31	11	42	31		
2:00 AM	0	31	11	42	31		
2:15 AM	1	31	30	46	32		
2:30 AM	1	31	30	46	32		
2:45 AM	1	31	30	46	32		
3:00 AM	1	31	30	46	32		
3:15 AM	1	31	70	41	32		
3:30 AM	1	31	70	41	32		
3:45 AM	1	31	70	41	32		
4:00 AM	1	31	70	41	32		
4:15 AM	4	89	210	148	93		
4:30 AM	4	89	210	148	93		
4:45 AM	4	89	210	148	93		
5:00 AM	4	89	210	148	93		
5:15 AM	8	89	255	181	97		
5:30 AM	8	89	255	181	97		
5:45 AM	8	89	255	181	97		
6:00 AM	8	89	255	181	97		
6:15 AM	7	76	269	206	83		
6:30 AM	7	76	269	206	83		
6:45 AM	7	76	269	206	83		
7:00 AM	7	76	269	206	83		
7:15 AM	7	76	210	218	83		
7:30 AM	7	76	210	218	83		
7:45 AM	7	76	210	218	83		
8:00 AM	7	76	210	218	83		
8:15 AM	6	31	188	158	37		
8:30 AM	6	31	188	158	37		
8:45 AM	6	31	188	158	37		
9:00 AM	6	31	188	158	37		
9:15 AM	4	31	196	146	35		
9:30 AM	4	31	196	146	35		
9:45 AM	4	31	196	146	35		
10:00 AM	4	31	196	146	35		
10:15 AM	5	31	166	161	36		
10:30 AM	5	31	166	161	36		
10:45 AM	5	31	166	161	36		
11:00 AM	5	31	166	161	36		
11:15 AM	7	31	117	173	38		
11:30 AM	7	31	117	173	38		
11:45 AM	7	31	117	173	38		
12:00 PM	7	31	117	173	38		
12:15 PM	6	89	139	235	95		
12:30 PM	6	89	139	235	95		
12:45 PM	6	89	139	235	95		
1:00 PM	6	89	139	235	95		
1:15 PM	7	89	129	249	96		
1:30 PM	7	89	129	249	96		
1:45 PM	7	89	129	249	96		
2:00 PM	7	89	129	249	96		
2:15 PM	6	89	163	360	95		Min. 2 Met
2:30 PM	6	89	163	360	95		

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

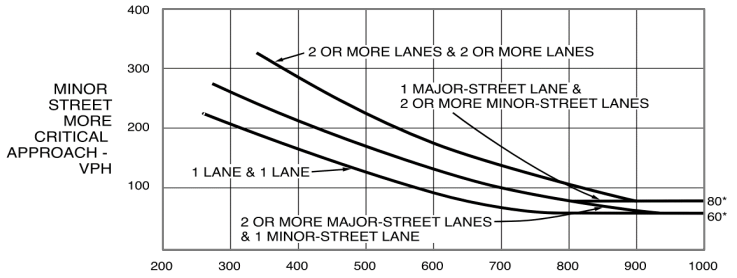
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	0
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	2

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
2:45 PM	6	89	163	360	95		
3:00 PM	6	89	163	360	95		
3:15 PM	5	74	229	422	79		Min. 2 Met
3:30 PM	5	74	229	422	79		
3:45 PM	5	74	229	422	79		
4:00 PM	5	74	229	422	79		
4:15 PM	3	15	176	321	18		
4:30 PM	3	15	176	321	18		
4:45 PM	3	15	176	321	18		
5:00 PM	3	15	176	321	18		
5:15 PM	1	31	159	233	32		
5:30 PM	1	31	159	233	32		
5:45 PM	1	31	159	233	32		
6:00 PM	1	31	159	233	32		
6:15 PM	1	31	112	193	32		
6:30 PM	1	31	112	193	32		
6:45 PM	1	31	112	193	32		
7:00 PM	1	31	112	193	32		
7:15 PM	1	31	90	167	32		
7:30 PM	1	31	90	167	32		
7:45 PM	1	31	90	167	32		
8:00 PM	1	31	90	167	32		
8:15 PM	2	89	60	194	91		
8:30 PM	2	89	60	194	91		
8:45 PM	2	89	60	194	91		
9:00 PM	2	89	60	194	91		
9:15 PM	2	89	40	146	91		
9:30 PM	2	89	40	146	91		
9:45 PM	2	89	40	146	91		
10:00 PM	2	89	40	146	91		
10:15 PM	2	89	21	129	91		
10:30 PM	2	89	21	129	91		
10:45 PM	2	89	21	129	91		
11:00 PM	2	89	21	129	91		
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		

Legend
● Minor Street 1 (EB)
▲ Minor Street 2 (WB)

Top Hours for Figure 4C-1 - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	6:15 AM	7:15 AM	83	269
2nd Highest Hour	5:15 AM	6:15 AM	97	255
3rd Highest Hour	3:15 PM	4:15 PM	79	229
4th Highest Hour	4:15 AM	5:15 AM	93	210
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	6:15 AM	7:15 AM	83	269
2nd Highest Hour	5:15 AM	6:15 AM	97	255
3rd Highest Hour	3:15 PM	4:15 PM	79	229
4th Highest Hour	4:15 AM	5:15 AM	93	210
Top Hours for Figure 4C-1 - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	3:15 PM	4:15 PM	79	422
2nd Highest Hour	2:15 PM	3:15 PM	95	360
3rd Highest Hour	4:15 PM	5:15 PM	18	321
4th Highest Hour	1:15 PM	2:15 PM	96	249
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	3:15 PM	4:15 PM	79	422
2nd Highest Hour	2:15 PM	3:15 PM	95	360
3rd Highest Hour	3:15 PM	4:15 PM	79	422
4th Highest Hour	2:15 PM	3:15 PM	95	360

WARRANT 3, PEAK HOUR

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	90	31	118	Y	
12:15 AM	31	22	55		
12:30 AM	31	22	55		
12:45 AM	31	22	55		
1:00 AM	31	22	55		
1:15 AM	31	11	42		
1:30 AM	31	11	42		
1:45 AM	31	11	42		
2:00 AM	31	11	42		
2:15 AM	32	30	46		
2:30 AM	32	30	46		
2:45 AM	32	30	46		
3:00 AM	32	30	46		
3:15 AM	32	70	41		
3:30 AM	32	70	41		
3:45 AM	32	70	41		
4:00 AM	32	70	41		
4:15 AM	93	210	148	Y	
4:30 AM	93	210	148	Y	
4:45 AM	93	210	148	Y	
5:00 AM	93	210	148	Y	
5:15 AM	97	255	181	Y	
5:30 AM	97	255	181	Y	
5:45 AM	97	255	181	Y	
6:00 AM	97	255	181	Y	
6:15 AM	83	269	206	Y	
6:30 AM	83	269	206	Y	
6:45 AM	83	269	206	Y	
7:00 AM	83	269	206	Y	
7:15 AM	83	210	218	Y	
7:30 AM	83	210	218	Y	
7:45 AM	83	210	218	Y	
8:00 AM	83	210	218	Y	
8:15 AM	37	188	158	Y	
8:30 AM	37	188	158	Y	
8:45 AM	37	188	158	Y	
9:00 AM	37	188	158	Y	
9:15 AM	35	196	146	Y	
9:30 AM	35	196	146	Y	
9:45 AM	35	196	146	Y	
10:00 AM	35	196	146	Y	
10:15 AM	36	166	161	Y	
10:30 AM	36	166	161	Y	
10:45 AM	36	166	161	Y	
11:00 AM	36	166	161	Y	
11:15 AM	38	117	173	Y	
11:30 AM	38	117	173	Y	
11:45 AM	38	117	173	Y	

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

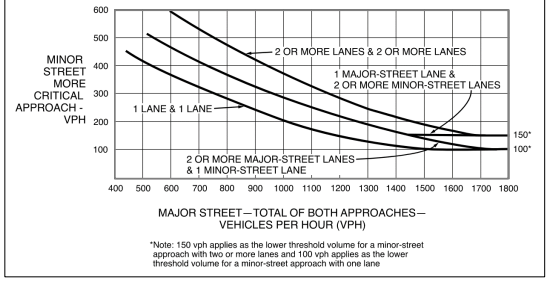
Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (EB)						
4C-3	6:15 AM	7:15 AM	83	269	684	Not Met
4C-4 (70% Factor)	6:15 AM	7:15 AM	83	269	459	Not Met
Minor Street 2 (WB)						
4C-3	3:15 PM	4:15 PM	79	422	687	Not Met
4C-4 (70% Factor)	3:15 PM	4:15 PM	79	422	461.62	Not Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
● Minor Street 1 (EB)
▲ Minor Street 2 (WB)

Figure 4C-3. Warrant 3, Peak Hour



WARRANT 3, PEAK HOUR

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

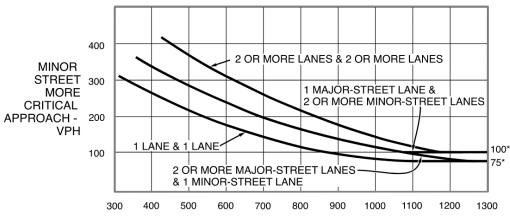
Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	38	117	173	Y	
12:15 PM	95	139	235	Y	
12:30 PM	95	139	235	Y	
12:45 PM	95	139	235	Y	
1:00 PM	95	139	235	Y	
1:15 PM	96	129	249	Y	
1:30 PM	96	129	249	Y	
1:45 PM	96	129	249	Y	
2:00 PM	96	129	249	Y	
2:15 PM	95	163	360	Y	
2:30 PM	95	163	360	Y	
2:45 PM	95	163	360	Y	
3:00 PM	95	163	360	Y	
3:15 PM	79	229	422	Y	
3:30 PM	79	229	422	Y	
3:45 PM	79	229	422	Y	
4:00 PM	79	229	422	Y	
4:15 PM	18	176	321	Y	
4:30 PM	18	176	321	Y	
4:45 PM	18	176	321	Y	
5:00 PM	18	176	321	Y	
5:15 PM	32	159	233	Y	
5:30 PM	32	159	233	Y	
5:45 PM	32	159	233	Y	
6:00 PM	32	159	233	Y	
6:15 PM	32	112	193	Y	
6:30 PM	32	112	193	Y	
6:45 PM	32	112	193	Y	
7:00 PM	32	112	193	Y	
7:15 PM	32	90	167	Y	
7:30 PM	32	90	167	Y	
7:45 PM	32	90	167	Y	
8:00 PM	32	90	167	Y	
8:15 PM	91	60	194	Y	
8:30 PM	91	60	194	Y	
8:45 PM	91	60	194	Y	
9:00 PM	91	60	194	Y	
9:15 PM	91	40	146	Y	
9:30 PM	91	40	146	Y	
9:45 PM	91	40	146	Y	
10:00 PM	91	40	146	Y	
10:15 PM	91	21	129	Y	
10:30 PM	91	21	129	Y	
10:45 PM	91	21	129	Y	
11:00 PM	91	21	129	Y	
11:15 PM	0	0	0		
11:30 PM	0	0	0		
11:45 PM	0	0	0		

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: IY with BIG (2033)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**No**	
Warrant 2, Four-Hour Vehicular Volume	Yes	**Yes**	Figure 4C-2 (70% Factor).
Warrant 3, Peak Hour	Yes	**Yes**	Figure 4C-4 (70% Factor).
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
OY with BIG (2028)	No	No	No						
IY with BIG (2033)	No	Yes	Yes						
HY with BIG (2048)	No	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes:

Lanes	Adjusted Volumes			Condition A						Condition B						Combination A/B											
																Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%			70%			100%			70%			80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1	X	X	X	500	150	150	350	105	105	750	75	75	525	53	53	400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1				600	150	150	420	105	105	900	75	75	630	53	53	480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+				600	200	200	420	140	140	900	100	100	630	70	70	480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+	X			500	200	200	350	140	140	750	100	100	525	70	70	400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				0	0		0	0		0	0		0	0		0	0		0	0		0	0		0	0	
WARRANT SATISFIED (8+ Hours)?				NO			NO			NO			NO			NO						NO					
12:00 AM	108	41	146																								
12:15 AM	37	30	71																								
12:30 AM	37	30	71																								
12:45 AM	37	30	71																								
1:00 AM	37	30	71																								
1:15 AM	37	15	54																								
1:30 AM	37	15	54																								
1:45 AM	37	15	54																								
2:00 AM	37	15	54																								
2:15 AM	38	41	58																								
2:30 AM	38	41	58																								
2:45 AM	38	41	58																								
3:00 AM	38	41	58																								
3:15 AM	38	94	51																								
3:30 AM	38	94	51																								
3:45 AM	38	94	51																								
4:00 AM	38	94	51																								
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4:45 AM	111	283	187																								
5:00 AM	111	283	187																								
5:15 AM	114	343	231																								
5:30 AM	114	343	231																								
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6:00 AM	114	343	231																								
6:15 AM	98	362	265																								
6:30 AM	98	362	265																								
6:45 AM	98	362	265																								
7:00 AM	98	362	265																								
7:15 AM	97	282	281																								
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8:00 AM	97	282	281																								
8:15 AM	43	254	208																								
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10:00 AM	41	264	191																								
10:15 AM	42	224	212																								
10:30 AM	42	224	212																								
10:45 AM	42	224	212																								
11:00 AM	42	224	212																								
11:15 AM	44	158	228																								
11:30 AM	44	158	228																								
11:45 AM	44	158	228																								

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes:

Lanes	Adjusted Volumes			Condition A						Condition B						Combination A/B											
																Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%			70%			100%			70%			80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1	X	X	X	500	150	150	350	105	105	750	75	75	525	53	53	400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1				600	150	150	420	105	105	900	75	75	630	53	53	480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+				600	200	200	420	140	140	900	100	100	630	70	70	480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+	X			500	200	200	350	140	140	750	100	100	525	70	70	400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				0	0		0	0		0	0		0	0		0	0		0	0		0	0		0	0	
WARRANT SATISFIED (8+ Hours)?				NO			NO			NO			NO			NO						NO					
12:00 PM	44	158	228																								
12:15 PM	113	188	303																								
12:30 PM	113	188	303																								
12:45 PM	113	188	303																								
1:00 PM	113	188	303																								
1:15 PM	114	173	322																								
1:30 PM	114	173	322																								
1:45 PM	114	173	322																								
2:00 PM	114	173	322																								
2:15 PM	113	219	471																								
2:30 PM	113	219	471																								
2:45 PM	113	219	471																								
3:00 PM	113	219	471																								
3:15 PM	93	308	555																								
3:30 PM	93	308	555																								
3:45 PM	93	308	555																								
4:00 PM	93	308	555																								
4:15 PM	22	238	429																								
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4:45 PM	22	238	429																								
5:00 PM	22	238	429																								
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5:30 PM	38	215	309																								
5:45 PM	38	215	309																								
6:00 PM	38	215	309																								
6:15 PM	38	152	256																								
6:30 PM	38	152	256																								
6:45 PM	38	152	256																								
7:00 PM	38	152	256																								
7:15 PM	38	122	221																								
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9:30 PM	109	53	184																								
9:45 PM	109	53	184																								
10:00 PM	109	53	184																								
10:15 PM	109	27	161																								
10:30 PM	109	27	161																								
10:45 PM	109	27	161																								
11:00 PM	109	27	161																								
11:15 PM	0	0	0																								
11:30 PM	0	0	0																								
11:45 PM	0	0	0																								

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

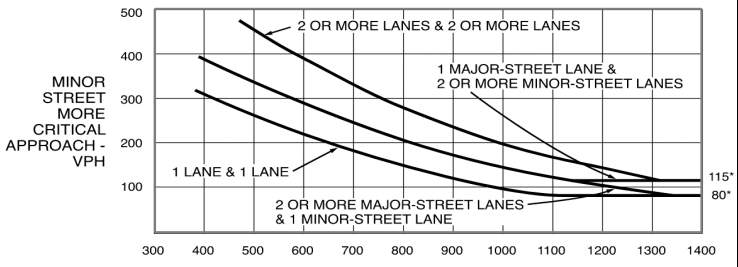
Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	1
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	6

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
12:00 AM	1	107	41	146	108		
12:15 AM	0	37	30	71	37		
12:30 AM	0	37	30	71	37		
12:45 AM	0	37	30	71	37		
1:00 AM	0	37	30	71	37		
1:15 AM	0	37	15	54	37		
1:30 AM	0	37	15	54	37		
1:45 AM	0	37	15	54	37		
2:00 AM	0	37	15	54	37		
2:15 AM	1	37	41	58	38		
2:30 AM	1	37	41	58	38		
2:45 AM	1	37	41	58	38		
3:00 AM	1	37	41	58	38		
3:15 AM	1	37	94	51	38		
3:30 AM	1	37	94	51	38		
3:45 AM	1	37	94	51	38		
4:00 AM	1	37	94	51	38		
4:15 AM	4	107	283	187	111		
4:30 AM	4	107	283	187	111		
4:45 AM	4	107	283	187	111		
5:00 AM	4	107	283	187	111		
5:15 AM	7	107	343	231	114		Min. 1 Met
5:30 AM	7	107	343	231	114		
5:45 AM	7	107	343	231	114		
6:00 AM	7	107	343	231	114		
6:15 AM	7	91	362	265	98		Min. 1 Met
6:30 AM	7	91	362	265	98		
6:45 AM	7	91	362	265	98		
7:00 AM	7	91	362	265	98		
7:15 AM	6	91	282	281	97		
7:30 AM	6	91	282	281	97		
7:45 AM	6	91	282	281	97		
8:00 AM	6	91	282	281	97		
8:15 AM	6	37	254	208	43		
8:30 AM	6	37	254	208	43		
8:45 AM	6	37	254	208	43		
9:00 AM	6	37	254	208	43		
9:15 AM	4	37	264	191	41		
9:30 AM	4	37	264	191	41		
9:45 AM	4	37	264	191	41		
10:00 AM	4	37	264	191	41		
10:15 AM	5	37	224	212	42		
10:30 AM	5	37	224	212	42		
10:45 AM	5	37	224	212	42		
11:00 AM	5	37	224	212	42		
11:15 AM	7	37	158	228	44		
11:30 AM	7	37	158	228	44		
11:45 AM	7	37	158	228	44		
12:00 PM	7	37	158	228	44		
12:15 PM	6	107	188	303	113		
12:30 PM	6	107	188	303	113		
12:45 PM	6	107	188	303	113		
1:00 PM	6	107	188	303	113		
1:15 PM	7	107	173	322	114		Min. 2 Met
1:30 PM	7	107	173	322	114		
1:45 PM	7	107	173	322	114		
2:00 PM	7	107	173	322	114		
2:15 PM	6	107	219	471	113		Min. 2 Met
2:30 PM	6	107	219	471	113		

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

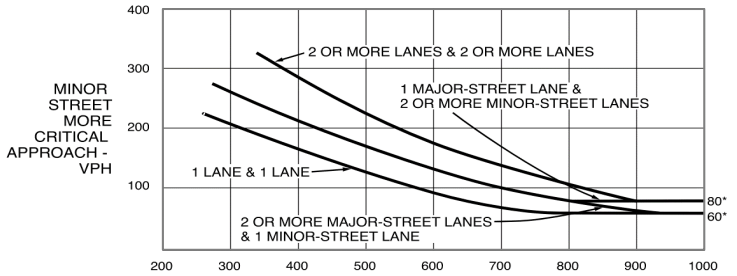
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	1
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	6

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
2:45 PM	6	107	219	471	113		
3:00 PM	6	107	219	471	113		
3:15 PM	5	88	308	555	93	Min. 2 Met	Min. 2 Met
3:30 PM	5	88	308	555	93		
3:45 PM	5	88	308	555	93		
4:00 PM	5	88	308	555	93		
4:15 PM	3	19	238	429	22		Min. 2 Met
4:30 PM	3	19	238	429	22		
4:45 PM	3	19	238	429	22		
5:00 PM	3	19	238	429	22		
5:15 PM	1	37	215	309	38		
5:30 PM	1	37	215	309	38		
5:45 PM	1	37	215	309	38		
6:00 PM	1	37	215	309	38		
6:15 PM	1	37	152	256	38		
6:30 PM	1	37	152	256	38		
6:45 PM	1	37	152	256	38		
7:00 PM	1	37	152	256	38		
7:15 PM	1	37	122	221	38		
7:30 PM	1	37	122	221	38		
7:45 PM	1	37	122	221	38		
8:00 PM	1	37	122	221	38		
8:15 PM	2	107	81	248	109		
8:30 PM	2	107	81	248	109		
8:45 PM	2	107	81	248	109		
9:00 PM	2	107	81	248	109		
9:15 PM	2	107	53	184	109		
9:30 PM	2	107	53	184	109		
9:45 PM	2	107	53	184	109		
10:00 PM	2	107	53	184	109		
10:15 PM	2	107	27	161	109		
10:30 PM	2	107	27	161	109		
10:45 PM	2	107	27	161	109		
11:00 PM	2	107	27	161	109		
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		

Legend
● Minor Street 1 (EB)
▲ Minor Street 2 (WB)

Top Hours for Figure 4C-1 - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	6:15 AM	7:15 AM	98	362
2nd Highest Hour	5:15 AM	6:15 AM	114	343
3rd Highest Hour	3:15 PM	4:15 PM	93	308
4th Highest Hour	4:15 AM	5:15 AM	111	283
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	6:15 AM	7:15 AM	98	362
2nd Highest Hour	5:15 AM	6:15 AM	114	343
3rd Highest Hour	6:15 AM	7:15 AM	98	362
4th Highest Hour	5:15 AM	6:15 AM	114	343
Top Hours for Figure 4C-1 - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	3:15 PM	4:15 PM	93	555
2nd Highest Hour	2:15 PM	3:15 PM	113	471
3rd Highest Hour	4:15 PM	5:15 PM	22	429
4th Highest Hour	1:15 PM	2:15 PM	114	322
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	3:15 PM	4:15 PM	93	555
2nd Highest Hour	2:15 PM	3:15 PM	113	471
3rd Highest Hour	4:15 PM	5:15 PM	22	429
4th Highest Hour	1:15 PM	2:15 PM	114	322

WARRANT 3, PEAK HOUR

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	108	41	146	Y	
12:15 AM	37	30	71		
12:30 AM	37	30	71		
12:45 AM	37	30	71		
1:00 AM	37	30	71		
1:15 AM	37	15	54		
1:30 AM	37	15	54		
1:45 AM	37	15	54		
2:00 AM	37	15	54		
2:15 AM	38	41	58		
2:30 AM	38	41	58		
2:45 AM	38	41	58		
3:00 AM	38	41	58		
3:15 AM	38	94	51		
3:30 AM	38	94	51		
3:45 AM	38	94	51		
4:00 AM	38	94	51		
4:15 AM	111	283	187	Y	
4:30 AM	111	283	187	Y	
4:45 AM	111	283	187	Y	
5:00 AM	111	283	187	Y	
5:15 AM	114	343	231	Y	
5:30 AM	114	343	231	Y	
5:45 AM	114	343	231	Y	
6:00 AM	114	343	231	Y	
6:15 AM	98	362	265	Y	
6:30 AM	98	362	265	Y	
6:45 AM	98	362	265	Y	
7:00 AM	98	362	265	Y	
7:15 AM	97	282	281	Y	
7:30 AM	97	282	281	Y	
7:45 AM	97	282	281	Y	
8:00 AM	97	282	281	Y	
8:15 AM	43	254	208	Y	
8:30 AM	43	254	208	Y	
8:45 AM	43	254	208	Y	
9:00 AM	43	254	208	Y	
9:15 AM	41	264	191	Y	
9:30 AM	41	264	191	Y	
9:45 AM	41	264	191	Y	
10:00 AM	41	264	191	Y	
10:15 AM	42	224	212	Y	
10:30 AM	42	224	212	Y	
10:45 AM	42	224	212	Y	
11:00 AM	42	224	212	Y	
11:15 AM	44	158	228	Y	
11:30 AM	44	158	228	Y	
11:45 AM	44	158	228	Y	

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

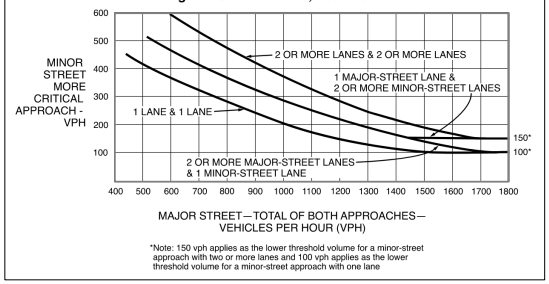
Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (EB)						
4C-3	6:15 AM	7:15 AM	98	362	674	Not Met
4C-4 (70% Factor)	6:15 AM	7:15 AM	98	362	448	Not Met
Minor Street 2 (WB)						
4C-3	3:15 PM	4:15 PM	93	555	677	Not Met
4C-4 (70% Factor)	3:15 PM	4:15 PM	93	555	451.70	Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
● Minor Street 1 (EB)
▲ Minor Street 2 (WB)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 3, PEAK HOUR

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

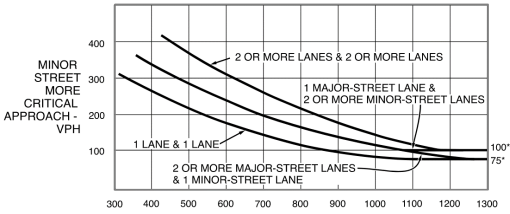
Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	44	158	228	Y	
12:15 PM	113	188	303	Y	
12:30 PM	113	188	303	Y	
12:45 PM	113	188	303	Y	
1:00 PM	113	188	303	Y	
1:15 PM	114	173	322	Y	
1:30 PM	114	173	322	Y	
1:45 PM	114	173	322	Y	
2:00 PM	114	173	322	Y	
2:15 PM	113	219	471	Y	Y
2:30 PM	113	219	471	Y	Y
2:45 PM	113	219	471	Y	Y
3:00 PM	113	219	471	Y	Y
3:15 PM	93	308	555	Y	Y
3:30 PM	93	308	555	Y	Y
3:45 PM	93	308	555	Y	Y
4:00 PM	93	308	555	Y	Y
4:15 PM	22	238	429	Y	
4:30 PM	22	238	429	Y	
4:45 PM	22	238	429	Y	
5:00 PM	22	238	429	Y	
5:15 PM	38	215	309	Y	
5:30 PM	38	215	309	Y	
5:45 PM	38	215	309	Y	
6:00 PM	38	215	309	Y	
6:15 PM	38	152	256	Y	
6:30 PM	38	152	256	Y	
6:45 PM	38	152	256	Y	
7:00 PM	38	152	256	Y	
7:15 PM	38	122	221	Y	
7:30 PM	38	122	221	Y	
7:45 PM	38	122	221	Y	
8:00 PM	38	122	221	Y	
8:15 PM	109	81	248	Y	
8:30 PM	109	81	248	Y	
8:45 PM	109	81	248	Y	
9:00 PM	109	81	248	Y	
9:15 PM	109	53	184	Y	
9:30 PM	109	53	184	Y	
9:45 PM	109	53	184	Y	
10:00 PM	109	53	184	Y	
10:15 PM	109	27	161	Y	
10:30 PM	109	27	161	Y	
10:45 PM	109	27	161	Y	
11:00 PM	109	27	161	Y	
11:15 PM	0	0	0		
11:30 PM	0	0	0		
11:45 PM	0	0	0		

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: HY with BIG (2048)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**No**	
Warrant 2, Four-Hour Vehicular Volume	Yes	**Yes**	Figure 4C-1 (100%). Figure 4C-2 (70% Factor).
Warrant 3, Peak Hour	Yes	**Yes**	Figure 4C-3 (100%). Figure 4C-4 (70% Factor).
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario

Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
OY with BIG (2028)	No	No	No						
IY with BIG (2033)	No	Yes	Yes						
HY with BIG (2048)	No	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes:

Lanes	Adjusted Volumes			Condition A						Condition B						Combination A/B											
																Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%			70%			100%			70%			80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1	X	X	X	500	150	150	350	105	105	750	75	75	525	53	53	400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1				600	150	150	420	105	105	900	75	75	630	53	53	480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+				600	200	200	420	140	140	900	100	100	630	70	70	480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+	X			500	200	200	350	140	140	750	100	100	525	70	70	400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**		**0**	**0**	
WARRANT SATISFIED (8+ Hours)?				**NO**			**NO**			**NO**			**NO**			**NO**						**NO**					
12:00 AM	125	71	196																								
12:15 AM	46	53	105																								
12:30 AM	46	53	105																								
12:45 AM	46	53	105																								
1:00 AM	46	53	105																								
1:15 AM	46	26	75																								
1:30 AM	46	26	75																								
1:45 AM	46	26	75																								
2:00 AM	46	26	75																								
2:15 AM	46	71	83																								
2:30 AM	46	71	83																								
2:45 AM	46	71	83																								
3:00 AM	46	71	83																								
3:15 AM	47	165	70																								
3:30 AM	47	165	70																								
3:45 AM	47	165	70																								
4:00 AM	47	165	70																								
4:15 AM	127	496	265																								
4:30 AM	127	496	265																								
4:45 AM	127	496	265																								
5:00 AM	127	496	265																								
5:15 AM	130	597	343																								
5:30 AM	130	597	343																								
5:45 AM	130	597	343																								
6:00 AM	130	597	343																								
6:15 AM	108	631	404																								
6:30 AM	108	631	404																								
6:45 AM	108	631	404																								
7:00 AM	108	631	404																								
7:15 AM	108	491	432																								
7:30 AM	108	491	432																								
7:45 AM	108	491	432																								
8:00 AM	108	491	432																								
8:15 AM	51	440	340																								
8:30 AM	51	440	340																								
8:45 AM	51	440	340																								
9:00 AM	51	440	340																								
9:15 AM	49	462	309																								
9:30 AM	49	462	309																								
9:45 AM	49	462	309																								
10:00 AM	49	462	309																								
10:15 AM	50	389	344																								
10:30 AM	50	389	344																								
10:45 AM	50	389	344																								
11:00 AM	50	389	344																								
11:15 AM	51	269	371																								
11:30 AM	51	269	371																								
11:45 AM	51	269	371																								

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes:

Lanes	Adjusted Volumes			Condition A						Condition B						Combination A/B											
																Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%			70%			100%			70%			80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1	X	X	X	500	150	150	350	105	105	750	75	75	525	53	53	400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1				600	150	150	420	105	105	900	75	75	630	53	53	480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+				600	200	200	420	140	140	900	100	100	630	70	70	480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+	X			500	200	200	350	140	140	750	100	100	525	70	70	400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				0	0		0	0		0	0		0	0		0	0		0	0		0	0		0	0	
WARRANT SATISFIED (8+ Hours)?				NO			NO			NO			NO			NO						NO					
12:00 PM	51	269	371																								
12:15 PM	128	323	464																								
12:30 PM	128	323	464																								
12:45 PM	128	323	464																								
1:00 PM	128	323	464																								
1:15 PM	129	296	497																								
1:30 PM	129	296	497																								
1:45 PM	129	296	497																								
2:00 PM	129	296	497																								
2:15 PM	128	380	752																								
2:30 PM	128	380	752																								
2:45 PM	128	380	752																								
3:00 PM	128	380	752																								
3:15 PM	104	540	911																								
3:30 PM	104	540	911																								
3:45 PM	104	540	911																								
4:00 PM	104	540	911																								
4:15 PM	25	417	732																								
4:30 PM	25	417	732																								
4:45 PM	25	417	732																								
5:00 PM	25	417	732																								
5:15 PM	47	379	520																								
5:30 PM	47	379	520																								
5:45 PM	47	379	520																								
6:00 PM	47	379	520																								
6:15 PM	47	268	433																								
6:30 PM	47	268	433																								
6:45 PM	47	268	433																								
7:00 PM	47	268	433																								
7:15 PM	47	216	372																								
7:30 PM	47	216	372																								
7:45 PM	47	216	372																								
8:00 PM	47	216	372																								
8:15 PM	125	141	371																								
8:30 PM	125	141	371																								
8:45 PM	125	141	371																								
9:00 PM	125	141	371																								
9:15 PM	126	91	263																								
9:30 PM	126	91	263																								
9:45 PM	126	91	263																								
10:00 PM	126	91	263																								
10:15 PM	125	46	220																								
10:30 PM	125	46	220																								
10:45 PM	125	46	220																								
11:00 PM	125	46	220																								
11:15 PM	0	0	0																								
11:30 PM	0	0	0																								
11:45 PM	0	0	0																								

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

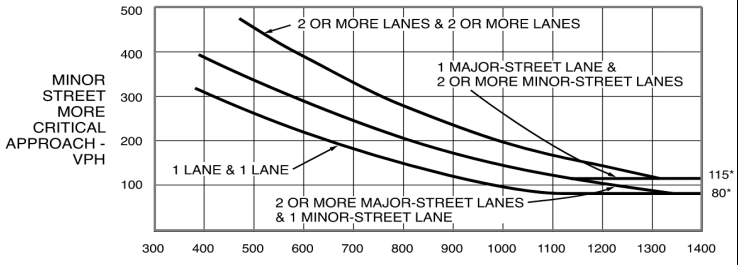
Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	9
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	17

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
12:00 AM	1	124	71	196	125		
12:15 AM	0	46	53	105	46		
12:30 AM	0	46	53	105	46		
12:45 AM	0	46	53	105	46		
1:00 AM	0	46	53	105	46		
1:15 AM	0	46	26	75	46		
1:30 AM	0	46	26	75	46		
1:45 AM	0	46	26	75	46		
2:00 AM	0	46	26	75	46		
2:15 AM	0	46	71	83	46		
2:30 AM	0	46	71	83	46		
2:45 AM	0	46	71	83	46		
3:00 AM	0	46	71	83	46		
3:15 AM	1	46	165	70	47		
3:30 AM	1	46	165	70	47		
3:45 AM	1	46	165	70	47		
4:00 AM	1	46	165	70	47		
4:15 AM	3	124	496	265	127	Min. 1 Met	Min. 1 Met
4:30 AM	3	124	496	265	127		
4:45 AM	3	124	496	265	127		
5:00 AM	3	124	496	265	127		
5:15 AM	6	124	597	343	130	Min. 1 Met	Min. 1 Met
5:30 AM	6	124	597	343	130		
5:45 AM	6	124	597	343	130		
6:00 AM	6	124	597	343	130		
6:15 AM	5	103	631	404	108	Min. 1 Met	Min. 1 Met
6:30 AM	5	103	631	404	108		
6:45 AM	5	103	631	404	108		
7:00 AM	5	103	631	404	108		
7:15 AM	5	103	491	432	108	Min. 1 Met	Min. 1 Met
7:30 AM	5	103	491	432	108		
7:45 AM	5	103	491	432	108		
8:00 AM	5	103	491	432	108		
8:15 AM	5	46	440	340	51		Min. 1 Met
8:30 AM	5	46	440	340	51		
8:45 AM	5	46	440	340	51		
9:00 AM	5	46	440	340	51		
9:15 AM	3	46	462	309	49		Min. 1 Met
9:30 AM	3	46	462	309	49		
9:45 AM	3	46	462	309	49		
10:00 AM	3	46	462	309	49		
10:15 AM	4	46	389	344	50		Min. 1 Met
10:30 AM	4	46	389	344	50		
10:45 AM	4	46	389	344	50		
11:00 AM	4	46	389	344	50		
11:15 AM	5	46	269	371	51		Min. 2 Met
11:30 AM	5	46	269	371	51		
11:45 AM	5	46	269	371	51		
12:00 PM	5	46	269	371	51		
12:15 PM	4	124	323	464	128		Min. 1 Met
12:30 PM	4	124	323	464	128		
12:45 PM	4	124	323	464	128		
1:00 PM	4	124	323	464	128		
1:15 PM	5	124	296	497	129	Min. 2 Met	Min. 1 Met
1:30 PM	5	124	296	497	129		
1:45 PM	5	124	296	497	129		
2:00 PM	5	124	296	497	129		
2:15 PM	4	124	380	752	128	Min. 2 Met	Min. 1 Met
2:30 PM	4	124	380	752	128		

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

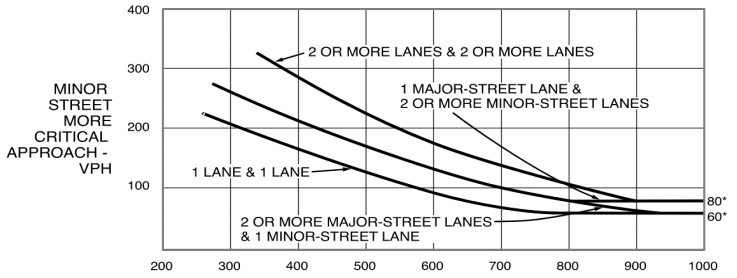
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	9
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	17

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
2:45 PM	4	124	380	752	128		
3:00 PM	4	124	380	752	128		
3:15 PM	4	100	540	911	104	Min. 1 Met	Min. 1 Met
3:30 PM	4	100	540	911	104		
3:45 PM	4	100	540	911	104		
4:00 PM	4	100	540	911	104		
4:15 PM	3	22	417	732	25	Min. 2 Met	Min. 1 Met
4:30 PM	3	22	417	732	25		
4:45 PM	3	22	417	732	25		
5:00 PM	3	22	417	732	25		
5:15 PM	1	46	379	520	47	Min. 2 Met	Min. 1 Met
5:30 PM	1	46	379	520	47		
5:45 PM	1	46	379	520	47		
6:00 PM	1	46	379	520	47		
6:15 PM	1	46	268	433	47		Min. 2 Met
6:30 PM	1	46	268	433	47		
6:45 PM	1	46	268	433	47		
7:00 PM	1	46	268	433	47		
7:15 PM	1	46	216	372	47		Min. 2 Met
7:30 PM	1	46	216	372	47		
7:45 PM	1	46	216	372	47		
8:00 PM	1	46	216	372	47		
8:15 PM	1	124	141	371	125		Min. 2 Met
8:30 PM	1	124	141	371	125		
8:45 PM	1	124	141	371	125		
9:00 PM	1	124	141	371	125		
9:15 PM	2	124	91	263	126		
9:30 PM	2	124	91	263	126		
9:45 PM	2	124	91	263	126		
10:00 PM	2	124	91	263	126		
10:15 PM	1	124	46	220	125		
10:30 PM	1	124	46	220	125		
10:45 PM	1	124	46	220	125		
11:00 PM	1	124	46	220	125		
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		

Legend
● Minor Street 1 (EB)
▲ Minor Street 2 (WB)

Top Hours for Figure 4C-1 - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	6:15 AM	7:15 AM	108	631
2nd Highest Hour	5:15 AM	6:15 AM	130	597
3rd Highest Hour	3:15 PM	4:15 PM	104	540
4th Highest Hour	4:15 AM	5:15 AM	127	496
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	6:15 AM	7:15 AM	108	631
2nd Highest Hour	5:15 AM	6:15 AM	130	597
3rd Highest Hour	3:15 PM	4:15 PM	104	540
4th Highest Hour	4:15 AM	5:15 AM	127	496
Top Hours for Figure 4C-1 - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	2:15 PM	3:15 PM	128	752
2nd Highest Hour	4:15 PM	5:15 PM	25	732
3rd Highest Hour	1:15 PM	2:15 PM	129	497
4th Highest Hour	5:15 PM	6:15 PM	47	520
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	6:15 PM	7:15 PM	47	433
2nd Highest Hour	8:15 PM	9:15 PM	125	371
3rd Highest Hour	11:15 AM	12:15 PM	51	371
4th Highest Hour	7:15 PM	8:15 PM	47	372

WARRANT 3, PEAK HOUR

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	125	71	196	Y	
12:15 AM	46	53	105	Y	
12:30 AM	46	53	105	Y	
12:45 AM	46	53	105	Y	
1:00 AM	46	53	105	Y	
1:15 AM	46	26	75		
1:30 AM	46	26	75		
1:45 AM	46	26	75		
2:00 AM	46	26	75		
2:15 AM	46	71	83		
2:30 AM	46	71	83		
2:45 AM	46	71	83		
3:00 AM	46	71	83		
3:15 AM	47	165	70	Y	
3:30 AM	47	165	70	Y	
3:45 AM	47	165	70	Y	
4:00 AM	47	165	70	Y	
4:15 AM	127	496	265	Y	Y
4:30 AM	127	496	265	Y	Y
4:45 AM	127	496	265	Y	Y
5:00 AM	127	496	265	Y	Y
5:15 AM	130	597	343	Y	Y
5:30 AM	130	597	343	Y	Y
5:45 AM	130	597	343	Y	Y
6:00 AM	130	597	343	Y	Y
6:15 AM	108	631	404	Y	Y
6:30 AM	108	631	404	Y	Y
6:45 AM	108	631	404	Y	Y
7:00 AM	108	631	404	Y	Y
7:15 AM	108	491	432	Y	Y
7:30 AM	108	491	432	Y	Y
7:45 AM	108	491	432	Y	Y
8:00 AM	108	491	432	Y	Y
8:15 AM	51	440	340	Y	Y
8:30 AM	51	440	340	Y	Y
8:45 AM	51	440	340	Y	Y
9:00 AM	51	440	340	Y	Y
9:15 AM	49	462	309	Y	Y
9:30 AM	49	462	309	Y	Y
9:45 AM	49	462	309	Y	Y
10:00 AM	49	462	309	Y	Y
10:15 AM	50	389	344	Y	
10:30 AM	50	389	344	Y	
10:45 AM	50	389	344	Y	
11:00 AM	50	389	344	Y	
11:15 AM	51	269	371	Y	
11:30 AM	51	269	371	Y	
11:45 AM	51	269	371	Y	

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

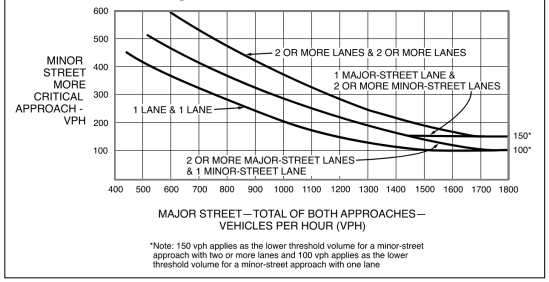
Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (EB)						
4C-3	6:15 AM	7:15 AM	108	631	667	Not Met
4C-4 (70% Factor)	6:15 AM	7:15 AM	108	631	441	Met
Minor Street 2 (WB)						
4C-3	3:15 PM	4:15 PM	104	911	669	Met
4C-4 (70% Factor)	3:15 PM	4:15 PM	104	911	443.99	Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
● Minor Street 1 (EB)
▲ Minor Street 2 (WB)

Figure 4C-3. Warrant 3, Peak Hour



WARRANT 3, PEAK HOUR

Intersection Name: Rail Yard Dwy/Country Club Dr & Main St
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	1 Lane
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

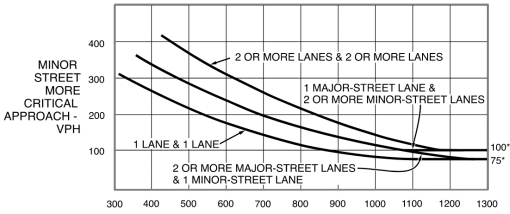
Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	51	269	371	Y	
12:15 PM	128	323	464	Y	Y
12:30 PM	128	323	464	Y	Y
12:45 PM	128	323	464	Y	Y
1:00 PM	128	323	464	Y	Y
1:15 PM	129	296	497	Y	Y
1:30 PM	129	296	497	Y	Y
1:45 PM	129	296	497	Y	Y
2:00 PM	129	296	497	Y	Y
2:15 PM	128	380	752	Y	Y
2:30 PM	128	380	752	Y	Y
2:45 PM	128	380	752	Y	Y
3:00 PM	128	380	752	Y	Y
3:15 PM	104	540	911	Y	Y
3:30 PM	104	540	911	Y	Y
3:45 PM	104	540	911	Y	Y
4:00 PM	104	540	911	Y	Y
4:15 PM	25	417	732	Y	Y
4:30 PM	25	417	732	Y	Y
4:45 PM	25	417	732	Y	Y
5:00 PM	25	417	732	Y	Y
5:15 PM	47	379	520	Y	Y
5:30 PM	47	379	520	Y	Y
5:45 PM	47	379	520	Y	Y
6:00 PM	47	379	520	Y	Y
6:15 PM	47	268	433	Y	
6:30 PM	47	268	433	Y	
6:45 PM	47	268	433	Y	
7:00 PM	47	268	433	Y	
7:15 PM	47	216	372	Y	
7:30 PM	47	216	372	Y	
7:45 PM	47	216	372	Y	
8:00 PM	47	216	372	Y	
8:15 PM	125	141	371	Y	
8:30 PM	125	141	371	Y	
8:45 PM	125	141	371	Y	
9:00 PM	125	141	371	Y	
9:15 PM	126	91	263	Y	
9:30 PM	126	91	263	Y	
9:45 PM	126	91	263	Y	
10:00 PM	126	91	263	Y	
10:15 PM	125	46	220	Y	
10:30 PM	125	46	220	Y	
10:45 PM	125	46	220	Y	
11:00 PM	125	46	220	Y	
11:15 PM	0	0	0		
11:30 PM	0	0	0		
11:45 PM	0	0	0		

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

TPTO Tools
Signal Warrant Analysis Tool

Questions/Feedback
Click Here to Email

Date of Last Update
9/25/2024

All input cells are highlighted orange throughout this tool | INPUT CELL

SET UP WORKBOOK
Click to generate necessary analysis tabs based on inputs

RESET WORKBOOK
Click to re-hide all workbook tabs except "Home"

CLEAR USER INPUTS
Click to clear all user inputs on this tab

Study Information	
Intersection Name	Pettit Rd and National Trails Hwy
Jurisdiction	Barstow, CA
85th-percentile speed or posted speed limit on the Major Street	45+ mph

Count Data Information	
Question	**Answer**
What year were counts collected?	2025
Counts in 15-minute or hourly increments?	15-Minute
Counts by movement or by approach?	By Movement
Counts by vehicle class (heavy vehicles vs. passenger vehicles)?	No
Do Not Enter Value	
Were pedestrian counts collected?	No
Were bicycle counts collected?	No
Do Not Enter Value	

Scenario Information							
Scenario Name	**Include Scenario?**	**Scenario Year**	**Vehicular Growth Rate (%)**	**Vehicular Growth Multiplier**	**Pedestrian Growth Rate (%)**	**Pedestrian Growth Multiplier**	**Number of Legs/ Approaches**
OY with BIG	N	2028	-0.80%	0.976		1.00	3
IY with BIG	Y	2033	-0.61%	0.952		1.00	3
HY with BIG	Y	2048	-0.55%	0.880		1.00	3
				1.000		1.00	
				1.000		1.00	
Include ITE Trip Generation for any of the above scenarios?			Yes				

Warrant Information	
Warrant	**Show in Workbook?**
1 - Eight Hour Vehicular Volume	Yes
2 - Four Hour Vehicular Volume	Yes
3 - Peak Hour	Yes
4 - Pedestrian Volume	
5 - School Crossing	
6 - Coordinated Signal System	
7 - Crash Experience	
8 - Roadway Network	
9 - Intersection Near a Grade Crossing	

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: IY with BIG (2033)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**Yes**	Condition A (70%) was met. Condition B (70%) was met. Combination of A/B (56%) was met.
Warrant 2, Four-Hour Vehicular Volume	Yes	**Yes**	Figure 4C-2 (70% Factor).
Warrant 3, Peak Hour	Yes	**Yes**	Figure 4C-4 (70% Factor).
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
IY with BIG (2033)	Yes	Yes	Yes						
HY with BIG (2048)	Yes	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

Apply 70% Reduction to Warrant Thresholds? Yes

Notes: Condition A (70%) was met. Condition B (70%) was met. Combination of A/B (56%) was met.

Lanes	Adjusted Volumes			Condition A									Condition B									Combination A/B											
																						Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (EB/WB)	Minor Street 1 (SB)	Minor Street 2 (N/A)	100%			70%						100%			70%						80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1				500	150	150	350	105	105				750	75	75	525	53	53				400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1	X	X		600	150	150	420	105	105				900	75	75	630	53	53				480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+	X			600	200	200	420	140	140				900	100	100	630	70	70				480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+				500	200	200	350	140	140				750	100	100	525	70	70				400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				**14**	**3**		**17**	**10**					**3**	**3**		**13**	**13**					**16**	**7**		**6**	**6**		**18**	**13**		**15**	**15**	
WARRANT SATISFIED (8+ Hours)?				**NO**			**YES**						**NO**			**YES**						**NO**						**YES**					
12:00 AM	177	16	0																														
12:15 AM	119	16	0																														
12:30 AM	107	12	0																														
12:45 AM	99	13	0																														
1:00 AM	94	11	0																														
1:15 AM	71	13	0																														
1:30 AM	67	12	0																														
1:45 AM	63	12	0																														
2:00 AM	62	13	0																														
2:15 AM	77	12	0																														
2:30 AM	79	13	0																														
2:45 AM	74	12	0																														
3:00 AM	77	13	0																														
3:15 AM	118	16	0																														
3:30 AM	123	20	0																														
3:45 AM	137	26	0																														
4:00 AM	156	31	0																														
4:15 AM	341	49	0																											X			
4:30 AM	370	55	0																														
4:45 AM	415	57	0																														
5:00 AM	457	73	0				X																										
5:15 AM	596	79	0																			X								X			X
5:30 AM	626	86	0	X																													
5:45 AM	650	99	0													X	X		X														
6:00 AM	684	103	0				X																										
6:15 AM	704	159	0																			X	X		X					X	X		X
6:30 AM	722	160	0	X	X		X																			X	X		X					
6:45 AM	722	167	0													X	X		X														
7:00 AM	723	159	0				X	X		X																							
7:15 AM	719	110	0																			X								X	X		X
7:30 AM	724	109	0	X																						X	X		X					
7:45 AM	748	102	0													X	X		X														
8:00 AM	739	107	0				X	X		X																							
8:15 AM	680	122	0																			X	X		X					X	X		X
8:30 AM	653	120	0	X																													
8:45 AM	626	114	0																														
9:00 AM	634	105	0				X	X		X						X	X		X														
9:15 AM	644	111	0																			X								X	X		X
9:30 AM	673	122	0	X																													
9:45 AM	676	127	0																														
10:00 AM	668	129	0				X	X		X						X	X		X														
10:15 AM	668	132	0																			X	X		X					X	X		X
10:30 AM	658	119	0	X																													
10:45 AM	667	118	0																														
11:00 AM	671	114	0				X	X		X						X	X		X														
11:15 AM	692	112	0																			X								X	X		X
11:30 AM	698	114	0	X																													
11:45 AM	680	106	0																														

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

Apply 70% Reduction to Warrant Thresholds? Yes

Notes: Condition A (70%) was met. Condition B (70%) was met. Combination of A/B (56%) was met.

Lanes	Adjusted Volumes			Condition A							Condition B							Combination A/B											
																		Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (EB/WB)	Minor Street 1 (SB)	Minor Street 2 (N/A)	100%			70%				100%			70%				80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1				500	150	150	350	105	105		750	75	75	525	53	53		400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1	X	X		600	150	150	420	105	105		900	75	75	630	53	53		480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+	X			600	200	200	420	140	140		900	100	100	630	70	70		480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+				500	200	200	350	140	140		750	100	100	525	70	70		400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				**14**	**3**		**17**	**10**			**3**	**3**		**13**	**13**			**16**	**7**		**6**	**6**		**18**	**13**		**15**	**15**	
WARRANT SATISFIED (8+ Hours)?				**NO**			**YES**				**NO**			**YES**				**NO**						**YES**					
12:00 PM	671	102	0				X							X	X		X												
12:15 PM	670	92	0															X						X	X		X	X	X		X
12:30 PM	678	94	0	X																										
12:45 PM	691	102	0																											
1:00 PM	682	105	0				X	X		X				X	X		X													
1:15 PM	691	106	0															X						X	X		X	X	X		X
1:30 PM	676	99	0	X																										
1:45 PM	659	93	0																											
2:00 PM	693	92	0				X							X	X		X													
2:15 PM	779	123	0															X	X		X	X	X	X	X		X	X	X		X
2:30 PM	817	133	0	X																										
2:45 PM	882	150	0																											
3:00 PM	934	161	0				X	X		X	X	X		X	X	X	X													
3:15 PM	1066	161	0															X	X		X	X	X	X	X		X	X	X		X
3:30 PM	1092	162	0	X	X		X																							
3:45 PM	1116	159	0																											
4:00 PM	1127	166	0				X	X		X	X	X		X	X	X	X													
4:15 PM	1048	154	0															X	X		X	X	X	X	X		X	X	X		X
4:30 PM	1063	158	0	X	X		X																							
4:45 PM	1042	151	0																											
5:00 PM	985	147	0				X	X		X	X	X		X	X	X	X													
5:15 PM	823	138	0															X	X		X	X	X	X	X		X	X	X		X
5:30 PM	762	134	0	X																										
5:45 PM	728	134	0																											
6:00 PM	692	125	0				X	X		X				X	X		X													
6:15 PM	588	94	0															X						X	X		X	X	X		X
6:30 PM	585	88	0																											
6:45 PM	581	89	0																											
7:00 PM	601	79	0	X			X																							
7:15 PM	559	68	0															X						X				X	X		X
7:30 PM	543	63	0																											
7:45 PM	514	52	0																											
8:00 PM	495	57	0				X																							
8:15 PM	497	79	0															X						X						
8:30 PM	477	77	0																											
8:45 PM	460	85	0																											
9:00 PM	431	82	0				X																							
9:15 PM	344	51	0																					X						
9:30 PM	334	48	0																											
9:45 PM	325	41	0																											
10:00 PM	323	37	0																											
10:15 PM	288	94	0																											
10:30 PM	257	92	0																											
10:45 PM	232	82	0																											
11:00 PM	195	79	0																											
11:15 PM	67	13	0																											
11:30 PM	45	7	0																											
11:45 PM	17	6	0																											

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

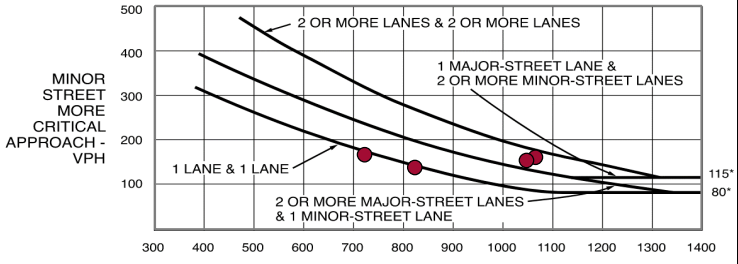
Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	2
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	11

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Eastbound	Westbound	Southbound	N/A			
12:00 AM	77	100	16	0	177		
12:15 AM	52	67	16	0	119		
12:30 AM	45	62	12	0	107		
12:45 AM	43	56	13	0	99		
1:00 AM	41	53	11	0	94		
1:15 AM	29	42	13	0	71		
1:30 AM	29	38	12	0	67		
1:45 AM	30	33	12	0	63		
2:00 AM	30	32	13	0	62		
2:15 AM	43	34	12	0	77		
2:30 AM	42	37	13	0	79		
2:45 AM	39	35	12	0	74		
3:00 AM	42	35	13	0	77		
3:15 AM	73	45	16	0	118		
3:30 AM	79	44	20	0	123		
3:45 AM	87	50	26	0	137		
4:00 AM	101	55	31	0	156		
4:15 AM	208	133	49	0	341		
4:30 AM	227	143	55	0	370		
4:45 AM	253	162	57	0	415		
5:00 AM	282	175	73	0	457		
5:15 AM	330	266	79	0	596		
5:30 AM	346	280	86	0	626		
5:45 AM	355	295	99	0	650		
6:00 AM	364	320	103	0	684		
6:15 AM	381	323	159	0	704		Min. 1 Met
6:30 AM	393	329	160	0	722		
6:45 AM	401	321	167	0	722		
7:00 AM	409	314	159	0	723		
7:15 AM	381	338	110	0	719		Min. 1 Met
7:30 AM	375	349	109	0	724		
7:45 AM	375	373	102	0	748		
8:00 AM	361	378	107	0	739		
8:15 AM	330	350	122	0	680		Min. 1 Met
8:30 AM	324	329	120	0	653		
8:45 AM	315	311	114	0	626		
9:00 AM	312	322	105	0	634		
9:15 AM	335	309	111	0	644		
9:30 AM	343	330	122	0	673		Min. 1 Met
9:45 AM	342	334	127	0	676		
10:00 AM	333	335	129	0	668		
10:15 AM	321	347	132	0	668		
10:30 AM	314	344	119	0	658		Min. 1 Met
10:45 AM	313	354	118	0	667		
11:00 AM	315	356	114	0	671		
11:15 AM	290	402	112	0	692		
11:30 AM	278	420	114	0	698		Min. 1 Met
11:45 AM	266	414	106	0	680		
12:00 PM	262	409	102	0	671		
12:15 PM	273	397	92	0	670		
12:30 PM	282	396	94	0	678		
12:45 PM	277	414	102	0	691		
1:00 PM	265	417	105	0	682		
1:15 PM	251	440	106	0	691		Min. 1 Met
1:30 PM	241	435	99	0	676		
1:45 PM	249	410	93	0	659		
2:00 PM	261	432	92	0	693		
2:15 PM	312	467	123	0	779		Min. 1 Met
2:30 PM	324	493	133	0	817		

Legend
● Minor Street 1 (SB)

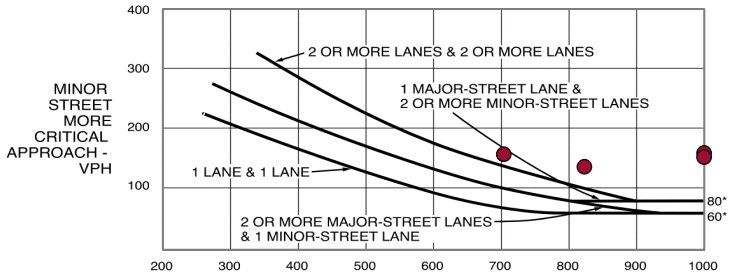
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	2
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	11

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Eastbound	Westbound	Southbound	N/A			
2:45 PM	344	538	150	0	882		
3:00 PM	364	570	161	0	934		
3:15 PM	412	654	161	0	1066	Min. 1 Met	Min. 1 Met
3:30 PM	424	668	162	0	1092		
3:45 PM	437	679	159	0	1116		
4:00 PM	449	678	166	0	1127		
4:15 PM	406	642	154	0	1048	Min. 1 Met	Min. 1 Met
4:30 PM	409	654	158	0	1063		
4:45 PM	399	643	151	0	1042		
5:00 PM	380	605	147	0	985		
5:15 PM	339	484	138	0	823		Min. 1 Met
5:30 PM	328	434	134	0	762		
5:45 PM	320	408	134	0	728		
6:00 PM	296	396	125	0	692		
6:15 PM	235	353	94	0	588		
6:30 PM	232	353	88	0	585		
6:45 PM	231	350	89	0	581		
7:00 PM	241	360	79	0	601		
7:15 PM	219	340	68	0	559		
7:30 PM	212	331	63	0	543		
7:45 PM	191	323	52	0	514		
8:00 PM	177	318	57	0	495		
8:15 PM	194	303	79	0	497		
8:30 PM	180	297	77	0	477		
8:45 PM	178	282	85	0	460		
9:00 PM	176	255	82	0	431		
9:15 PM	127	217	51	0	344		
9:30 PM	122	212	48	0	334		
9:45 PM	110	215	41	0	325		
10:00 PM	103	220	37	0	323		
10:15 PM	96	192	94	0	288		
10:30 PM	92	165	92	0	257		
10:45 PM	87	145	82	0	232		
11:00 PM	78	117	79	0	195		
11:15 PM	26	41	13	0	67		
11:30 PM	15	30	7	0	45		
11:45 PM	6	11	6	0	17		

Legend
● Minor Street 1 (SB)

Top Hours for Figure 4C-1 - Minor Street 1 (SB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	3:15 PM	4:15 PM	1066	161
2nd Highest Hour	4:15 PM	5:15 PM	1048	154
3rd Highest Hour	5:15 PM	6:15 PM	823	138
4th Highest Hour	6:45 AM	7:45 AM	722	167
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 1 (SB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	3:15 PM	4:15 PM	1066	161
2nd Highest Hour	4:15 PM	5:15 PM	1048	154
3rd Highest Hour	5:15 PM	6:15 PM	823	138
4th Highest Hour	6:15 AM	7:15 AM	704	159
Top Hours for Figure 4C-1 - Minor Street 2 (N/A)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	N/A	N/A	N/A	N/A
2nd Highest Hour	N/A	N/A	N/A	N/A
3rd Highest Hour	N/A	N/A	N/A	N/A
4th Highest Hour	N/A	N/A	N/A	N/A
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 2 (N/A)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	N/A	N/A	N/A	N/A
2nd Highest Hour	N/A	N/A	N/A	N/A
3rd Highest Hour	N/A	N/A	N/A	N/A
4th Highest Hour	N/A	N/A	N/A	N/A

WARRANT 3, PEAK HOUR

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (EB/WB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (SB) Vehicles Per Hour (VPH)	Minor Street 2 (N/A) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	177	16	0		
12:15 AM	119	16	0		
12:30 AM	107	12	0		
12:45 AM	99	13	0		
1:00 AM	94	11	0		
1:15 AM	71	13	0		
1:30 AM	67	12	0		
1:45 AM	63	12	0		
2:00 AM	62	13	0		
2:15 AM	77	12	0		
2:30 AM	79	13	0		
2:45 AM	74	12	0		
3:00 AM	77	13	0		
3:15 AM	118	16	0		
3:30 AM	123	20	0		
3:45 AM	137	26	0		
4:00 AM	156	31	0		
4:15 AM	341	49	0		
4:30 AM	370	55	0		
4:45 AM	415	57	0		
5:00 AM	457	73	0		
5:15 AM	596	79	0		Y
5:30 AM	626	86	0		Y
5:45 AM	650	99	0		Y
6:00 AM	684	103	0	Y	Y
6:15 AM	704	159	0	Y	Y
6:30 AM	722	160	0	Y	Y
6:45 AM	722	167	0	Y	Y
7:00 AM	723	159	0	Y	Y
7:15 AM	719	110	0	Y	Y
7:30 AM	724	109	0	Y	Y
7:45 AM	748	102	0	Y	Y
8:00 AM	739	107	0	Y	Y
8:15 AM	680	122	0	Y	Y
8:30 AM	653	120	0	Y	Y
8:45 AM	626	114	0	Y	Y
9:00 AM	634	105	0	Y	Y
9:15 AM	644	111	0	Y	Y
9:30 AM	673	122	0	Y	Y
9:45 AM	676	127	0	Y	Y
10:00 AM	668	129	0	Y	Y
10:15 AM	668	132	0	Y	Y
10:30 AM	658	119	0	Y	Y
10:45 AM	667	118	0	Y	Y
11:00 AM	671	114	0	Y	Y
11:15 AM	692	112	0	Y	Y
11:30 AM	698	114	0	Y	Y
11:45 AM	680	106	0	Y	Y

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

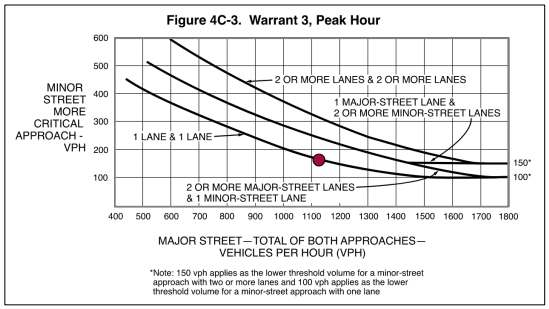
Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (SB)						
4C-3	4:00 PM	5:00 PM	1127	166	242	Not Met
4C-4 (70% Factor)	4:00 PM	5:00 PM	1127	166	85	Met
Minor Street 2 (N/A)						
4C-3	N/A	N/A	N/A	N/A	N/A	Not Met
4C-4 (70% Factor)	N/A	N/A	N/A	N/A	N/A	Not Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
● Minor Street 1 (SB)



WARRANT 3, PEAK HOUR

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

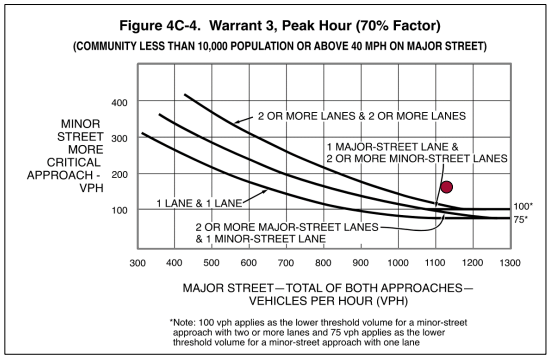
Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (EB/WB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (SB) Vehicles Per Hour (VPH)	Minor Street 2 (N/A) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	671	102	0	Y	Y
12:15 PM	670	92	0		Y
12:30 PM	678	94	0		Y
12:45 PM	691	102	0	Y	Y
1:00 PM	682	105	0	Y	Y
1:15 PM	691	106	0	Y	Y
1:30 PM	676	99	0		Y
1:45 PM	659	93	0		Y
2:00 PM	693	92	0		Y
2:15 PM	779	123	0	Y	Y
2:30 PM	817	133	0	Y	Y
2:45 PM	882	150	0	Y	Y
3:00 PM	934	161	0	Y	Y
3:15 PM	1066	161	0	Y	Y
3:30 PM	1092	162	0	Y	Y
3:45 PM	1116	159	0	Y	Y
4:00 PM	1127	166	0	Y	Y
4:15 PM	1048	154	0	Y	Y
4:30 PM	1063	158	0	Y	Y
4:45 PM	1042	151	0	Y	Y
5:00 PM	985	147	0	Y	Y
5:15 PM	823	138	0	Y	Y
5:30 PM	762	134	0	Y	Y
5:45 PM	728	134	0	Y	Y
6:00 PM	692	125	0	Y	Y
6:15 PM	588	94	0		Y
6:30 PM	585	88	0		Y
6:45 PM	581	89	0		Y
7:00 PM	601	79	0		Y
7:15 PM	559	68	0		
7:30 PM	543	63	0		
7:45 PM	514	52	0		
8:00 PM	495	57	0		
8:15 PM	497	79	0		
8:30 PM	477	77	0		
8:45 PM	460	85	0		
9:00 PM	431	82	0		
9:15 PM	344	51	0		
9:30 PM	334	48	0		
9:45 PM	325	41	0		
10:00 PM	323	37	0		
10:15 PM	288	94	0		
10:30 PM	257	92	0		
10:45 PM	232	82	0		
11:00 PM	195	79	0		
11:15 PM	67	13	0		
11:30 PM	45	7	0		
11:45 PM	17	6	0		



TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: HY with BIG (2048)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**Yes**	Condition A (70%) was met. Condition B (70%) was met. Combination of A/B (56%) was met.
Warrant 2, Four-Hour Vehicular Volume	Yes	**Yes**	Figure 4C-2 (70% Factor).
Warrant 3, Peak Hour	Yes	**Yes**	Figure 4C-4 (70% Factor).
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
IY with BIG (2033)	Yes	Yes	Yes						
HY with BIG (2048)	Yes	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

Apply 70% Reduction to Warrant Thresholds? Yes

Notes: Condition A (70%) was met. Condition B (70%) was met. Combination of A/B (56%) was met.

Lanes	Adjusted Volumes			Condition A									Condition B									Combination A/B											
																						Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (EB/WB)	Minor Street 1 (SB)	Minor Street 2 (N/A)	100%			70%						100%			70%						80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1				500	150	150	350	105	105				750	75	75	525	53	53				400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1	X	X		600	150	150	420	105	105				900	75	75	630	53	53				480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+	X			600	200	200	420	140	140				900	100	100	630	70	70				480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+				500	200	200	350	140	140				750	100	100	525	70	70				400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				**13**	**3**		**16**	**9**					**3**	**3**		**12**	**12**					**15**	**7**		**5**	**5**		**17**	**13**		**15**	**15**	
WARRANT SATISFIED (8+ Hours)?				**NO**			**YES**						**NO**			**YES**						**NO**						**YES**					
12:00 AM	175	16	0																														
12:15 AM	114	16	0																														
12:30 AM	104	12	0																														
12:45 AM	95	13	0																														
1:00 AM	92	11	0																														
1:15 AM	69	12	0																														
1:30 AM	65	12	0																														
1:45 AM	61	12	0																														
2:00 AM	61	12	0																														
2:15 AM	76	12	0																														
2:30 AM	78	13	0																														
2:45 AM	73	12	0																														
3:00 AM	76	13	0																														
3:15 AM	117	16	0																														
3:30 AM	121	20	0																														
3:45 AM	135	25	0																														
4:00 AM	152	31	0																														
4:15 AM	337	48	0																											X			
4:30 AM	365	54	0																														
4:45 AM	406	55	0																														
5:00 AM	444	70	0				X																										
5:15 AM	587	76	0																			X								X			X
5:30 AM	615	83	0	X																													
5:45 AM	636	95	0													X	X		X														
6:00 AM	668	99	0				X																										
6:15 AM	687	153	0																			X	X		X					X	X		X
6:30 AM	703	154	0	X	X		X																										
6:45 AM	704	160	0													X	X		X														
7:00 AM	705	153	0				X	X		X																							
7:15 AM	699	108	0																			X								X	X		X
7:30 AM	704	107	0	X																													
7:45 AM	726	101	0													X	X		X						X	X		X					
8:00 AM	717	105	0				X	X		X																							
8:15 AM	662	120	0																			X	X		X					X	X		X
8:30 AM	635	118	0	X																													
8:45 AM	611	113	0																														
9:00 AM	618	104	0				X																										
9:15 AM	621	110	0																			X								X			X
9:30 AM	648	121	0	X												X	X		X														
9:45 AM	650	125	0																														
10:00 AM	643	127	0				X	X		X																							
10:15 AM	649	132	0																			X	X		X					X	X		X
10:30 AM	639	119	0	X												X	X		X														
10:45 AM	647	118	0																														
11:00 AM	651	115	0				X	X		X																							
11:15 AM	677	113	0																			X								X	X		X
11:30 AM	682	116	0	X												X	X		X														
11:45 AM	667	108	0																														

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

Apply 70% Reduction to Warrant Thresholds? Yes

Notes: Condition A (70%) was met. Condition B (70%) was met. Combination of A/B (56%) was met.

Lanes	Adjusted Volumes			Condition A							Condition B							Combination A/B											
																		Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (EB/WB)	Minor Street 1 (SB)	Minor Street 2 (N/A)	100%			70%				100%			70%				80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	
1 / 1				500	150	150	350	105	105		750	75	75	525	53	53		400	120	120	600	60	60	280	84	84	420	42	42	
2+ / 1	X	X		600	150	150	420	105	105		900	75	75	630	53	53		480	120	120	720	60	60	336	84	84	504	42	42	
2+ / 2+	X			600	200	200	420	140	140		900	100	100	630	70	70		480	160	160	720	80	80	336	112	112	504	56	56	
1 / 2+				500	200	200	350	140	140		750	100	100	525	70	70		400	160	160	600	80	80	280	112	112	420	56	56	
HOURS MET				**13**	**3**		**16**	**9**			**3**	**3**		**12**	**12**			**15**	**7**		**5**	**5**		**17**	**13**		**15**	**15**		
WARRANT SATISFIED (8+ Hours)?				**NO**			**YES**				**NO**			**YES**				**NO**						**YES**						
12:00 PM	657	104	0				X																						
12:15 PM	653	92	0															X						X	X		X	X	X		X
12:30 PM	660	94	0	X										X	X		X													
12:45 PM	673	101	0																											
1:00 PM	664	105	0				X	X		X																				
1:15 PM	676	106	0															X						X	X		X	X	X		X
1:30 PM	662	100	0	X										X	X		X													
1:45 PM	646	94	0																											
2:00 PM	678	93	0				X																							
2:15 PM	759	128	0															X	X		X	X	X	X	X		X	X	X		X
2:30 PM	796	137	0	X										X	X		X													
2:45 PM	855	153	0																											
3:00 PM	903	164	0				X	X		X	X	X		X																
3:15 PM	1019	161	0															X	X		X	X	X	X	X		X	X	X		X
3:30 PM	1042	162	0	X	X		X							X	X		X													
3:45 PM	1066	160	0																											
4:00 PM	1075	166	0				X	X		X	X	X		X																
4:15 PM	994	153	0															X	X		X	X	X	X	X		X	X	X		X
4:30 PM	1008	158	0	X	X		X							X	X		X													
4:45 PM	987	150	0																											
5:00 PM	935	147	0				X	X		X	X	X		X																
5:15 PM	776	135	0															X	X		X	X	X	X	X		X	X	X		X
5:30 PM	720	131	0	X										X	X		X													
5:45 PM	688	131	0																											
6:00 PM	656	123	0				X	X		X																				
6:15 PM	550	89	0															X						X	X		X	X	X		X
6:30 PM	548	84	0																											
6:45 PM	545	85	0																											
7:00 PM	563	75	0				X																							
7:15 PM	523	64	0															X						X				X	X		X
7:30 PM	508	59	0																											
7:45 PM	481	50	0																											
8:00 PM	463	54	0				X																							
8:15 PM	476	78	0																					X						
8:30 PM	457	76	0																											
8:45 PM	441	83	0																											
9:00 PM	414	80	0																											
9:15 PM	331	48	0																											
9:30 PM	322	45	0																											
9:45 PM	313	38	0																											
10:00 PM	312	35	0																											
10:15 PM	279	89	0																											
10:30 PM	250	87	0																											
10:45 PM	227	77	0																											
11:00 PM	193	74	0																											
11:15 PM	62	12	0																											
11:30 PM	41	6	0																											
11:45 PM	16	5	0																											

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

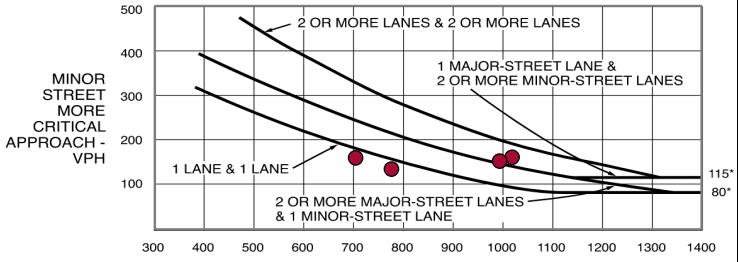
Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	2
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	9

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Eastbound	Westbound	Southbound	N/A			
12:00 AM	77	98	16	0	175		
12:15 AM	50	64	16	0	114		
12:30 AM	44	60	12	0	104		
12:45 AM	42	53	13	0	95		
1:00 AM	41	51	11	0	92		
1:15 AM	28	41	12	0	69		
1:30 AM	28	37	12	0	65		
1:45 AM	29	32	12	0	61		
2:00 AM	30	31	12	0	61		
2:15 AM	42	34	12	0	76		
2:30 AM	41	37	13	0	78		
2:45 AM	38	35	12	0	73		
3:00 AM	41	35	13	0	76		
3:15 AM	70	47	16	0	117		
3:30 AM	76	45	20	0	121		
3:45 AM	84	51	25	0	135		
4:00 AM	97	55	31	0	152		
4:15 AM	200	137	48	0	337		
4:30 AM	218	147	54	0	365		
4:45 AM	242	164	55	0	406		
5:00 AM	268	176	70	0	444		
5:15 AM	313	274	76	0	587		
5:30 AM	328	287	83	0	615		
5:45 AM	336	300	95	0	636		
6:00 AM	345	323	99	0	668		
6:15 AM	362	325	153	0	687		Min. 1 Met
6:30 AM	373	330	154	0	703		
6:45 AM	381	323	160	0	704		
7:00 AM	388	317	153	0	705		
7:15 AM	363	336	108	0	699		Min. 1 Met
7:30 AM	357	347	107	0	704		
7:45 AM	357	369	101	0	726		
8:00 AM	344	373	105	0	717		
8:15 AM	314	348	120	0	662		Min. 1 Met
8:30 AM	308	327	118	0	635		
8:45 AM	299	312	113	0	611		
9:00 AM	297	321	104	0	618		
9:15 AM	319	302	110	0	621		
9:30 AM	326	322	121	0	648		Min. 1 Met
9:45 AM	325	325	125	0	650		
10:00 AM	317	326	127	0	643		
10:15 AM	308	341	132	0	649		
10:30 AM	301	338	119	0	639		
10:45 AM	300	347	118	0	647		Min. 1 Met
11:00 AM	302	349	115	0	651		
11:15 AM	280	397	113	0	677		
11:30 AM	268	414	116	0	682		
11:45 AM	258	409	108	0	667		
12:00 PM	253	404	104	0	657		
12:15 PM	264	389	92	0	653		
12:30 PM	272	388	94	0	660		
12:45 PM	268	405	101	0	673		
1:00 PM	257	407	105	0	664		
1:15 PM	245	431	106	0	676		
1:30 PM	235	427	100	0	662		
1:45 PM	242	404	94	0	646		
2:00 PM	254	424	93	0	678		
2:15 PM	307	452	128	0	759		Min. 1 Met
2:30 PM	319	477	137	0	796		

Legend
● Minor Street 1 (SB)

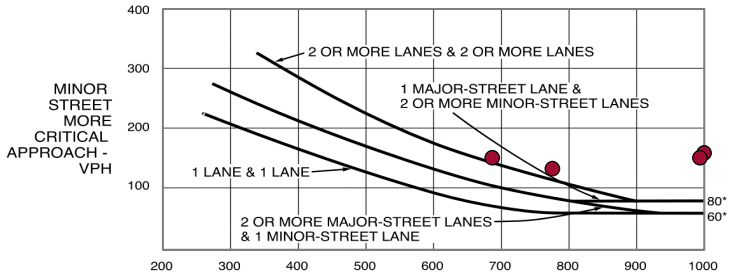
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	2
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	9

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Eastbound	Westbound	Southbound	N/A			
2:45 PM	337	518	153	0	855		
3:00 PM	356	547	164	0	903		
3:15 PM	398	621	161	0	1019	Min. 1 Met	Min. 1 Met
3:30 PM	408	634	162	0	1042		
3:45 PM	421	645	160	0	1066		
4:00 PM	431	644	166	0	1075		
4:15 PM	388	606	153	0	994	Min. 1 Met	Min. 1 Met
4:30 PM	390	618	158	0	1008		
4:45 PM	380	607	150	0	987		
5:00 PM	363	572	147	0	935		
5:15 PM	322	454	135	0	776		Min. 1 Met
5:30 PM	312	408	131	0	720		
5:45 PM	305	383	131	0	688		
6:00 PM	283	373	123	0	656		
6:15 PM	220	330	89	0	550		
6:30 PM	218	330	84	0	548		
6:45 PM	217	328	85	0	545		
7:00 PM	227	336	75	0	563		
7:15 PM	206	317	64	0	523		
7:30 PM	198	310	59	0	508		
7:45 PM	179	302	50	0	481		
8:00 PM	166	297	54	0	463		
8:15 PM	189	287	78	0	476		
8:30 PM	176	281	76	0	457		
8:45 PM	174	267	83	0	441		
9:00 PM	172	242	80	0	414		
9:15 PM	123	208	48	0	331		
9:30 PM	118	204	45	0	322		
9:45 PM	107	206	38	0	313		
10:00 PM	100	212	35	0	312		
10:15 PM	95	184	89	0	279		
10:30 PM	91	159	87	0	250		
10:45 PM	87	140	77	0	227		
11:00 PM	78	115	74	0	193		
11:15 PM	24	38	12	0	62		
11:30 PM	14	27	6	0	41		
11:45 PM	5	11	5	0	16		

Legend
● Minor Street 1 (SB)

Top Hours for Figure 4C-1 - Minor Street 1 (SB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	3:15 PM	4:15 PM	1019	161
2nd Highest Hour	4:15 PM	5:15 PM	994	153
3rd Highest Hour	5:15 PM	6:15 PM	776	135
4th Highest Hour	6:45 AM	7:45 AM	704	160
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 1 (SB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	3:15 PM	4:15 PM	1019	161
2nd Highest Hour	4:15 PM	5:15 PM	994	153
3rd Highest Hour	5:15 PM	6:15 PM	776	135
4th Highest Hour	6:15 AM	7:15 AM	687	153
Top Hours for Figure 4C-1 - Minor Street 2 (N/A)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	N/A	N/A	N/A	N/A
2nd Highest Hour	N/A	N/A	N/A	N/A
3rd Highest Hour	N/A	N/A	N/A	N/A
4th Highest Hour	N/A	N/A	N/A	N/A
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 2 (N/A)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	N/A	N/A	N/A	N/A
2nd Highest Hour	N/A	N/A	N/A	N/A
3rd Highest Hour	N/A	N/A	N/A	N/A
4th Highest Hour	N/A	N/A	N/A	N/A

WARRANT 3, PEAK HOUR

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (EB/WB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (SB) Vehicles Per Hour (VPH)	Minor Street 2 (N/A) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	175	16	0		
12:15 AM	114	16	0		
12:30 AM	104	12	0		
12:45 AM	95	13	0		
1:00 AM	92	11	0		
1:15 AM	69	12	0		
1:30 AM	65	12	0		
1:45 AM	61	12	0		
2:00 AM	61	12	0		
2:15 AM	76	12	0		
2:30 AM	78	13	0		
2:45 AM	73	12	0		
3:00 AM	76	13	0		
3:15 AM	117	16	0		
3:30 AM	121	20	0		
3:45 AM	135	25	0		
4:00 AM	152	31	0		
4:15 AM	337	48	0		
4:30 AM	365	54	0		
4:45 AM	406	55	0		
5:00 AM	444	70	0		
5:15 AM	587	76	0		Y
5:30 AM	615	83	0		Y
5:45 AM	636	95	0		Y
6:00 AM	668	99	0		Y
6:15 AM	687	153	0	Y	Y
6:30 AM	703	154	0	Y	Y
6:45 AM	704	160	0	Y	Y
7:00 AM	705	153	0	Y	Y
7:15 AM	699	108	0	Y	Y
7:30 AM	704	107	0	Y	Y
7:45 AM	726	101	0	Y	Y
8:00 AM	717	105	0	Y	Y
8:15 AM	662	120	0	Y	Y
8:30 AM	635	118	0	Y	Y
8:45 AM	611	113	0	Y	Y
9:00 AM	618	104	0	Y	Y
9:15 AM	621	110	0	Y	Y
9:30 AM	648	121	0	Y	Y
9:45 AM	650	125	0	Y	Y
10:00 AM	643	127	0	Y	Y
10:15 AM	649	132	0	Y	Y
10:30 AM	639	119	0	Y	Y
10:45 AM	647	118	0	Y	Y
11:00 AM	651	115	0	Y	Y
11:15 AM	677	113	0	Y	Y
11:30 AM	682	116	0	Y	Y
11:45 AM	667	108	0	Y	Y

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

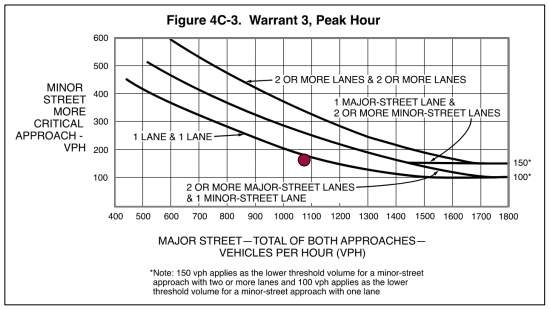
Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (SB)						
4C-3	4:00 PM	5:00 PM	1075	166	260	Not Met
4C-4 (70% Factor)	4:00 PM	5:00 PM	1075	166	93	Met
Minor Street 2 (N/A)						
4C-3	N/A	N/A	N/A	N/A	N/A	Not Met
4C-4 (70% Factor)	N/A	N/A	N/A	N/A	N/A	Not Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
● Minor Street 1 (SB)



WARRANT 3, PEAK HOUR

Intersection Name: Pettit Rd and National Trails Hwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (SB)	1 Lane
Minor Street 2 (N/A)	N/A

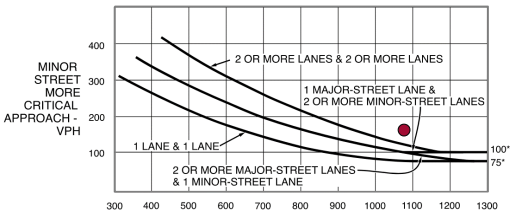
Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (EB/WB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (SB) Vehicles Per Hour (VPH)	Minor Street 2 (N/A) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	657	104	0	Y	Y
12:15 PM	653	92	0		Y
12:30 PM	660	94	0		Y
12:45 PM	673	101	0	Y	Y
1:00 PM	664	105	0	Y	Y
1:15 PM	676	106	0	Y	Y
1:30 PM	662	100	0		Y
1:45 PM	646	94	0		Y
2:00 PM	678	93	0		Y
2:15 PM	759	128	0	Y	Y
2:30 PM	796	137	0	Y	Y
2:45 PM	855	153	0	Y	Y
3:00 PM	903	164	0	Y	Y
3:15 PM	1019	161	0	Y	Y
3:30 PM	1042	162	0	Y	Y
3:45 PM	1066	160	0	Y	Y
4:00 PM	1075	166	0	Y	Y
4:15 PM	994	153	0	Y	Y
4:30 PM	1008	158	0	Y	Y
4:45 PM	987	150	0	Y	Y
5:00 PM	935	147	0	Y	Y
5:15 PM	776	135	0	Y	Y
5:30 PM	720	131	0	Y	Y
5:45 PM	688	131	0	Y	Y
6:00 PM	656	123	0	Y	Y
6:15 PM	550	89	0		
6:30 PM	548	84	0		
6:45 PM	545	85	0		
7:00 PM	563	75	0		
7:15 PM	523	64	0		
7:30 PM	508	59	0		
7:45 PM	481	50	0		
8:00 PM	463	54	0		
8:15 PM	476	78	0		
8:30 PM	457	76	0		
8:45 PM	441	83	0		
9:00 PM	414	80	0		
9:15 PM	331	48	0		
9:30 PM	322	45	0		
9:45 PM	313	38	0		
10:00 PM	312	35	0		
10:15 PM	279	89	0		
10:30 PM	250	87	0		
10:45 PM	227	77	0		
11:00 PM	193	74	0		
11:15 PM	62	12	0		
11:30 PM	41	6	0		
11:45 PM	16	5	0		

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

TPTO Tools

Signal Warrant Analysis Tool

Questions/Feedback
Click Here to Email

Date of Last Update
9/25/2024

All input cells are highlighted orange throughout this tool | INPUT CELL

SET UP WORKBOOK
Click to generate necessary analysis tabs based on inputs

RESET WORKBOOK
Click to re-hide all workbook tabs except "Home"

CLEAR USER INPUTS
Click to clear all user inputs on this tab

Study Information	
Intersection Name	Lenwood Rd and Love's Travel Stop Dwy
Jurisdiction	Barstow, CA
85th-percentile speed or posted speed limit on the Major Street	40 mph

Count Data Information	
Question	**Answer**
What year were counts collected?	2025
Counts in 15-minute or hourly increments?	15-Minute
Counts by movement or by approach?	By Movement
Counts by vehicle class (heavy vehicles vs. passenger vehicles)?	No
Do Not Enter Value	
Were pedestrian counts collected?	No
Were bicycle counts collected?	No
Do Not Enter Value	

Scenario Information							
Scenario Name	**Include Scenario?**	**Scenario Year**	**Vehicular Growth Rate (%)**	**Vehicular Growth Multiplier**	**Pedestrian Growth Rate (%)**	**Pedestrian Growth Multiplier**	**Number of Legs/ Approaches**
OY with BIG	N	2028	19.46%	1.705		1.00	4
IY with BIG	N	2033	11.62%	2.410		1.00	4
HY with BIG	Y	2048	6.78%	4.524		1.00	4
				1.000		1.00	
				1.000		1.00	
Include ITE Trip Generation for any of the above scenarios?			Yes				

Warrant Information	
Warrant	**Show in Workbook?**
1 - Eight Hour Vehicular Volume	Yes
2 - Four Hour Vehicular Volume	Yes
3 - Peak Hour	Yes
4 - Pedestrian Volume	
5 - School Crossing	
6 - Coordinated Signal System	
7 - Crash Experience	
8 - Roadway Network	
9 - Intersection Near a Grade Crossing	

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: HY with BIG (2048)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**Yes**	Condition B was met. Combination of A/B (80%) was met.
Warrant 2, Four-Hour Vehicular Volume	Yes	**Yes**	Figure 4C-1 (100%).
Warrant 3, Peak Hour	Yes	**Yes**	Figure 4C-3 (100%).
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
HY with BIG (2048)	Yes	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd and Love's Travel Stop Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? No

Notes: Condition B was met. Combination of A/B (80%) was met.

Lanes	Adjusted Volumes			Condition A							Condition B							Combination A/B											
				100%				70%			100%				70%			Cond. A 80%				Cond. B 80%				Cond. A 56%				Cond. B 56%			
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	
1 / 1				500	150	150					750	75	75					400	120	120		600	60	60									
2+ / 1	X	X	X	600	150	150					900	75	75					480	120	120		720	60	60									
2+ / 2+	X			600	200	200					900	100	100					480	160	160		720	80	80									
1 / 2+				500	200	200					750	100	100					400	160	160		600	80	80									
HOURS MET				**18**	**7**						**16**	**16**						**19**	**13**			**17**	**17**										
WARRANT SATISFIED (8+ Hours)?				**NO**							**YES**							**YES**															
12:00 AM	381	41	5																														
12:15 AM	276	36	0																														
12:30 AM	235	41	0																														
12:45 AM	226	32	0																														
1:00 AM	226	32	0																														
1:15 AM	227	32	0																														
1:30 AM	236	41	5																														
1:45 AM	231	45	5																														
2:00 AM	232	32	5																														
2:15 AM	226	32	9																														
2:30 AM	217	23	5																														
2:45 AM	204	18	5																														
3:00 AM	204	23	5																														
3:15 AM	256	32	0																														
3:30 AM	288	27	0																														
3:45 AM	333	45	0																														
4:00 AM	369	54	0																														
4:15 AM	599	81	5															X															
4:30 AM	649	104	5	X																													
4:45 AM	776	113	9																			X	X		X								
5:00 AM	889	118	9																														
5:15 AM	1026	95	5								X	X		X				X															
5:30 AM	1080	86	5	X																													
5:45 AM	1062	109	0																			X	X		X								
6:00 AM	1076	113	0																														
6:15 AM	1150	118	5								X	X		X				X															
6:30 AM	1159	131	5	X																													
6:45 AM	1150	104	14																			X	X		X								
7:00 AM	1272	122	14																														
7:15 AM	1339	136	14								X	X		X				X	X		X												
7:30 AM	1406	140	14	X																													
7:45 AM	1406	136	5																			X	X		X								
8:00 AM	1280	127	5																														
8:15 AM	1257	118	9								X	X		X				X															
8:30 AM	1275	127	9	X																													
8:45 AM	1361	167	9																			X	X		X								
9:00 AM	1406	195	18																														
9:15 AM	1331	204	9								X	X		X				X	X		X												
9:30 AM	1241	195	23	X	X		X																										
9:45 AM	1168	158	36																			X	X		X								
10:00 AM	1127	131	32																														
10:15 AM	1211	122	36								X	X		X				X	X		X												
10:30 AM	1256	113	32	X																													
10:45 AM	1325	109	27																			X	X		X								
11:00 AM	1342	104	36																														
11:15 AM	1383	113	41								X	X		X				X															
11:30 AM	1365	127	36	X																													
11:45 AM	1342	127	32																			X	X		X								

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd and Love's Travel Stop Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? No

Notes: Condition B was met. Combination of A/B (80%) was met.

Lanes	Adjusted Volumes			Condition A							Condition B							Combination A/B											
																		Cond. A				Cond. B				Cond. A			
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%				70%			100%				70%			80%				80%				56%			
				Maj.	Min. 1	Min. 2					Maj.	Min. 1	Min. 2					Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2					
1 / 1				500	150	150					750	75	75					400	120	120		600	60	60					
2+ / 1	X	X	X	600	150	150					900	75	75					480	120	120		720	60	60					
2+ / 2+	X			600	200	200					900	100	100					480	160	160		720	80	80					
1 / 2+				500	200	200					750	100	100					400	160	160		600	80	80					
HOURS MET				**18**	**7**						**16**	**16**						**19**	**13**			**17**	**17**						
WARRANT SATISFIED (8+ Hours)?				**NO**							**YES**							**YES**											
12:00 PM	1315	131	27																										
12:15 PM	1210	140	32								X	X		X				X	X		X								
12:30 PM	1201	127	36	X																									
12:45 PM	1188	163	32																			X	X		X				
1:00 PM	1175	163	32																										
1:15 PM	1171	176	27								X	X		X				X	X		X								
1:30 PM	1171	181	36	X	X		X																						
1:45 PM	1162	181	41																			X	X		X				
2:00 PM	1216	213	32																										
2:15 PM	1391	213	32								X	X		X				X	X		X								
2:30 PM	1549	249	27	X	X		X																						
2:45 PM	1662	271	41																			X	X		X				
3:00 PM	1725	271	45																										
3:15 PM	1707	290	41								X	X		X				X	X		X								
3:30 PM	1744	285	36	X	X		X																						
3:45 PM	1752	285	18																			X	X		X				
4:00 PM	1757	285	23																										
4:15 PM	1708	271	36								X	X		X				X	X		X								
4:30 PM	1644	262	32	X	X		X																						
4:45 PM	1654	240	41																			X	X		X				
5:00 PM	1689	226	36																										
5:15 PM	1445	235	18								X	X		X				X	X		X								
5:30 PM	1423	217	36	X	X		X																						
5:45 PM	1373	199	27																			X	X		X				
6:00 PM	1314	199	32																										
6:15 PM	1239	167	41								X	X		X				X	X		X								
6:30 PM	1181	149	32	X																									
6:45 PM	1144	158	50																			X	X		X				
7:00 PM	1108	136	41																										
7:15 PM	1115	149	36								X	X		X				X	X		X								
7:30 PM	1043	172	23	X	X		X																						
7:45 PM	970	163	9																			X	X		X				
8:00 PM	971	158	18																										
8:15 PM	1057	131	18								X	X		X				X	X		X								
8:30 PM	1116	131	27	X																									
8:45 PM	1125	127	23																			X	X		X				
9:00 PM	1025	136	14																										
9:15 PM	856	140	14															X	X		X								
9:30 PM	762	109	5	X																									
9:45 PM	684	90	5																										
10:00 PM	662	63	18																										
10:15 PM	641	36	18															X											
10:30 PM	559	36	18																										
10:45 PM	492	32	18																										
11:00 PM	392	32	5																										
11:15 PM	109	27	0																										
11:30 PM	59	18	0																										
11:45 PM	19	5	0																										

Figure 5. Daily Vehicle Trips at Transload and Short-Term Storage HCW

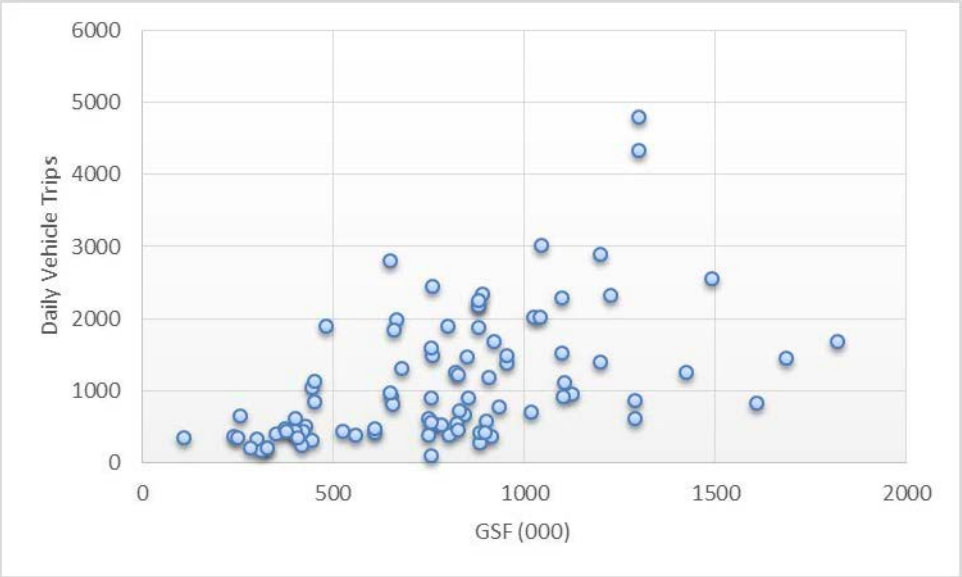
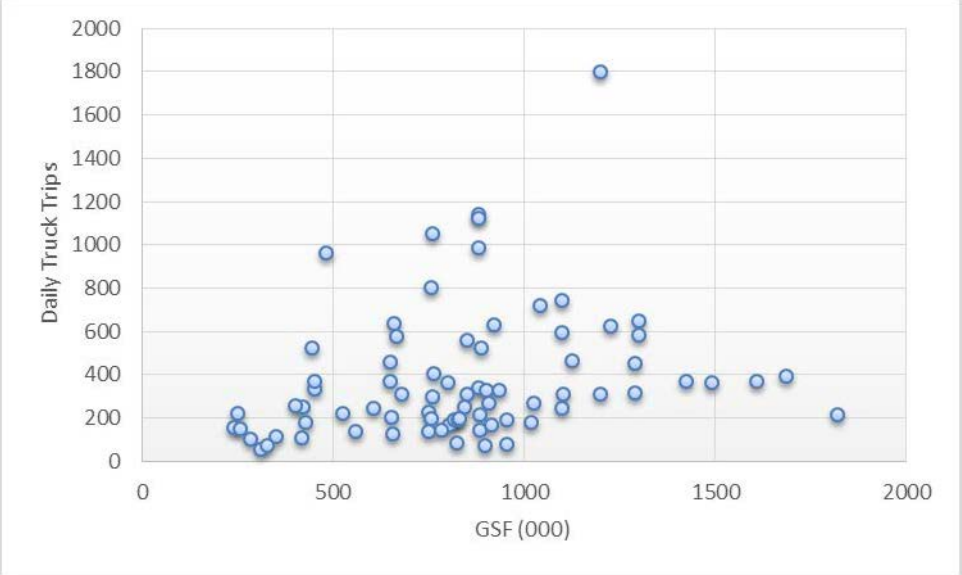


Figure 6 presents a plot of daily truck trips against building square footage at transload and short-term storage HCW. For trucks, the weighted average rate is 0.454 trucks per 1,000 GSF.

Figure 6. Daily Truck Trips at Transload and Short-Term Storage HCW



WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd and Love's Travel Stop Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? No

Total Number of Unique Hours Met on Figure 4C-1	15
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	N/A

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
2:45 PM	841	821	271	41	1662		
3:00 PM	868	857	271	45	1725		
3:15 PM	881	826	290	41	1707	Min. 1 Met	
3:30 PM	859	885	285	36	1744		
3:45 PM	899	853	285	18	1752		
4:00 PM	854	903	285	23	1757		
4:15 PM	847	861	271	36	1708	Min. 1 Met	
4:30 PM	811	833	262	32	1644		
4:45 PM	843	811	240	41	1654		
5:00 PM	883	806	226	36	1689		
5:15 PM	752	693	235	18	1445	Min. 1 Met	
5:30 PM	766	657	217	36	1423		
5:45 PM	716	657	199	27	1373		
6:00 PM	698	616	199	32	1314		
6:15 PM	744	495	167	41	1239	Min. 1 Met	
6:30 PM	726	455	149	32	1181		
6:45 PM	712	432	158	50	1144		
7:00 PM	699	409	136	41	1108		
7:15 PM	681	434	149	36	1115	Min. 1 Met	
7:30 PM	636	407	172	23	1043		
7:45 PM	586	384	163	9	970		
8:00 PM	609	362	158	18	971		
8:15 PM	613	444	131	18	1057	Min. 1 Met	
8:30 PM	677	439	131	27	1116		
8:45 PM	699	426	127	23	1125		
9:00 PM	618	407	136	14	1025		
9:15 PM	582	274	140	14	856		
9:30 PM	510	252	109	5	762		
9:45 PM	446	238	90	5	684		
10:00 PM	451	211	63	18	662		
10:15 PM	413	228	36	18	641		
10:30 PM	345	214	36	18	559		
10:45 PM	305	187	32	18	492		
11:00 PM	228	164	32	5	392		
11:15 PM	68	41	27	0	109		
11:30 PM	41	18	18	0	59		
11:45 PM	14	5	5	0	19		

Legend
● Minor Street 1 (EB)
▲ Minor Street 2 (WB)

Top Hours for Figure 4C-1 - Minor Street 1 (EB)

	Start Time	End Time	Major Street	Minor Street
Top Hour	3:15 PM	4:15 PM	1707	290
2nd Highest Hour	4:15 PM	5:15 PM	1708	271
3rd Highest Hour	5:15 PM	6:15 PM	1445	235
4th Highest Hour	2:15 PM	3:15 PM	1391	213

Top Hours for Figure 4C-1 - Minor Street 2 (WB)

	Start Time	End Time	Major Street	Minor Street
Top Hour	3:00 PM	4:00 PM	1725	45
2nd Highest Hour	4:45 PM	5:45 PM	1654	41
3rd Highest Hour	11:15 AM	12:15 PM	1383	41
4th Highest Hour	6:00 PM	7:00 PM	1314	32

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd and Love's Travel Stop Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **No**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	381	41	5		
12:15 AM	276	36	0		
12:30 AM	235	41	0		
12:45 AM	226	32	0		
1:00 AM	226	32	0		
1:15 AM	227	32	0		
1:30 AM	236	41	5		
1:45 AM	231	45	5		
2:00 AM	232	32	5		
2:15 AM	226	32	9		
2:30 AM	217	23	5		
2:45 AM	204	18	5		
3:00 AM	204	23	5		
3:15 AM	256	32	0		
3:30 AM	288	27	0		
3:45 AM	333	45	0		
4:00 AM	369	54	0		
4:15 AM	599	81	5		
4:30 AM	649	104	5	Y	
4:45 AM	776	113	9	Y	Y
5:00 AM	889	118	9	Y	Y
5:15 AM	1026	95	5		Y
5:30 AM	1080	86	5		Y
5:45 AM	1062	109	0	Y	Y
6:00 AM	1076	113	0	Y	Y
6:15 AM	1150	118	5	Y	Y
6:30 AM	1159	131	5	Y	Y
6:45 AM	1150	104	14	Y	Y
7:00 AM	1272	122	14	Y	Y
7:15 AM	1339	136	14	Y	Y
7:30 AM	1406	140	14	Y	Y
7:45 AM	1406	136	5	Y	Y
8:00 AM	1280	127	5	Y	Y
8:15 AM	1257	118	9	Y	Y
8:30 AM	1275	127	9	Y	Y
8:45 AM	1361	167	9	Y	Y
9:00 AM	1406	195	18	Y	Y
9:15 AM	1331	204	9	Y	Y
9:30 AM	1241	195	23	Y	Y
9:45 AM	1168	158	36	Y	Y
10:00 AM	1127	131	32	Y	Y
10:15 AM	1211	122	36	Y	Y
10:30 AM	1256	113	32	Y	Y
10:45 AM	1325	109	27	Y	Y
11:00 AM	1342	104	36	Y	Y
11:15 AM	1383	113	41	Y	Y
11:30 AM	1365	127	36	Y	Y
11:45 AM	1342	127	32	Y	Y

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

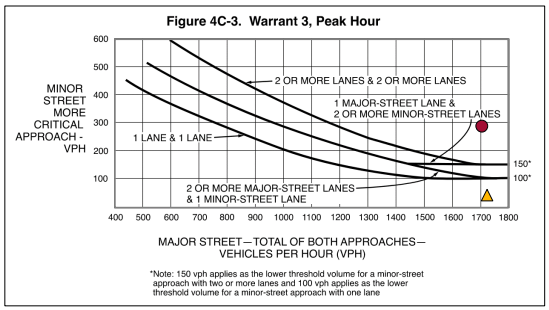
Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (EB)						
4C-3	3:15 PM	4:15 PM	1707	290	106	Met
Minor Street 2 (WB)						
4C-3	3:00 PM	4:00 PM	1725	45	104	Not Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
● Minor Street 1 (EB)
▲ Minor Street 2 (WB)



WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd and Love's Travel Stop Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

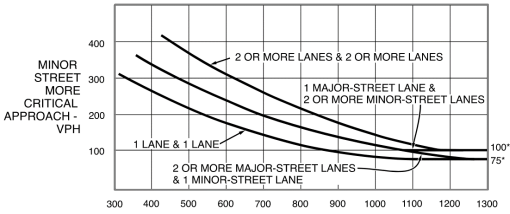
Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **No**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	1315	131	27	Y	Y
12:15 PM	1210	140	32	Y	Y
12:30 PM	1201	127	36	Y	Y
12:45 PM	1188	163	32	Y	Y
1:00 PM	1175	163	32	Y	Y
1:15 PM	1171	176	27	Y	Y
1:30 PM	1171	181	36	Y	Y
1:45 PM	1162	181	41	Y	Y
2:00 PM	1216	213	32	Y	Y
2:15 PM	1391	213	32	Y	Y
2:30 PM	1549	249	27	Y	Y
2:45 PM	1662	271	41	Y	Y
3:00 PM	1725	271	45	Y	Y
3:15 PM	1707	290	41	Y	Y
3:30 PM	1744	285	36	Y	Y
3:45 PM	1752	285	18	Y	Y
4:00 PM	1757	285	23	Y	Y
4:15 PM	1708	271	36	Y	Y
4:30 PM	1644	262	32	Y	Y
4:45 PM	1654	240	41	Y	Y
5:00 PM	1689	226	36	Y	Y
5:15 PM	1445	235	18	Y	Y
5:30 PM	1423	217	36	Y	Y
5:45 PM	1373	199	27	Y	Y
6:00 PM	1314	199	32	Y	Y
6:15 PM	1239	167	41	Y	Y
6:30 PM	1181	149	32	Y	Y
6:45 PM	1144	158	50	Y	Y
7:00 PM	1108	136	41	Y	Y
7:15 PM	1115	149	36	Y	Y
7:30 PM	1043	172	23	Y	Y
7:45 PM	970	163	9	Y	Y
8:00 PM	971	158	18	Y	Y
8:15 PM	1057	131	18	Y	Y
8:30 PM	1116	131	27	Y	Y
8:45 PM	1125	127	23	Y	Y
9:00 PM	1025	136	14	Y	Y
9:15 PM	856	140	14	Y	Y
9:30 PM	762	109	5	Y	Y
9:45 PM	684	90	5		
10:00 PM	662	63	18		
10:15 PM	641	36	18		
10:30 PM	559	36	18		
10:45 PM	492	32	18		
11:00 PM	392	32	5		
11:15 PM	109	27	0		
11:30 PM	59	18	0		
11:45 PM	19	5	0		

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

TPTO Tools

Signal Warrant Analysis Tool

Questions/Feedback
Click Here to Email

Date of Last Update
9/25/2024

All input cells are highlighted orange throughout this tool

INPUT CELL

SET UP WORKBOOK

Click to generate necessary analysis tabs based on inputs

RESET WORKBOOK

Click to re-hide all workbook tabs except "Home"

CLEAR USER INPUTS

Click to clear all user inputs on this tab

Study Information	
Intersection Name	Lenwood Rd & High Desert Dr
Jurisdiction	Barstow, CA
85th-percentile speed or posted speed limit on the Major Street	40 mph

Count Data Information	
Question	**Answer**
What year were counts collected?	2025
Counts in 15-minute or hourly increments?	15-Minute
Counts by movement or by approach?	By Movement
Counts by vehicle class (heavy vehicles vs. passenger vehicles)?	No
Do Not Enter Value	
Were pedestrian counts collected?	No
Were bicycle counts collected?	No
Do Not Enter Value	

Scenario Information							
Scenario Name	**Include Scenario?**	**Scenario Year**	**Vehicular Growth Rate (%)**	**Vehicular Growth Multiplier**	**Pedestrian Growth Rate (%)**	**Pedestrian Growth Multiplier**	**Number of Legs/ Approaches**
OY with BIG	N	2028	14.53%	1.502		1.00	3
IY with BIG	Y	2033	8.97%	1.988		1.00	3
HY with BIG	Y	2048	5.50%	3.423		1.00	3
				1.000		1.00	
				1.000		1.00	
Include ITE Trip Generation for any of the above scenarios?			Yes				

Warrant Information	
Warrant	**Show in Workbook?**
1 - Eight Hour Vehicular Volume	Yes
2 - Four Hour Vehicular Volume	Yes
3 - Peak Hour	Yes
4 - Pedestrian Volume	
5 - School Crossing	
6 - Coordinated Signal System	
7 - Crash Experience	
8 - Roadway Network	
9 - Intersection Near a Grade Crossing	

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: IY with BIG (2033)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**No**	
Warrant 2, Four-Hour Vehicular Volume	Yes	**No**	
Warrant 3, Peak Hour	Yes	**No**	
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
IY with BIG (2033)	No	No	No						
HY with BIG (2048)	Yes	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

Apply 70% Reduction to Warrant Thresholds? No

Notes:

Lanes	Adjusted Volumes			Condition A							Condition B							Combination A/B											
																		Cond. A				Cond. B				Cond. A			
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%				70%			100%				70%			80%				80%				56%			
				Maj.	Min. 1	Min. 2					Maj.	Min. 1	Min. 2					Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2					
1 / 1				500	150	150					750	75	75					400	120	120		600	60	60					
2+ / 1	X	X		600	150	150					900	75	75					480	120	120		720	60	60					
2+ / 2+	X			600	200	200					900	100	100					480	160	160		720	80	80					
1 / 2+				500	200	200					750	100	100					400	160	160		600	80	80					
HOURS MET				**16**	**1**						**4**	**4**						**17**	**5**			**12**	**12**						
WARRANT SATISFIED (8+ Hours)?				**NO**							**NO**							**NO**											
12:00 AM	275	73	0																										
12:15 AM	211	66	0																										
12:30 AM	195	46	0																										
12:45 AM	181	38	0																										
1:00 AM	177	38	0																										
1:15 AM	167	38	0																										
1:30 AM	171	48	0																										
1:45 AM	178	50	0																										
2:00 AM	179	56	0																										
2:15 AM	181	59	0																										
2:30 AM	167	57	0																										
2:45 AM	167	55	0																										
3:00 AM	175	49	0																										
3:15 AM	217	56	0																										
3:30 AM	233	64	0																										
3:45 AM	255	64	0																										
4:00 AM	278	78	0																										
4:15 AM	453	89	0																										
4:30 AM	489	100	0															X											
4:45 AM	535	114	0																										
5:00 AM	569	114	0																										
5:15 AM	650	125	0	X																									
5:30 AM	654	111	0															X											
5:45 AM	662	103	0																										
6:00 AM	676	101	0																										
6:15 AM	730	92	0	X																		X	X		X				
6:30 AM	754	96	0															X											
6:45 AM	738	108	0																										
7:00 AM	782	102	0																										
7:15 AM	809	110	0	X																		X	X		X				
7:30 AM	843	128	0															X	X		X								
7:45 AM	851	122	0																										
8:00 AM	809	126	0																										
8:15 AM	789	130	0	X																		X	X		X				
8:30 AM	821	134	0															X	X		X								
8:45 AM	890	132	0																										
9:00 AM	924	152	0								X	X		X															
9:15 AM	887	165	0	X	X		X															X	X		X				
9:30 AM	835	165	0															X	X		X								
9:45 AM	781	189	0																										
10:00 AM	747	169	0																										
10:15 AM	788	141	0	X																		X	X		X				
10:30 AM	776	131	0															X	X		X								
10:45 AM	786	105	0																										
11:00 AM	795	93	0																										
11:15 AM	825	95	0	X																		X	X		X				
11:30 AM	821	99	0															X											
11:45 AM	809	109	0																										

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

Apply 70% Reduction to Warrant Thresholds? No

Notes:

Lanes	Adjusted Volumes			Condition A							Condition B							Combination A/B											
				100%				70%			100%				70%			Cond. A 80%				Cond. B 80%				Cond. A 56%				Cond. B 56%			
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2							
1 / 1				500	150	150					750	75	75					400	120	120		600	60	60							
2+ / 1	X	X		600	150	150					900	75	75					480	120	120		720	60	60							
2+ / 2+	X			600	200	200					900	100	100					480	160	160		720	80	80							
1 / 2+				500	200	200					750	100	100					400	160	160		600	80	80							
HOURS MET				16	1						4	4						17	5			12	12								
WARRANT SATISFIED (8+ Hours)?				NO							NO							NO												
12:00 PM	773	117	0																											
12:15 PM	743	119	0	X																		X	X		X					
12:30 PM	739	107	0															X												
12:45 PM	747	113	0																											
1:00 PM	755	113	0																											
1:15 PM	758	109	0	X																		X	X		X					
1:30 PM	762	109	0															X												
1:45 PM	744	99	0																											
2:00 PM	770	101	0																											
2:15 PM	879	91	0	X																		X	X		X					
2:30 PM	967	83	0								X	X		X				X												
2:45 PM	1033	71	0																											
3:00 PM	1074	67	0																											
3:15 PM	1046	70	0	X																		X	X		X					
3:30 PM	1058	94	0								X	X		X				X												
3:45 PM	1062	110	0																											
4:00 PM	1060	124	0																											
4:15 PM	1025	129	0	X																		X	X		X					
4:30 PM	993	125	0								X	X		X				X	X		X									
4:45 PM	991	111	0																											
5:00 PM	1015	105	0																											
5:15 PM	848	99	0	X																		X	X		X					
5:30 PM	850	85	0															X												
5:45 PM	830	103	0																											
6:00 PM	812	103	0																											
6:15 PM	716	111	0	X																										
6:30 PM	668	115	0															X												
6:45 PM	660	107	0																											
7:00 PM	632	109	0																											
7:15 PM	613	95	0	X																										
7:30 PM	589	99	0															X												
7:45 PM	556	85	0																											
8:00 PM	552	81	0																											
8:15 PM	649	89	0	X																										
8:30 PM	679	79	0															X												
8:45 PM	671	95	0																											
9:00 PM	618	105	0																											
9:15 PM	514	94	0																											
9:30 PM	456	88	0																											
9:45 PM	430	72	0																											
10:00 PM	430	58	0																											
10:15 PM	417	59	0																											
10:30 PM	383	63	0																											
10:45 PM	343	61	0																											
11:00 PM	295	51	0																											
11:15 PM	94	34	0																											
11:30 PM	62	16	0																											
11:45 PM	30	8	0																											

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

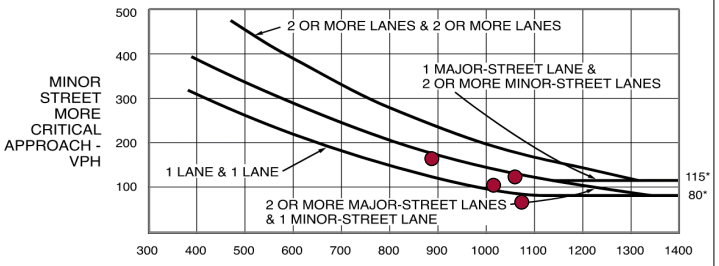
Apply 70% Reduction to Warrant Thresholds? No

Total Number of Unique Hours Met on Figure 4C-1	0
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	N/A

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
12:00 AM	169	106	73	0	275		
12:15 AM	131	80	66	0	211		
12:30 AM	121	74	46	0	195		
12:45 AM	111	70	38	0	181		
1:00 AM	107	70	38	0	177		
1:15 AM	110	57	38	0	167		
1:30 AM	102	69	48	0	171		
1:45 AM	104	74	50	0	178		
2:00 AM	110	69	56	0	179		
2:15 AM	110	71	59	0	181		
2:30 AM	106	61	57	0	167		
2:45 AM	110	57	55	0	167		
3:00 AM	108	67	49	0	175		
3:15 AM	125	92	56	0	217		
3:30 AM	135	98	64	0	233		
3:45 AM	143	112	64	0	255		
4:00 AM	164	114	78	0	278		
4:15 AM	266	187	89	0	453		
4:30 AM	284	205	100	0	489		
4:45 AM	316	219	114	0	535		
5:00 AM	330	239	114	0	569		
5:15 AM	413	237	125	0	650		
5:30 AM	413	241	111	0	654		
5:45 AM	403	259	103	0	662		
6:00 AM	411	265	101	0	676		
6:15 AM	423	307	92	0	730		
6:30 AM	433	321	96	0	754		
6:45 AM	435	303	108	0	738		
7:00 AM	447	335	102	0	782		
7:15 AM	441	368	110	0	809		
7:30 AM	453	390	128	0	843		
7:45 AM	465	386	122	0	851		
8:00 AM	451	358	126	0	809		
8:15 AM	452	337	130	0	789		
8:30 AM	492	329	134	0	821		
8:45 AM	533	357	132	0	890		
9:00 AM	557	367	152	0	924		
9:15 AM	515	372	165	0	887		
9:30 AM	481	354	165	0	835		
9:45 AM	435	346	189	0	781		
10:00 AM	407	340	169	0	747		
10:15 AM	421	367	141	0	788		
10:30 AM	401	375	131	0	776		
10:45 AM	407	379	105	0	786		
11:00 AM	411	384	93	0	795		
11:15 AM	442	383	95	0	825		
11:30 AM	446	375	99	0	821		
11:45 AM	440	369	109	0	809		
12:00 PM	418	355	117	0	773		
12:15 PM	377	366	119	0	743		
12:30 PM	381	358	107	0	739		
12:45 PM	389	358	113	0	747		
1:00 PM	409	346	113	0	755		
1:15 PM	422	336	109	0	758		
1:30 PM	426	336	109	0	762		
1:45 PM	422	322	99	0	744		
2:00 PM	426	344	101	0	770		
2:15 PM	416	463	91	0	879		
2:30 PM	452	515	83	0	967		

Legend
● Minor Street 1 (EB)

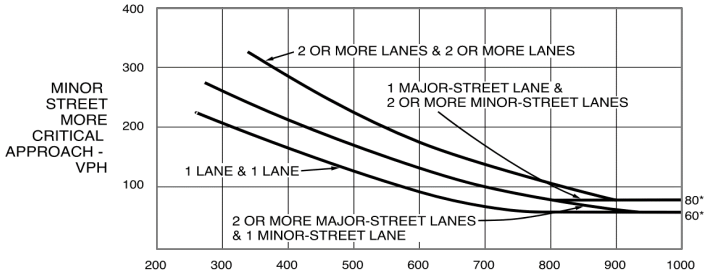
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

Apply 70% Reduction to Warrant Thresholds? No

Total Number of Unique Hours Met on Figure 4C-1	0
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	N/A

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
2:45 PM	462	571	71	0	1033		
3:00 PM	484	590	67	0	1074		
3:15 PM	484	562	70	0	1046		
3:30 PM	492	566	94	0	1058		
3:45 PM	522	540	110	0	1062		
4:00 PM	518	542	124	0	1060		
4:15 PM	523	502	129	0	1025		
4:30 PM	515	478	125	0	993		
4:45 PM	521	470	111	0	991		
5:00 PM	539	476	105	0	1015		
5:15 PM	447	401	99	0	848		
5:30 PM	449	401	85	0	850		
5:45 PM	435	395	103	0	830		
6:00 PM	433	379	103	0	812		
6:15 PM	446	270	111	0	716		
6:30 PM	430	238	115	0	668		
6:45 PM	422	238	107	0	660		
7:00 PM	414	218	109	0	632		
7:15 PM	399	214	95	0	613		
7:30 PM	375	214	99	0	589		
7:45 PM	349	207	85	0	556		
8:00 PM	347	205	81	0	552		
8:15 PM	367	282	89	0	649		
8:30 PM	401	278	79	0	679		
8:45 PM	407	264	95	0	671		
9:00 PM	373	245	105	0	618		
9:15 PM	348	166	94	0	514		
9:30 PM	306	150	88	0	456		
9:45 PM	286	144	72	0	430		
10:00 PM	290	140	58	0	430		
10:15 PM	267	150	59	0	417		
10:30 PM	241	142	63	0	383		
10:45 PM	215	128	61	0	343		
11:00 PM	181	114	51	0	295		
11:15 PM	74	20	34	0	94		
11:30 PM	50	12	16	0	62		
11:45 PM	26	4	8	0	30		

Legend
● Minor Street 1 (EB)

Top Hours for Figure 4C-1 - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	4:00 PM	5:00 PM	1060	124
2nd Highest Hour	9:15 AM	10:15 AM	887	165
3rd Highest Hour	5:00 PM	6:00 PM	1015	105
4th Highest Hour	3:00 PM	4:00 PM	1074	67

Top Hours for Figure 4C-1 - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	N/A	N/A	N/A	N/A
2nd Highest Hour	N/A	N/A	N/A	N/A
3rd Highest Hour	N/A	N/A	N/A	N/A
4th Highest Hour	N/A	N/A	N/A	N/A

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **No**

A1: During the hour of any of the purple highlighted rows, does the total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equal or exceed 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach? **No**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	275	73	0		
12:15 AM	211	66	0		
12:30 AM	195	46	0		
12:45 AM	181	38	0		
1:00 AM	177	38	0		
1:15 AM	167	38	0		
1:30 AM	171	48	0		
1:45 AM	178	50	0		
2:00 AM	179	56	0		
2:15 AM	181	59	0		
2:30 AM	167	57	0		
2:45 AM	167	55	0		
3:00 AM	175	49	0		
3:15 AM	217	56	0		
3:30 AM	233	64	0		
3:45 AM	255	64	0		
4:00 AM	278	78	0		
4:15 AM	453	89	0		
4:30 AM	489	100	0		
4:45 AM	535	114	0	Y	
5:00 AM	569	114	0	Y	Y
5:15 AM	650	125	0	Y	Y
5:30 AM	654	111	0	Y	Y
5:45 AM	662	103	0	Y	Y
6:00 AM	676	101	0	Y	Y
6:15 AM	730	92	0		Y
6:30 AM	754	96	0		Y
6:45 AM	738	108	0	Y	Y
7:00 AM	782	102	0	Y	Y
7:15 AM	809	110	0	Y	Y
7:30 AM	843	128	0	Y	Y
7:45 AM	851	122	0	Y	Y
8:00 AM	809	126	0	Y	Y
8:15 AM	789	130	0	Y	Y
8:30 AM	821	134	0	Y	Y
8:45 AM	890	132	0	Y	Y
9:00 AM	924	152	0	Y	Y
9:15 AM	887	165	0	Y	Y
9:30 AM	835	165	0	Y	Y
9:45 AM	781	189	0	Y	Y
10:00 AM	747	169	0	Y	Y
10:15 AM	788	141	0	Y	Y
10:30 AM	776	131	0	Y	Y
10:45 AM	786	105	0	Y	Y
11:00 AM	795	93	0		Y
11:15 AM	825	95	0		Y
11:30 AM	821	99	0		Y
11:45 AM	809	109	0	Y	Y

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

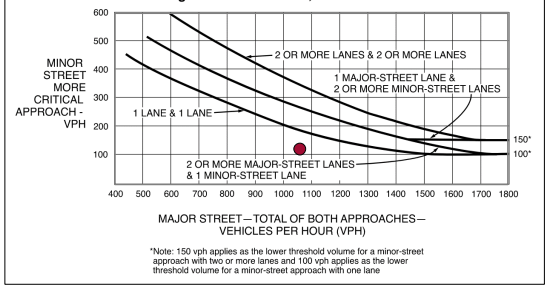
Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (EB)						
4C-3	4:00 PM	5:00 PM	1060	124	266	Not Met
Minor Street 2 (WB)						
4C-3	N/A	N/A	N/A	N/A	N/A	Not Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
● Minor Street 1 (EB)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

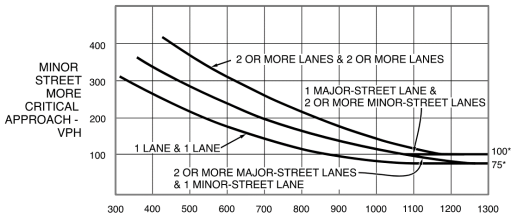
Apply 70% Reduction to Warrant Thresholds? **No**

A1: During the hour of any of the purple highlighted rows, does the total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equal or exceed 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach? **No**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	773	117	0	Y	Y
12:15 PM	743	119	0	Y	Y
12:30 PM	739	107	0	Y	Y
12:45 PM	747	113	0	Y	Y
1:00 PM	755	113	0	Y	Y
1:15 PM	758	109	0	Y	Y
1:30 PM	762	109	0	Y	Y
1:45 PM	744	99	0		Y
2:00 PM	770	101	0	Y	Y
2:15 PM	879	91	0		Y
2:30 PM	967	83	0		Y
2:45 PM	1033	71	0		Y
3:00 PM	1074	67	0		Y
3:15 PM	1046	70	0		Y
3:30 PM	1058	94	0		Y
3:45 PM	1062	110	0	Y	Y
4:00 PM	1060	124	0	Y	Y
4:15 PM	1025	129	0	Y	Y
4:30 PM	993	125	0	Y	Y
4:45 PM	991	111	0	Y	Y
5:00 PM	1015	105	0	Y	Y
5:15 PM	848	99	0		Y
5:30 PM	850	85	0		Y
5:45 PM	830	103	0	Y	Y
6:00 PM	812	103	0	Y	Y
6:15 PM	716	111	0	Y	Y
6:30 PM	668	115	0	Y	Y
6:45 PM	660	107	0	Y	Y
7:00 PM	632	109	0	Y	Y
7:15 PM	613	95	0		Y
7:30 PM	589	99	0		Y
7:45 PM	556	85	0		
8:00 PM	552	81	0		
8:15 PM	649	89	0		Y
8:30 PM	679	79	0		Y
8:45 PM	671	95	0		Y
9:00 PM	618	105	0	Y	Y
9:15 PM	514	94	0		
9:30 PM	456	88	0		
9:45 PM	430	72	0		
10:00 PM	430	58	0		
10:15 PM	417	59	0		
10:30 PM	383	63	0		
10:45 PM	343	61	0		
11:00 PM	295	51	0		
11:15 PM	94	34	0		
11:30 PM	62	16	0		
11:45 PM	30	8	0		

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: HY with BIG (2048)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**Yes**	Condition A was met. Condition B was met. Combination of A/B (80%) was met.
Warrant 2, Four-Hour Vehicular Volume	Yes	**Yes**	Figure 4C-1 (100%).
Warrant 3, Peak Hour	Yes	**Yes**	Figure 4C-3 (100%).
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
IY with BIG (2033)	No	No	No						
HY with BIG (2048)	Yes	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

Apply 70% Reduction to Warrant Thresholds? No

Notes: Condition A was met. Condition B was met. Combination of A/B (80%) was met.

Lanes	Adjusted Volumes			Condition A							Condition B							Combination A/B											
				100%				70%			100%				70%			Cond. A 80%				Cond. B 80%				Cond. A 56%				Cond. B 56%			
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	
1 / 1				500	150	150					750	75	75					400	120	120		600	60	60									
2+ / 1	X	X		600	150	150					900	75	75					480	120	120		720	60	60									
2+ / 2+	X			600	200	200					900	100	100					480	160	160		720	80	80									
1 / 2+				500	200	200					750	100	100					400	160	160		600	80	80									
HOURS MET				**19**	**17**						**16**	**16**						**19**	**18**			**17**	**17**										
WARRANT SATISFIED (8+ Hours)?				**YES**							**YES**							**YES**															
12:00 AM	405	126	0																														
12:15 AM	327	114	0																														
12:30 AM	300	80	0																														
12:45 AM	276	66	0																														
1:00 AM	269	66	0																														
1:15 AM	253	66	0																														
1:30 AM	261	83	0																														
1:45 AM	274	87	0																														
2:00 AM	274	97	0																														
2:15 AM	274	102	0																														
2:30 AM	250	98	0																														
2:45 AM	250	95	0																														
3:00 AM	264	84	0																														
3:15 AM	320	97	0																														
3:30 AM	347	111	0																														
3:45 AM	385	111	0																														
4:00 AM	427	135	0																														
4:15 AM	649	155	0	X	X		X											X	X		X												
4:30 AM	711	175	0																														
4:45 AM	790	199	0																			X	X		X								
5:00 AM	848	199	0																														
5:15 AM	924	219	0	X	X		X				X	X		X				X	X		X												
5:30 AM	931	195	0																														
5:45 AM	945	181	0																			X	X		X								
6:00 AM	969	178	0																														
6:15 AM	1049	163	0	X	X		X				X	X		X				X	X		X												
6:30 AM	1090	169	0																														
6:45 AM	1063	190	0																			X	X		X								
7:00 AM	1138	180	0																														
7:15 AM	1192	194	0	X	X		X				X	X		X				X	X		X												
7:30 AM	1250	225	0																														
7:45 AM	1264	214	0																			X	X		X								
8:00 AM	1192	221	0																														
8:15 AM	1171	227	0	X	X		X				X	X		X				X	X		X												
8:30 AM	1226	234	0																														
8:45 AM	1345	230	0																			X	X		X								
9:00 AM	1404	265	0																														
9:15 AM	1366	287	0	X	X		X				X	X		X				X	X		X												
9:30 AM	1276	287	0																														
9:45 AM	1184	328	0																			X	X		X								
10:00 AM	1126	294	0																														
10:15 AM	1167	246	0	X	X		X				X	X		X				X	X		X												
10:30 AM	1146	229	0																														
10:45 AM	1163	184	0																			X	X		X								
11:00 AM	1180	164	0																														
11:15 AM	1199	168	0	X	X		X				X	X		X				X	X		X												
11:30 AM	1192	175	0																														
11:45 AM	1171	192	0																			X	X		X								

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

Apply 70% Reduction to Warrant Thresholds? No

Notes: Condition A was met. Condition B was met. Combination of A/B (80%) was met.

Lanes	Adjusted Volumes			Condition A							Condition B							Combination A/B											
				100%				70%			100%				70%			Cond. A 80%				Cond. B 80%				Cond. A 56%				Cond. B 56%			
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	
1 / 1				500	150	150					750	75	75					400	120	120		600	60	60									
2+ / 1	X	X		600	150	150					900	75	75					480	120	120		720	60	60									
2+ / 2+	X			600	200	200					900	100	100					480	160	160		720	80	80									
1 / 2+				500	200	200					750	100	100					400	160	160		600	80	80									
HOURS MET				19	17						16	16						19	18			17	17									
WARRANT SATISFIED (8+ Hours)?				YES							YES							YES														
12:00 PM	1110	206	0																													
12:15 PM	1077	208	0	X	X		X				X	X		X				X	X		X											
12:30 PM	1071	188	0																													
12:45 PM	1085	198	0																			X	X		X							
1:00 PM	1098	198	0																													
1:15 PM	1085	191	0	X	X		X				X	X		X				X	X		X											
1:30 PM	1091	191	0																													
1:45 PM	1061	174	0																			X	X		X							
2:00 PM	1105	178	0																													
2:15 PM	1254	159	0	X	X		X				X	X		X				X	X		X											
2:30 PM	1404	145	0																													
2:45 PM	1518	125	0																			X	X		X							
3:00 PM	1589	118	0																													
3:15 PM	1586	124	0	X							X	X		X				X	X		X											
3:30 PM	1607	165	0																													
3:45 PM	1614	192	0																			X	X		X							
4:00 PM	1610	216	0																													
4:15 PM	1600	224	0	X	X		X				X	X		X				X	X		X											
4:30 PM	1545	217	0																													
4:45 PM	1541	193	0																			X	X		X							
5:00 PM	1582	183	0																													
5:15 PM	1351	171	0	X	X		X				X	X		X				X	X		X											
5:30 PM	1354	147	0																													
5:45 PM	1319	178	0																			X	X		X							
6:00 PM	1289	178	0																													
6:15 PM	1178	192	0	X	X		X				X	X		X				X	X		X											
6:30 PM	1096	199	0																													
6:45 PM	1082	185	0																			X	X		X							
7:00 PM	1034	189	0																													
7:15 PM	1011	164	0	X	X		X				X	X		X				X	X		X											
7:30 PM	970	171	0																													
7:45 PM	913	147	0																			X	X		X							
8:00 PM	905	140	0																													
8:15 PM	1006	155	0	X	X		X				X	X		X				X	X		X											
8:30 PM	1058	137	0																													
8:45 PM	1044	165	0																			X	X		X							
9:00 PM	952	182	0																													
9:15 PM	803	163	0	X	X		X											X	X		X											
9:30 PM	703	153	0																													
9:45 PM	659	126	0																													
10:00 PM	659	102	0																													
10:15 PM	635	103	0	X														X														
10:30 PM	577	110	0																													
10:45 PM	508	106	0																													
11:00 PM	427	89	0																													
11:15 PM	161	58	0																													
11:30 PM	107	27	0																													
11:45 PM	51	14	0																													

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

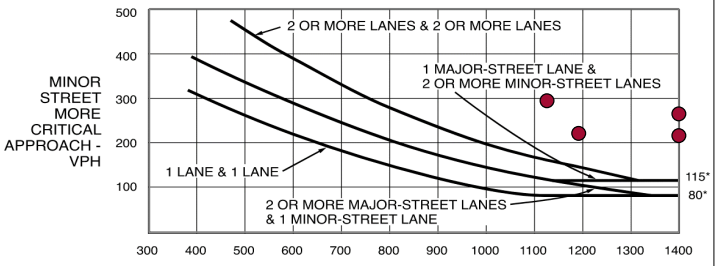
Apply 70% Reduction to Warrant Thresholds? No

Total Number of Unique Hours Met on Figure 4C-1	16
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	N/A

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
12:00 AM	257	148	126	0	405		
12:15 AM	210	117	114	0	327		
12:30 AM	193	107	80	0	300		
12:45 AM	176	100	66	0	276		
1:00 AM	169	100	66	0	269		
1:15 AM	173	80	66	0	253		
1:30 AM	160	101	83	0	261		
1:45 AM	163	111	87	0	274		
2:00 AM	173	101	97	0	274		
2:15 AM	169	105	102	0	274		
2:30 AM	162	88	98	0	250		
2:45 AM	169	81	95	0	250		
3:00 AM	166	98	84	0	264		
3:15 AM	187	133	97	0	320		
3:30 AM	204	143	111	0	347		
3:45 AM	218	167	111	0	385		
4:00 AM	256	171	135	0	427		
4:15 AM	382	267	155	0	649		
4:30 AM	413	298	175	0	711		
4:45 AM	468	322	199	0	790		
5:00 AM	492	356	199	0	848	Min. 1 Met	
5:15 AM	577	347	219	0	924		
5:30 AM	577	354	195	0	931		
5:45 AM	560	385	181	0	945		
6:00 AM	574	395	178	0	969	Min. 1 Met	
6:15 AM	603	446	163	0	1049		
6:30 AM	620	470	169	0	1090		
6:45 AM	624	439	190	0	1063		
7:00 AM	644	494	180	0	1138	Min. 1 Met	
7:15 AM	645	547	194	0	1192		
7:30 AM	665	585	225	0	1250		
7:45 AM	686	578	214	0	1264		
8:00 AM	662	530	221	0	1192	Min. 1 Met	
8:15 AM	665	506	227	0	1171		
8:30 AM	733	493	234	0	1226		
8:45 AM	805	540	230	0	1345		
9:00 AM	846	558	265	0	1404	Min. 1 Met	
9:15 AM	804	562	287	0	1366		
9:30 AM	745	531	287	0	1276		
9:45 AM	667	517	328	0	1184		
10:00 AM	619	507	294	0	1126	Min. 1 Met	
10:15 AM	629	538	246	0	1167		
10:30 AM	595	551	229	0	1146		
10:45 AM	605	558	184	0	1163		
11:00 AM	612	568	164	0	1180	Min. 1 Met	
11:15 AM	638	561	168	0	1199		
11:30 AM	645	547	175	0	1192		
11:45 AM	634	537	192	0	1171		
12:00 PM	597	513	206	0	1110	Min. 1 Met	
12:15 PM	540	537	208	0	1077		
12:30 PM	547	524	188	0	1071		
12:45 PM	561	524	198	0	1085		
1:00 PM	595	503	198	0	1098	Min. 1 Met	
1:15 PM	606	479	191	0	1085		
1:30 PM	612	479	191	0	1091		
1:45 PM	606	455	174	0	1061		
2:00 PM	612	493	178	0	1105	Min. 1 Met	
2:15 PM	612	642	159	0	1254		
2:30 PM	673	731	145	0	1404		

Legend
● Minor Street 1 (EB)

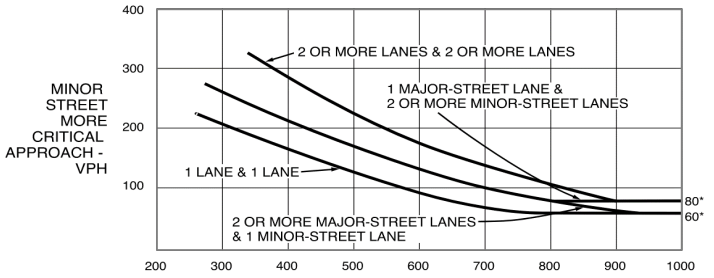
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

Apply 70% Reduction to Warrant Thresholds? No

Total Number of Unique Hours Met on Figure 4C-1	16
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	N/A

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
2:45 PM	691	827	125	0	1518		
3:00 PM	728	861	118	0	1589	Min. 1 Met	
3:15 PM	752	834	124	0	1586		
3:30 PM	766	841	165	0	1607		
3:45 PM	817	797	192	0	1614		
4:00 PM	810	800	216	0	1610	Min. 1 Met	
4:15 PM	842	758	224	0	1600		
4:30 PM	828	717	217	0	1545		
4:45 PM	838	703	193	0	1541		
5:00 PM	869	713	183	0	1582	Min. 1 Met	
5:15 PM	735	616	171	0	1351		
5:30 PM	738	616	147	0	1354		
5:45 PM	714	605	178	0	1319		
6:00 PM	711	578	178	0	1289	Min. 1 Met	
6:15 PM	743	435	192	0	1178		
6:30 PM	716	380	199	0	1096		
6:45 PM	702	380	185	0	1082		
7:00 PM	688	346	189	0	1034	Min. 1 Met	
7:15 PM	664	347	164	0	1011		
7:30 PM	623	347	171	0	970		
7:45 PM	579	334	147	0	913		
8:00 PM	575	330	140	0	905		
8:15 PM	592	414	155	0	1006	Min. 1 Met	
8:30 PM	651	407	137	0	1058		
8:45 PM	661	383	165	0	1044		
9:00 PM	603	349	182	0	952		
9:15 PM	553	250	163	0	803		
9:30 PM	481	222	153	0	703		
9:45 PM	447	212	126	0	659		
10:00 PM	454	205	102	0	659		
10:15 PM	420	215	103	0	635		
10:30 PM	376	201	110	0	577		
10:45 PM	331	177	106	0	508		
11:00 PM	273	154	89	0	427		
11:15 PM	127	34	58	0	161		
11:30 PM	86	21	27	0	107		
11:45 PM	44	7	14	0	51		

Legend
● Minor Street 1 (EB)

Top Hours for Figure 4C-1 - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	9:00 AM	10:00 AM	1404	265
2nd Highest Hour	10:00 AM	11:00 AM	1126	294
3rd Highest Hour	4:00 PM	5:00 PM	1610	216
4th Highest Hour	8:00 AM	9:00 AM	1192	221

Top Hours for Figure 4C-1 - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	N/A	N/A	N/A	N/A
2nd Highest Hour	N/A	N/A	N/A	N/A
3rd Highest Hour	N/A	N/A	N/A	N/A
4th Highest Hour	N/A	N/A	N/A	N/A

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **No**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	405	126	0	Y	
12:15 AM	327	114	0	Y	
12:30 AM	300	80	0		
12:45 AM	276	66	0		
1:00 AM	269	66	0		
1:15 AM	253	66	0		
1:30 AM	261	83	0		
1:45 AM	274	87	0		
2:00 AM	274	97	0		
2:15 AM	274	102	0	Y	
2:30 AM	250	98	0		
2:45 AM	250	95	0		
3:00 AM	264	84	0		
3:15 AM	320	97	0		
3:30 AM	347	111	0	Y	
3:45 AM	385	111	0	Y	
4:00 AM	427	135	0	Y	
4:15 AM	649	155	0	Y	Y
4:30 AM	711	175	0	Y	Y
4:45 AM	790	199	0	Y	Y
5:00 AM	848	199	0	Y	Y
5:15 AM	924	219	0	Y	Y
5:30 AM	931	195	0	Y	Y
5:45 AM	945	181	0	Y	Y
6:00 AM	969	178	0	Y	Y
6:15 AM	1049	163	0	Y	Y
6:30 AM	1090	169	0	Y	Y
6:45 AM	1063	190	0	Y	Y
7:00 AM	1138	180	0	Y	Y
7:15 AM	1192	194	0	Y	Y
7:30 AM	1250	225	0	Y	Y
7:45 AM	1264	214	0	Y	Y
8:00 AM	1192	221	0	Y	Y
8:15 AM	1171	227	0	Y	Y
8:30 AM	1226	234	0	Y	Y
8:45 AM	1345	230	0	Y	Y
9:00 AM	1404	265	0	Y	Y
9:15 AM	1366	287	0	Y	Y
9:30 AM	1276	287	0	Y	Y
9:45 AM	1184	328	0	Y	Y
10:00 AM	1126	294	0	Y	Y
10:15 AM	1167	246	0	Y	Y
10:30 AM	1146	229	0	Y	Y
10:45 AM	1163	184	0	Y	Y
11:00 AM	1180	164	0	Y	Y
11:15 AM	1199	168	0	Y	Y
11:30 AM	1192	175	0	Y	Y
11:45 AM	1171	192	0	Y	Y

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

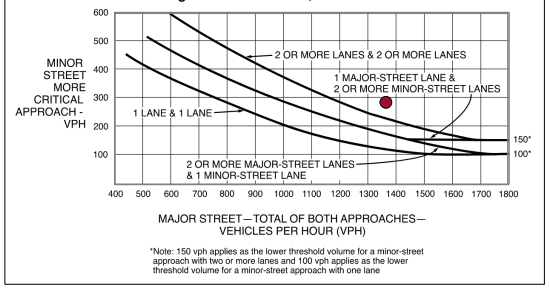
Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (EB)						
4C-3	9:15 AM	10:15 AM	1366	287	172	Met
Minor Street 2 (WB)						
4C-3	N/A	N/A	N/A	N/A	N/A	Not Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
● Minor Street 1 (EB)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd & High Desert Dr
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

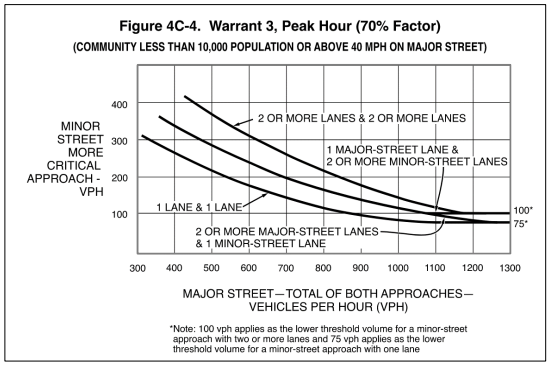
Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	N/A

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **No**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	1110	206	0	Y	Y
12:15 PM	1077	208	0	Y	Y
12:30 PM	1071	188	0	Y	Y
12:45 PM	1085	198	0	Y	Y
1:00 PM	1098	198	0	Y	Y
1:15 PM	1085	191	0	Y	Y
1:30 PM	1091	191	0	Y	Y
1:45 PM	1061	174	0	Y	Y
2:00 PM	1105	178	0	Y	Y
2:15 PM	1254	159	0	Y	Y
2:30 PM	1404	145	0	Y	Y
2:45 PM	1518	125	0	Y	Y
3:00 PM	1589	118	0	Y	Y
3:15 PM	1586	124	0	Y	Y
3:30 PM	1607	165	0	Y	Y
3:45 PM	1614	192	0	Y	Y
4:00 PM	1610	216	0	Y	Y
4:15 PM	1600	224	0	Y	Y
4:30 PM	1545	217	0	Y	Y
4:45 PM	1541	193	0	Y	Y
5:00 PM	1582	183	0	Y	Y
5:15 PM	1351	171	0	Y	Y
5:30 PM	1354	147	0	Y	Y
5:45 PM	1319	178	0	Y	Y
6:00 PM	1289	178	0	Y	Y
6:15 PM	1178	192	0	Y	Y
6:30 PM	1096	199	0	Y	Y
6:45 PM	1082	185	0	Y	Y
7:00 PM	1034	189	0	Y	Y
7:15 PM	1011	164	0	Y	Y
7:30 PM	970	171	0	Y	Y
7:45 PM	913	147	0	Y	Y
8:00 PM	905	140	0	Y	Y
8:15 PM	1006	155	0	Y	Y
8:30 PM	1058	137	0	Y	Y
8:45 PM	1044	165	0	Y	Y
9:00 PM	952	182	0	Y	Y
9:15 PM	803	163	0	Y	Y
9:30 PM	703	153	0	Y	Y
9:45 PM	659	126	0	Y	Y
10:00 PM	659	102	0	Y	Y
10:15 PM	635	103	0	Y	Y
10:30 PM	577	110	0	Y	Y
10:45 PM	508	106	0	Y	
11:00 PM	427	89	0		
11:15 PM	161	58	0		
11:30 PM	107	27	0		
11:45 PM	51	14	0		



TPTO Tools

Signal Warrant Analysis Tool

Questions/Feedback
Click Here to Email

Date of Last Update
9/25/2024

All input cells are highlighted orange throughout this tool — **INPUT CELL**

SET UP WORKBOOK
Click to generate necessary analysis tabs based on inputs

RESET WORKBOOK
Click to re-hide all workbook tabs except "Home"

CLEAR USER INPUTS
Click to clear all user inputs on this tab

Study Information	
Intersection Name	Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction	Barstow, CA
85th-percentile speed or posted speed limit on the Major Street	40 mph

Count Data Information	
Question	**Answer**
What year were counts collected?	2025
Counts in 15-minute or hourly increments?	15-Minute
Counts by movement or by approach?	By Movement
Counts by vehicle class (heavy vehicles vs. passenger vehicles)?	No
Do Not Enter Value	
Were pedestrian counts collected?	No
Were bicycle counts collected?	No
Do Not Enter Value	

Scenario Information

Scenario Name	Include Scenario?	Scenario Year	Vehicular Growth Rate (%)	Vehicular Growth Multiplier	Pedestrian Growth Rate (%)	Pedestrian Growth Multiplier	Number of Legs/ Approaches
OY with BIG	N	2028	9.59%	1.316		1.00	4
IY with BIG	Y	2033	6.32%	1.632		1.00	4
HY with BIG	Y	2048	4.21%	2.581		1.00	4
				1.000		1.00	
				1.000		1.00	
Include ITE Trip Generation for any of the above scenarios?			Yes				

Warrant Information	
Warrant	**Show in Workbook?**
1 - Eight Hour Vehicular Volume	Yes
2 - Four Hour Vehicular Volume	Yes
3 - Peak Hour	Yes
4 - Pedestrian Volume	
5 - School Crossing	
6 - Coordinated Signal System	
7 - Crash Experience	
8 - Roadway Network	
9 - Intersection Near a Grade Crossing	

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: IY with BIG (2033)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**No**	
Warrant 2, Four-Hour Vehicular Volume	Yes	**No**	
Warrant 3, Peak Hour	Yes	**No**	
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
IY with BIG (2033)	No	No	No						
HY with BIG (2048)	No	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? No

Notes:

Lanes	Adjusted Volumes			Condition A						Condition B						Combination A/B											
																Cond. A				Cond. B				Cond. A			
Major/Minor	Major Street (EB/WB)	Minor Street 1 (NB)	Minor Street 2 (SB)	100%			70%			100%			70%			80%				80%				56%			
				Maj.	Min. 1	Min. 2				Maj.	Min. 1	Min. 2				Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2					
1 / 1				500	150	150				750	75	75				400	120	120		600	60	60					
2+ / 1	X	X	X	600	150	150				900	75	75				480	120	120		720	60	60					
2+ / 2+	X			600	200	200				900	100	100				480	160	160		720	80	80					
1 / 2+				500	200	200				750	100	100				400	160	160		600	80	80					
HOURS MET				0	0					0	0					2	2			0	0						
WARRANT SATISFIED (8+ Hours)?				NO						NO						NO											
12:00 AM	159	139	85																								
12:15 AM	114	131	82																								
12:30 AM	110	127	60																								
12:45 AM	107	111	54																								
1:00 AM	107	100	57																								
1:15 AM	100	93	52																								
1:30 AM	103	87	60																								
1:45 AM	105	93	69																								
2:00 AM	108	93	70																								
2:15 AM	118	91	77																								
2:30 AM	116	80	75																								
2:45 AM	117	93	69																								
3:00 AM	122	101	69																								
3:15 AM	149	106	73																								
3:30 AM	155	113	85																								
3:45 AM	152	106	95																								
4:00 AM	156	116	111																								
4:15 AM	292	124	134																								
4:30 AM	301	144	157																								
4:45 AM	313	173	183																								
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9:15 AM	396	341	307																								
9:30 AM	389	325	294																								
9:45 AM	373	297	305																								
10:00 AM	348	276	289																								
10:15 AM	403	245	253																								
10:30 AM	400	219	248																								
10:45 AM	412	224	232																								
11:00 AM	440	222	230																								
11:15 AM	493	225	227													X	X	X	X								
11:30 AM	489	233	222																								
11:45 AM	475	211	222																								

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

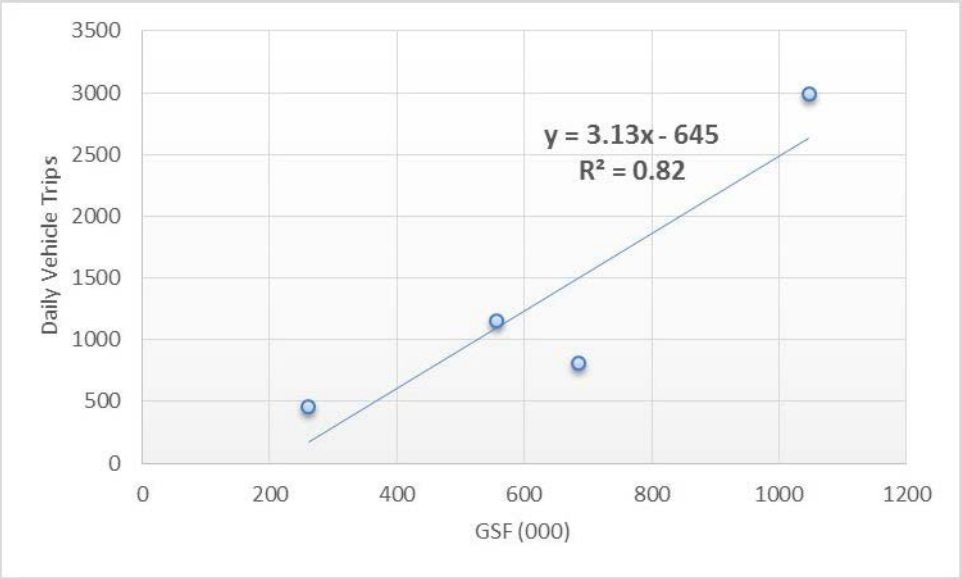
Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? No

Notes:

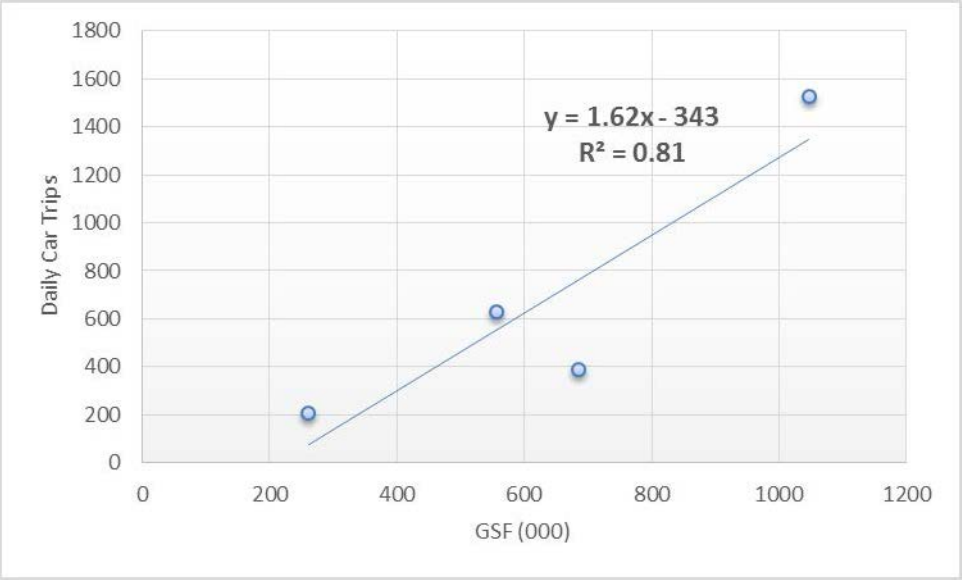
Lanes	Adjusted Volumes			Condition A								Condition B								Combination A/B											
																				Cond. A				Cond. B				Cond. A			
Major/Minor				100%				70%				100%				70%				80%				80%				56%			
	Major Street (EB/WB)	Minor Street 1 (NB)	Minor Street 2 (SB)	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	
1 / 1				500	150	150						750	75	75						400	120	120		600	60	60					
2+ / 1	X	X	X	600	150	150						900	75	75						480	120	120		720	60	60					
2+ / 2+	X			600	200	200						900	100	100						480	160	160		720	80	80					
1 / 2+				500	200	200						750	100	100						400	160	160		600	80	80					
HOURS MET				0	0							0	0							2	2			0	0						
WARRANT SATISFIED (8+ Hours)?				NO								NO								NO											
12:00 PM	454	194	219																												
12:15 PM	422	180	240																												
12:30 PM	428	181	222																												
12:45 PM	438	196	220																												
1:00 PM	444	222	209																												
1:15 PM	474	215	183																												
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2:15 PM	518	260	196																	X	X	X	X								
2:30 PM	515	291	229																												
2:45 PM	528	300	266																												
3:00 PM	532	315	281																												
3:15 PM	451	344	299																												
3:30 PM	452	374	323																												
3:45 PM	454	405	315																												
4:00 PM	476	397	322																												
4:15 PM	388	442	331																												
4:30 PM	385	434	307																												
4:45 PM	380	429	287																												
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5:15 PM	294	424	276																												
5:30 PM	297	431	266																												
5:45 PM	298	421	279																												
6:00 PM	286	416	260																												
6:15 PM	186	428	255																												
6:30 PM	188	393	235																												
6:45 PM	186	395	222																												
7:00 PM	175	382	215																												
7:15 PM	158	380	207																												
7:30 PM	159	359	212																												
7:45 PM	153	343	202																												
8:00 PM	172	331	194																												
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9:00 PM	258	349	170																												
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9:30 PM	236	256	134																												
9:45 PM	219	229	127																												
10:00 PM	202	233	114																												
10:15 PM	193	217	113																												
10:30 PM	175	215	109																												
10:45 PM	176	193	90																												
11:00 PM	181	168	75																												
11:15 PM	29	122	49																												
11:30 PM	18	82	26																												
11:45 PM	10	46	15																												

Figure A1. Correlation between Daily Total Vehicles and Cold Storage GSF (SCAQMD & NAIOP Sites)



Correlation is also exhibited for cars, trucks, and 5+ axle trucks for daily traffic generated at cold storage facilities. Figures A2, A3, and A4 present the data plots for cars, trucks, and 5+ axle trucks, respectively. As recommended in ITE *Trip Generation Handbook* 3rd Edition, the fitted curves should be considered acceptable only within the building site size range in the dataset.

Figure A2. Correlation between Daily Cars and Cold Storage GSF (SCAQMD & NAIOP Sites)



WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? No

Total Number of Unique Hours Met on Figure 4C-1	2
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	N/A

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Eastbound	Westbound	Northbound	Southbound			
2:45 PM	340	188	300	266	528		
3:00 PM	344	188	315	281	532		
3:15 PM	296	155	344	299	451		
3:30 PM	301	151	374	323	452	Min. 1 Met	
3:45 PM	304	150	405	315	454		
4:00 PM	316	160	397	322	476		
4:15 PM	266	122	442	331	388		
4:30 PM	260	125	434	307	385	Min. 1 Met	
4:45 PM	258	122	429	287	380		
5:00 PM	256	114	462	295	370		
5:15 PM	222	72	424	276	294		
5:30 PM	227	70	431	266	297		
5:45 PM	224	74	421	279	298		
6:00 PM	209	77	416	260	286		
6:15 PM	126	60	428	255	186		
6:30 PM	128	60	393	235	188		
6:45 PM	126	60	395	222	186		
7:00 PM	120	55	382	215	175		
7:15 PM	109	49	380	207	158		
7:30 PM	112	47	359	212	159		
7:45 PM	104	49	343	202	153		
8:00 PM	122	50	331	194	172		
8:15 PM	194	76	322	191	270		
8:30 PM	183	74	364	183	257		
8:45 PM	196	69	369	176	265		
9:00 PM	190	68	349	170	258		
9:15 PM	141	79	317	153	220		
9:30 PM	152	84	256	134	236		
9:45 PM	135	84	229	127	219		
10:00 PM	115	87	233	114	202		
10:15 PM	118	75	217	113	193		
10:30 PM	103	72	215	109	175		
10:45 PM	103	73	193	90	176		
11:00 PM	113	68	168	75	181		
11:15 PM	26	3	122	49	29		
11:30 PM	16	2	82	26	18		
11:45 PM	10	0	46	15	10		

Legend
- Minor Street 1 (NB)
- Minor Street 2 (SB)

Top Hours for Figure 4C-1 - Minor Street 1 (NB)

	Start Time	End Time	Major Street	Minor Street
Top Hour	4:30 PM	5:30 PM	385	434
2nd Highest Hour	3:30 PM	4:30 PM	452	374
3rd Highest Hour	5:30 PM	6:30 PM	297	431
4th Highest Hour	9:00 AM	10:00 AM	450	326

Top Hours for Figure 4C-1 - Minor Street 2 (SB)

	Start Time	End Time	Major Street	Minor Street
Top Hour	4:00 PM	5:00 PM	476	322
2nd Highest Hour	3:00 PM	4:00 PM	532	281
3rd Highest Hour	7:30 AM	8:30 AM	458	289
4th Highest Hour	9:00 AM	10:00 AM	450	287

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? **No**

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

A1: During the hour of any of the purple highlighted rows, does the total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equal or exceed 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach? **No**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (EB/WB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (NB) Vehicles Per Hour (VPH)	Minor Street 2 (SB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	159	139	85	Y	
12:15 AM	114	131	82	Y	
12:30 AM	110	127	60	Y	
12:45 AM	107	111	54	Y	
1:00 AM	107	100	57		
1:15 AM	100	93	52		
1:30 AM	103	87	60		
1:45 AM	105	93	69		
2:00 AM	108	93	70		
2:15 AM	118	91	77		
2:30 AM	116	80	75		
2:45 AM	117	93	69		
3:00 AM	122	101	69	Y	
3:15 AM	149	106	73	Y	
3:30 AM	155	113	85	Y	
3:45 AM	152	106	95	Y	
4:00 AM	156	116	111	Y	
4:15 AM	292	124	134	Y	
4:30 AM	301	144	157	Y	
4:45 AM	313	173	183	Y	
5:00 AM	315	189	193	Y	
5:15 AM	420	186	191	Y	
5:30 AM	429	178	188	Y	
5:45 AM	428	165	186	Y	
6:00 AM	433	167	191	Y	
6:15 AM	457	194	189	Y	Y
6:30 AM	441	215	189	Y	Y
6:45 AM	450	215	198	Y	Y
7:00 AM	456	227	217	Y	Y
7:15 AM	446	232	243	Y	Y
7:30 AM	458	227	289	Y	Y
7:45 AM	456	253	276	Y	Y
8:00 AM	461	243	264	Y	Y
8:15 AM	438	250	261	Y	Y
8:30 AM	440	289	251	Y	Y
8:45 AM	446	310	273	Y	Y
9:00 AM	450	326	287	Y	Y
9:15 AM	396	341	307	Y	Y
9:30 AM	389	325	294	Y	Y
9:45 AM	373	297	305	Y	Y
10:00 AM	348	276	289	Y	Y
10:15 AM	403	245	253	Y	Y
10:30 AM	400	219	248	Y	Y
10:45 AM	412	224	232	Y	Y
11:00 AM	440	222	230	Y	Y
11:15 AM	493	225	227	Y	Y
11:30 AM	489	233	222	Y	Y
11:45 AM	475	211	222	Y	Y

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

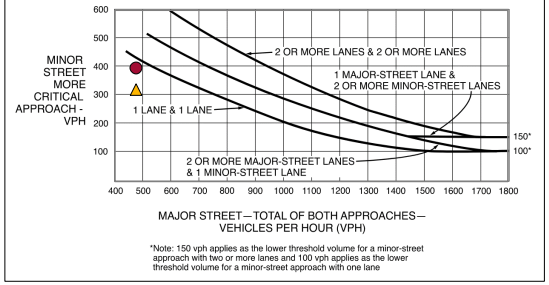
Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (NB)						
4C-3	4:00 PM	5:00 PM	476	397	533	Not Met
Minor Street 2 (SB)						
4C-3	4:00 PM	5:00 PM	476	322	533	Not Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
- Minor Street 1 (NB)
- Minor Street 2 (SB)

Figure 4C-3. Warrant 3, Peak Hour



WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

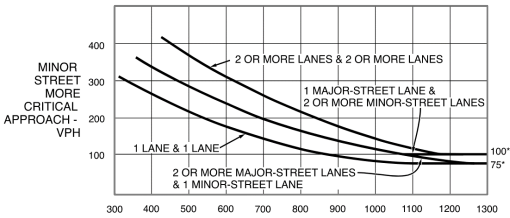
Apply 70% Reduction to Warrant Thresholds? **No**

A1: During the hour of any of the purple highlighted rows, does the total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equal or exceed 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach? **No**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (EB/WB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (NB) Vehicles Per Hour (VPH)	Minor Street 2 (SB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	454	194	219	Y	Y
12:15 PM	422	180	240	Y	Y
12:30 PM	428	181	222	Y	Y
12:45 PM	438	196	220	Y	Y
1:00 PM	444	222	209	Y	Y
1:15 PM	474	215	183	Y	Y
1:30 PM	469	219	188	Y	Y
1:45 PM	457	229	173	Y	Y
2:00 PM	449	242	188	Y	Y
2:15 PM	518	260	196	Y	Y
2:30 PM	515	291	229	Y	Y
2:45 PM	528	300	266	Y	Y
3:00 PM	532	315	281	Y	Y
3:15 PM	451	344	299	Y	Y
3:30 PM	452	374	323	Y	Y
3:45 PM	454	405	315	Y	Y
4:00 PM	476	397	322	Y	Y
4:15 PM	388	442	331	Y	Y
4:30 PM	385	434	307	Y	Y
4:45 PM	380	429	287	Y	Y
5:00 PM	370	462	295	Y	Y
5:15 PM	294	424	276	Y	Y
5:30 PM	297	431	266	Y	Y
5:45 PM	298	421	279	Y	Y
6:00 PM	286	416	260	Y	Y
6:15 PM	186	428	255	Y	Y
6:30 PM	188	393	235	Y	Y
6:45 PM	186	395	222	Y	Y
7:00 PM	175	382	215	Y	
7:15 PM	158	380	207	Y	
7:30 PM	159	359	212	Y	
7:45 PM	153	343	202	Y	
8:00 PM	172	331	194	Y	
8:15 PM	270	322	191	Y	
8:30 PM	257	364	183	Y	Y
8:45 PM	265	369	176	Y	Y
9:00 PM	258	349	170	Y	
9:15 PM	220	317	153	Y	
9:30 PM	236	256	134	Y	
9:45 PM	219	229	127	Y	
10:00 PM	202	233	114	Y	
10:15 PM	193	217	113	Y	
10:30 PM	175	215	109	Y	
10:45 PM	176	193	90	Y	
11:00 PM	181	168	75	Y	
11:15 PM	29	122	49	Y	
11:30 PM	18	82	26		
11:45 PM	10	46	15		

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: HY with BIG (2048)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**No**	
Warrant 2, Four-Hour Vehicular Volume	Yes	**Yes**	Figure 4C-1 (100%).
Warrant 3, Peak Hour	Yes	**Yes**	Figure 4C-3 (100%).
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
IY with BIG (2033)	No	No	No						
HY with BIG (2048)	No	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? No

Notes:

Lanes	Adjusted Volumes			Condition A								Condition B								Combination A/B											
				100%				70%				100%				70%				Cond. A 80%				Cond. B 80%				Cond. A 56%				Cond. B 56%			
Major/Minor	Major Street (EB/WB)	Minor Street 1 (NB)	Minor Street 2 (SB)	Maj.	Min. 1	Min. 2						Maj.	Min. 1	Min. 2						Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2							
1 / 1				500	150	150						750	75	75						400	120	120		600	60	60							
2+ / 1	X	X	X	600	150	150						900	75	75						480	120	120		720	60	60							
2+ / 2+	X			600	200	200						900	100	100						480	160	160		720	80	80							
1 / 2+				500	200	200						750	100	100						400	160	160		600	80	80							
HOURS MET				2	2							0	0							12	12			0	0								
WARRANT SATISFIED (8+ Hours)?				NO								NO								NO											
12:00 AM	198	219	134																												
12:15 AM	152	206	129																												
12:30 AM	147	201	96																												
12:45 AM	142	176	85																												
1:00 AM	142	157	90																												
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6:00 AM	533	263	302																												
6:15 AM	561	307	299																	X	X	X	X								
6:30 AM	535	341	299																												
6:45 AM	550	341	312																												
7:00 AM	559	359	343																												
7:15 AM	549	367	385																	X	X	X	X								
7:30 AM	566	359	457																												
7:45 AM	563	400	436																												
8:00 AM	572	385	418																												
8:15 AM	546	395	413																	X	X	X	X								
8:30 AM	551	457	397																												
8:45 AM	559	490	431																												
9:00 AM	566	516	454																												
9:15 AM	501	539	485																	X	X	X	X								
9:30 AM	491	514	465																												
9:45 AM	466	470	483																												
10:00 AM	426	436	457																												
10:15 AM	490	387	400																	X	X	X	X								
10:30 AM	485	346	392																												
10:45 AM	505	354	367																												
11:00 AM	550	351	364																												
11:15 AM	608	356	359	X	X	X	X													X	X	X	X								
11:30 AM	603	369	351																												
11:45 AM	580	333	351																												

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? No

Notes:

Lanes	Adjusted Volumes			Condition A								Condition B								Combination A/B											
				100%				70%				100%				70%				Cond. A 80%				Cond. B 80%				Cond. A 56%				Cond. B 56%			
Major/Minor	Major Street (EB/WB)	Minor Street 1 (NB)	Minor Street 2 (SB)	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	
1 / 1				500	150	150						750	75	75						400	120	120		600	60	60									
2+ / 1	X	X	X	600	150	150						900	75	75						480	120	120		720	60	60									
2+ / 2+	X			600	200	200						900	100	100						480	160	160		720	80	80									
1 / 2+				500	200	200						750	100	100						400	160	160		600	80	80									
HOURS MET				**2**	**2**							**0**	**0**							**12**	**12**			**0**	**0**										
WARRANT SATISFIED (8+ Hours)?				**NO**								**NO**								**NO**															
12:00 PM	545	307	346																																
12:15 PM	511	284	379																	X	X	X	X												
12:30 PM	520	287	351																																
12:45 PM	536	310	348																																
1:00 PM	546	351	330																																
1:15 PM	577	341	289																	X	X	X	X												
1:30 PM	569	346	297																																
1:45 PM	552	361	274																																
2:00 PM	539	382	297																																
2:15 PM	615	410	310	X	X	X	X													X	X	X	X												
2:30 PM	610	459	361																																
2:45 PM	631	475	421																																
3:00 PM	636	498	444																																
3:15 PM	544	545	472																	X	X	X	X												
3:30 PM	547	591	511																																
3:45 PM	549	640	498																																
4:00 PM	583	627	508																																
4:15 PM	484	699	524																	X	X	X	X												
4:30 PM	479	687	485																																
4:45 PM	471	679	454																																
5:00 PM	455	730	467																																
5:15 PM	380	671	436																																
5:30 PM	385	681	421																																
5:45 PM	385	666	441																																
6:00 PM	367	658	410																																
6:15 PM	253	676	403																																
6:30 PM	256	622	372																																
6:45 PM	253	625	351																																
7:00 PM	235	604	341																																
7:15 PM	215	601	328																																
7:30 PM	218	568	336																																
7:45 PM	207	542	320																																
8:00 PM	238	524	307																																
8:15 PM	340	508	302																																
8:30 PM	320	576	289																																
8:45 PM	333	583	279																																
9:00 PM	320	552	268																																
9:15 PM	285	501	243																																
9:30 PM	310	405	212																																
9:45 PM	282	361	201																																
10:00 PM	256	369	181																																
10:15 PM	242	343	178																																
10:30 PM	213	341	173																																
10:45 PM	216	305	142																																
11:00 PM	224	266	119																																
11:15 PM	46	194	77																																
11:30 PM	29	129	41																																
11:45 PM	15	72	23																																

Figure A3. Correlation between Daily Trucks and Cold Storage GSF (SCAQMD & NAIOP Sites)

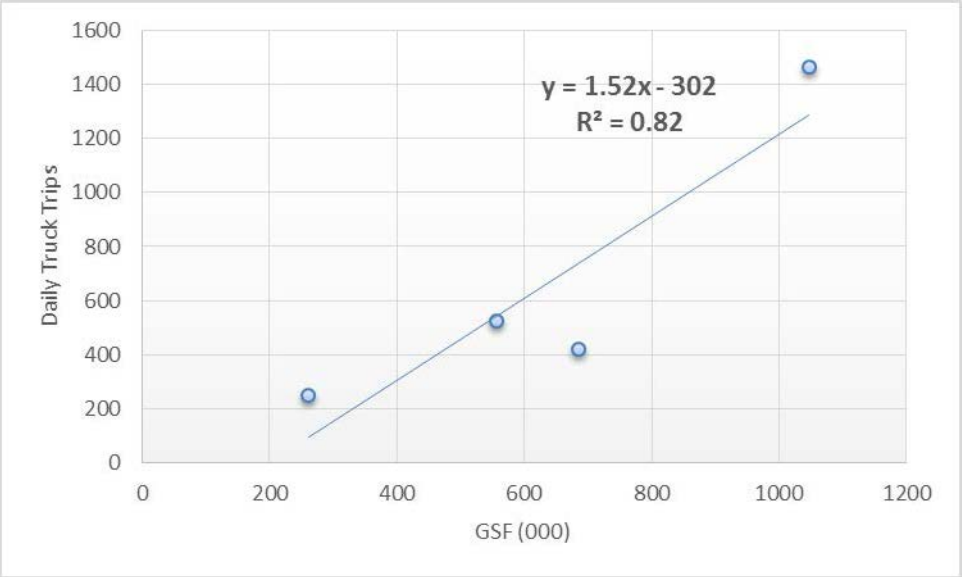


Figure A4. Correlation between Daily 5+ Axle Trucks and Cold Storage GSF (SCAQMD & NAIOP Sites)

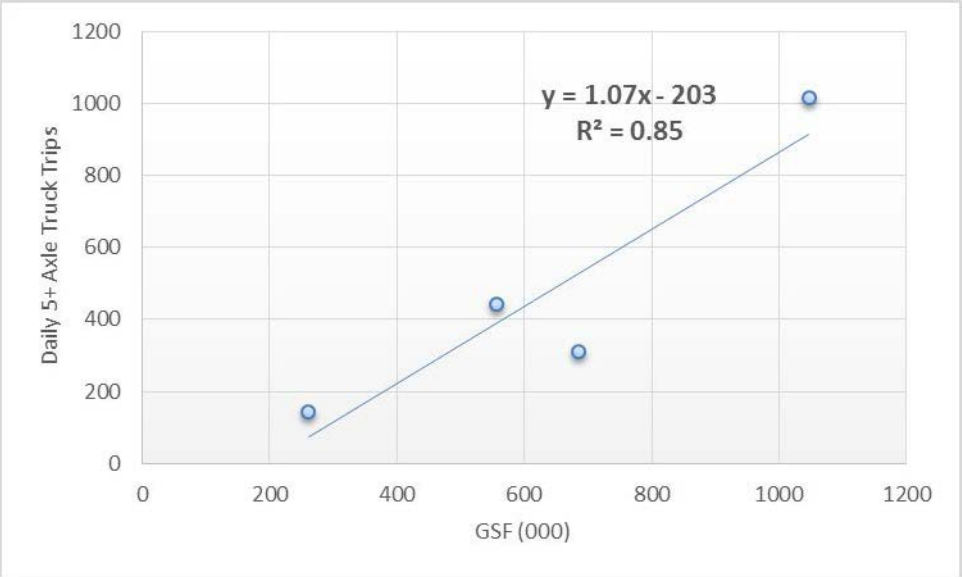


Table A2 presents the weighted average rates for all vehicles, cars, trucks, and 5+ axle trucks per 1,000 GSF at cold storage sites. Separate calculations are presented for the complete database plus 13 different subsets. When the complete set is included, the overall weighted average rate for all vehicles is 2.12. The rate is nearly identical whether calculated with only the SCAQMD and NAIOP data or with the other data points in the complete dataset.

Another observation from the table is that newer data (post-2006 and post-2009) have higher rates than do the older data, sometimes substantially higher. The newer and older datasets are comprised of relatively small numbers of data points, 6 and 3, respectively. Additional data points would be helpful to derive a more reliable estimate of cold storage HCW trip generation.

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? No

Total Number of Unique Hours Met on Figure 4C-1	15
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	N/A

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Eastbound	Westbound	Northbound	Southbound			
2:45 PM	414	217	475	421	631		
3:00 PM	419	217	498	444	636		
3:15 PM	363	181	545	472	544		
3:30 PM	371	176	591	511	547	Min. 1 Met	
3:45 PM	376	173	640	498	549		
4:00 PM	394	189	627	508	583		
4:15 PM	338	146	699	524	484		
4:30 PM	328	151	687	485	479	Min. 1 Met	
4:45 PM	325	146	679	454	471		
5:00 PM	322	133	730	467	455		
5:15 PM	292	88	671	436	380		
5:30 PM	300	85	681	421	385	Min. 1 Met	
5:45 PM	295	90	666	441	385		
6:00 PM	272	95	658	410	367		
6:15 PM	176	77	676	403	253		
6:30 PM	179	77	622	372	256	Min. 1 Met	
6:45 PM	176	77	625	351	253		
7:00 PM	166	69	604	341	235		
7:15 PM	155	60	601	328	215		
7:30 PM	160	58	568	336	218	Min. 1 Met	
7:45 PM	147	60	542	320	207		
8:00 PM	175	63	524	307	238		
8:15 PM	250	90	508	302	340		
8:30 PM	232	88	576	289	320	Min. 1 Met	
8:45 PM	253	80	583	279	333		
9:00 PM	243	77	552	268	320		
9:15 PM	195	90	501	243	285		
9:30 PM	213	97	405	212	310		
9:45 PM	185	97	361	201	282		
10:00 PM	154	102	369	181	256		
10:15 PM	153	89	343	178	242		
10:30 PM	129	84	341	173	213		
10:45 PM	129	87	305	142	216		
11:00 PM	145	79	266	119	224		
11:15 PM	41	5	194	77	46		
11:30 PM	26	3	129	41	29		
11:45 PM	15	0	72	23	15		

Legend
- Minor Street 1 (NB)
- Minor Street 2 (SB)

Top Hours for Figure 4C-1 - Minor Street 1 (NB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	4:30 PM	5:30 PM	479	687
2nd Highest Hour	5:30 PM	6:30 PM	385	681
3rd Highest Hour	3:30 PM	4:30 PM	547	591
4th Highest Hour	2:30 PM	3:30 PM	610	459

Top Hours for Figure 4C-1 - Minor Street 2 (SB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	12:30 PM	1:30 PM	520	351
2nd Highest Hour	4:00 PM	5:00 PM	583	508
3rd Highest Hour	3:00 PM	4:00 PM	636	444
4th Highest Hour	7:30 AM	8:30 AM	566	457

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **No**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (EB/WB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (NB) Vehicles Per Hour (VPH)	Minor Street 2 (SB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	198	219	134	Y	
12:15 AM	152	206	129	Y	
12:30 AM	147	201	96	Y	
12:45 AM	142	176	85	Y	
1:00 AM	142	157	90	Y	
1:15 AM	132	147	83	Y	
1:30 AM	138	137	96	Y	
1:45 AM	140	147	108	Y	
2:00 AM	145	147	111	Y	
2:15 AM	157	145	121	Y	
2:30 AM	154	126	119	Y	
2:45 AM	157	147	108	Y	
3:00 AM	165	160	108	Y	
3:15 AM	195	168	116	Y	
3:30 AM	205	178	134	Y	
3:45 AM	199	168	150	Y	
4:00 AM	205	183	176	Y	
4:15 AM	360	196	212	Y	
4:30 AM	375	227	248	Y	Y
4:45 AM	393	274	289	Y	Y
5:00 AM	396	299	305	Y	Y
5:15 AM	513	294	302	Y	Y
5:30 AM	525	281	297	Y	Y
5:45 AM	525	261	294	Y	Y
6:00 AM	533	263	302	Y	Y
6:15 AM	561	307	299	Y	Y
6:30 AM	535	341	299	Y	Y
6:45 AM	550	341	312	Y	Y
7:00 AM	559	359	343	Y	Y
7:15 AM	549	367	385	Y	Y
7:30 AM	566	359	457	Y	Y
7:45 AM	563	400	436	Y	Y
8:00 AM	572	385	418	Y	Y
8:15 AM	546	395	413	Y	Y
8:30 AM	551	457	397	Y	Y
8:45 AM	559	490	431	Y	Y
9:00 AM	566	516	454	Y	Y
9:15 AM	501	539	485	Y	Y
9:30 AM	491	514	465	Y	Y
9:45 AM	466	470	483	Y	Y
10:00 AM	426	436	457	Y	Y
10:15 AM	490	387	400	Y	Y
10:30 AM	485	346	392	Y	Y
10:45 AM	505	354	367	Y	Y
11:00 AM	550	351	364	Y	Y
11:15 AM	608	356	359	Y	Y
11:30 AM	603	369	351	Y	Y
11:45 AM	580	333	351	Y	Y

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

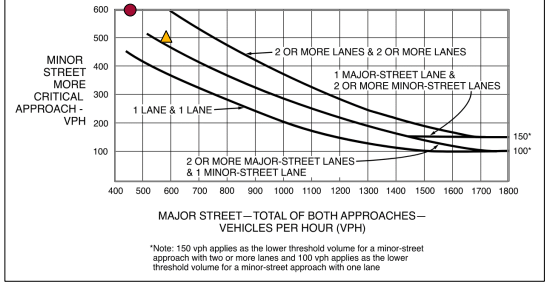
Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (NB)						
4C-3	5:00 PM	6:00 PM	455	730	545	Met
Minor Street 2 (SB)						
4C-3	4:00 PM	5:00 PM	583	508	475	Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
- Minor Street 1 (NB)
- Minor Street 2 (SB)

Figure 4C-3. Warrant 3, Peak Hour



WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

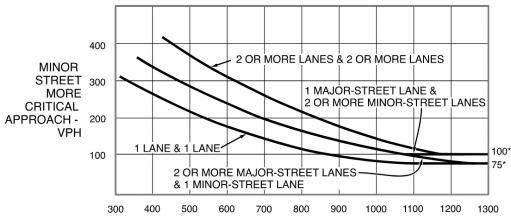
Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **No**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (EB/WB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (NB) Vehicles Per Hour (VPH)	Minor Street 2 (SB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	545	307	346	Y	Y
12:15 PM	511	284	379	Y	Y
12:30 PM	520	287	351	Y	Y
12:45 PM	536	310	348	Y	Y
1:00 PM	546	351	330	Y	Y
1:15 PM	577	341	289	Y	Y
1:30 PM	569	346	297	Y	Y
1:45 PM	552	361	274	Y	Y
2:00 PM	539	382	297	Y	Y
2:15 PM	615	410	310	Y	Y
2:30 PM	610	459	361	Y	Y
2:45 PM	631	475	421	Y	Y
3:00 PM	636	498	444	Y	Y
3:15 PM	544	545	472	Y	Y
3:30 PM	547	591	511	Y	Y
3:45 PM	549	640	498	Y	Y
4:00 PM	583	627	508	Y	Y
4:15 PM	484	699	524	Y	Y
4:30 PM	479	687	485	Y	Y
4:45 PM	471	679	454	Y	Y
5:00 PM	455	730	467	Y	Y
5:15 PM	380	671	436	Y	Y
5:30 PM	385	681	421	Y	Y
5:45 PM	385	666	441	Y	Y
6:00 PM	367	658	410	Y	Y
6:15 PM	253	676	403	Y	Y
6:30 PM	256	622	372	Y	Y
6:45 PM	253	625	351	Y	Y
7:00 PM	235	604	341	Y	Y
7:15 PM	215	601	328	Y	Y
7:30 PM	218	568	336	Y	Y
7:45 PM	207	542	320	Y	Y
8:00 PM	238	524	307	Y	Y
8:15 PM	340	508	302	Y	Y
8:30 PM	320	576	289	Y	Y
8:45 PM	333	583	279	Y	Y
9:00 PM	320	552	268	Y	Y
9:15 PM	285	501	243	Y	Y
9:30 PM	310	405	212	Y	Y
9:45 PM	282	361	201	Y	Y
10:00 PM	256	369	181	Y	Y
10:15 PM	242	343	178	Y	
10:30 PM	213	341	173	Y	
10:45 PM	216	305	142	Y	
11:00 PM	224	266	119	Y	
11:15 PM	46	194	77	Y	
11:30 PM	29	129	41	Y	
11:45 PM	15	72	23		

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

TPTO Tools
Signal Warrant Analysis Tool

Questions/Feedback
Click Here to Email

Date of Last Update
9/25/2024

All input cells are highlighted orange throughout this tool — **INPUT CELL**

SET UP WORKBOOK
Click to generate necessary analysis tabs based on inputs

RESET WORKBOOK
Click to re-hide all workbook tabs except "Home"

CLEAR USER INPUTS
Click to clear all user inputs on this tab

Study Information	
Intersection Name	Lenwood Rd & Jasper Rd
Jurisdiction	Barstow, CA
85th-percentile speed or posted speed limit on the Major Street	45+ mph

Count Data Information	
Question	**Answer**
What year were counts collected?	2025
Counts in 15-minute or hourly increments?	Hourly
Counts by movement or by approach?	By Approach
Counts by vehicle class (heavy vehicles vs. passenger vehicles)?	Yes
Truck Factor (Passenger Car Equivalent)	1.6
Were pedestrian counts collected?	No
Were bicycle counts collected?	No
Do Not Enter Value	

Scenario Information							
Scenario Name	**Include Scenario?**	**Scenario Year**	**Vehicular Growth Rate (%)**	**Vehicular Growth Multiplier**	**Pedestrian Growth Rate (%)**	**Pedestrian Growth Multiplier**	**Number of Legs/ Approaches**
OY with BIG	Y	2028	1.52%	1.046		1.00	4
IY with BIG	Y	2033	1.10%	1.091		1.00	4
HY with BIG	Y	2048	0.87%	1.221		1.00	4
				1.000		1.00	
				1.000		1.00	
Include ITE Trip Generation for any of the above scenarios?			Yes				

Warrant Information	
Warrant	**Show in Workbook?**
1 - Eight Hour Vehicular Volume	Yes
2 - Four Hour Vehicular Volume	Yes
3 - Peak Hour	Yes
4 - Pedestrian Volume	
5 - School Crossing	
6 - Coordinated Signal System	
7 - Crash Experience	
8 - Roadway Network	
9 - Intersection Near a Grade Crossing	

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: OY with BIG (2028)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**Yes**	Condition A (70%) was met.
Warrant 2, Four-Hour Vehicular Volume	Yes	**Yes**	Figure 4C-2 (70% Factor).
Warrant 3, Peak Hour	Yes	**Yes**	Figure 4C-4 (70% Factor).
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
OY with BIG (2028)	Yes	Yes	Yes						
IY with BIG (2033)	Yes	Yes	Yes						
HY with BIG (2048)	Yes	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Jasper Rd
Jurisdiction: Barstow,
Scenario: OY with BIG (2028)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes: Condition A (70%) was met.

Lanes	Adjusted Volumes			Condition A						Condition B						Combination A/B											
																Cond. A				Cond. B				Cond. A				Cond. B			
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%			70%			100%			70%			80%				80%				56%				56%			
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	
1 / 1				500	150	150	350	105	105	750	75	75	525	53	53	400	120	120		600	60	60		280	84	84		420	42	42	
2+ / 1	X		X	600	150	150	420	105	105	900	75	75	630	53	53	480	120	120		720	60	60		336	84	84		504	42	42	
2+ / 2+	X	X		600	200	200	420	140	140	900	100	100	630	70	70	480	160	160		720	80	80		336	112	112		504	56	56	
1 / 2+				500	200	200	350	140	140	750	100	100	525	70	70	400	160	160		600	80	80		280	112	112		420	56	56	
HOURS MET				**1**	**1**		**10**	**9**		**0**	**0**		**1**	**1**		**4**	**2**			**0**	**0**			**13**	**12**			**2**	**2**		
WARRANT SATISFIED (8+ Hours)?				**NO**			**YES**			**NO**			**NO**			**NO**								**NO**							
12:00 AM	119	24	2																												
12:15 AM	80	39	1																												
12:30 AM	80	39	1																												
12:45 AM	80	39	1																												
1:00 AM	80	39	1																												
1:15 AM	70	25	1																												
1:30 AM	70	25	1																												
1:45 AM	70	25	1																												
2:00 AM	70	25	1																												
2:15 AM	87	27	3																												
2:30 AM	87	27	3																												
2:45 AM	87	27	3																												
3:00 AM	87	27	3																												
3:15 AM	292	87	18																												
3:30 AM	580	143	55													X								X	X		X	X	X	X	X
3:45 AM	664	166	63										X	X	X	X															
4:00 AM	125	0	0																												
4:15 AM	125	0	0																												
4:30 AM	292	87	18																												
4:45 AM	454	168	39				X	X	X															X	X		X				
5:00 AM	547	223	52													X	X		X									X	X	X	X
5:15 AM	624	257	60	X	X		X																								
5:30 AM	139	0	0																												
5:45 AM	139	0	0																												
6:00 AM	480	108	41				X									X								X							
6:15 AM	454	168	39																												
6:30 AM	454	168	39																												
6:45 AM	454	168	39																												
7:00 AM	454	168	39				X	X	X															X	X		X				
7:15 AM	441	181	35																												
7:30 AM	441	181	35																												
7:45 AM	441	181	35																												
8:00 AM	441	181	35				X	X	X															X	X		X				
8:15 AM	447	205	40																												
8:30 AM	447	205	40																												
8:45 AM	447	205	40																												
9:00 AM	447	205	40				X	X	X															X	X		X				
9:15 AM	335	216	27																												
9:30 AM	335	216	27																												
9:45 AM	335	216	27																												
10:00 AM	335	216	27																												
10:15 AM	378	265	33																					X	X		X				
10:30 AM	378	265	33																												
10:45 AM	378	265	33																												
11:00 AM	378	265	33																												
11:15 AM	448	279	44				X	X	X															X	X		X				
11:30 AM	448	279	44																												
11:45 AM	448	279	44																												

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Jasper Rd
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes: Condition A (70%) was met.

Lanes	Adjusted Volumes			Condition A									Condition B									Combination A/B															
																						Cond. A				Cond. B				Cond. A				Cond. B			
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%				70%					100%				70%					80%				80%				56%				56%			
				Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2			Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2			Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	
1 / 1				500	150	150		350	105	105			750	75	75		525	53	53			400	120	120		600	60	60		280	84	84		420	42	42	
2+ / 1	X		X	600	150	150		420	105	105			900	75	75		630	53	53			480	120	120		720	60	60		336	84	84		504	42	42	
2+ / 2+	X	X		600	200	200		420	140	140			900	100	100		630	70	70			480	160	160		720	80	80		336	112	112		504	56	56	
1 / 2+				500	200	200		350	140	140			750	100	100		525	70	70			400	160	160		600	80	80		280	112	112		420	56	56	
HOURS MET				**1**	**1**			**10**	**9**				**0**	**0**			**1**	**1**				**4**	**2**			**0**	**0**			**13**	**12**			**2**	**2**		
WARRANT SATISFIED (8+ Hours)?				**NO**				**YES**					**NO**				**NO**					**NO**								**NO**							
12:00 PM	448	279	44																																		
12:15 PM	404	205	31																										X	X		X				
12:30 PM	404	205	31																																		
12:45 PM	404	205	31																																		
1:00 PM	404	205	31																																		
1:15 PM	441	225	36					X	X		X																		X	X		X				
1:30 PM	441	225	36																																		
1:45 PM	441	225	36																																		
2:00 PM	441	225	36																																		
2:15 PM	499	405	30					X	X		X											X	X		X				X	X		X				
2:30 PM	499	405	30																																		
2:45 PM	499	405	30																																		
3:00 PM	499	405	30																																		
3:15 PM	478	341	23					X	X		X																		X	X		X				
3:30 PM	478	341	23																																		
3:45 PM	478	341	23																																		
4:00 PM	478	341	23																																		
4:15 PM	423	310	21					X	X		X																		X	X		X				
4:30 PM	423	310	21																																		
4:45 PM	423	310	21																																		
5:00 PM	423	310	21																																		
5:15 PM	286	205	9																																		
5:30 PM	286	205	9																																		
5:45 PM	286	205	9																																		
6:00 PM	286	205	9																																		
6:15 PM	257	63	4																																		
6:30 PM	257	63	4																																		
6:45 PM	257	63	4																																		
7:00 PM	257	63	4																																		
7:15 PM	246	40	4																																		
7:30 PM	246	40	4																																		
7:45 PM	246	40	4																																		
8:00 PM	246	40	4																																		
8:15 PM	254	141	4																																		
8:30 PM	254	141	4																																		
8:45 PM	254	141	4																																		
9:00 PM	254	141	4																																		
9:15 PM	200	27	6																																		
9:30 PM	200	27	6																																		
9:45 PM	200	27	6																																		
10:00 PM	200	27	6																																		
10:15 PM	136	51	3																																		
10:30 PM	136	51	3																																		
10:45 PM	136	51	3																																		
11:00 PM	136	51	3																																		
11:15 PM	0	0	0																																		
11:30 PM	0	0	0																																		
11:45 PM	0	0	0																																		

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd and Love's Travel Stop Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	1 Lane
Minor Street 2 (WB)	1 Lane

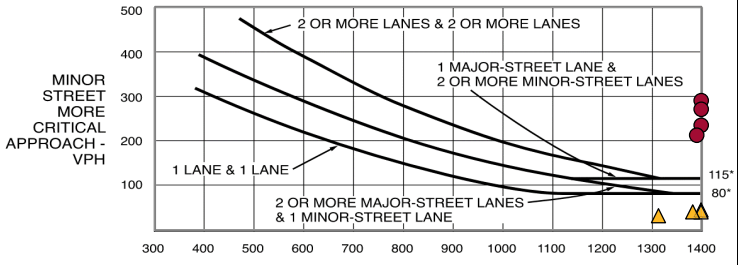
Apply 70% Reduction to Warrant Thresholds? No

Total Number of Unique Hours Met on Figure 4C-1	15
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	N/A

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
12:00 AM	231	150	41	5	381		
12:15 AM	151	125	36	0	276		
12:30 AM	123	112	41	0	235		
12:45 AM	114	112	32	0	226		
1:00 AM	114	112	32	0	226		
1:15 AM	138	89	32	0	227		
1:30 AM	143	93	41	5	236		
1:45 AM	138	93	45	5	231		
2:00 AM	143	89	32	5	232		
2:15 AM	127	99	32	9	226		
2:30 AM	118	99	23	5	217		
2:45 AM	105	99	18	5	204		
3:00 AM	78	126	23	5	204		
3:15 AM	103	153	32	0	256		
3:30 AM	122	166	27	0	288		
3:45 AM	140	193	45	0	333		
4:00 AM	176	193	54	0	369		
4:15 AM	315	284	81	5	599		
4:30 AM	338	311	104	5	649		
4:45 AM	429	347	113	9	776		
5:00 AM	496	393	118	9	889		
5:15 AM	618	408	95	5	1026		
5:30 AM	632	448	86	5	1080		
5:45 AM	605	457	109	0	1062		
6:00 AM	596	480	113	0	1076		
6:15 AM	628	522	118	5	1150	Min. 1 Met	
6:30 AM	655	504	131	5	1159		
6:45 AM	655	495	104	14	1150		
7:00 AM	705	567	122	14	1272		
7:15 AM	700	639	136	14	1339	Min. 1 Met	
7:30 AM	713	693	140	14	1406		
7:45 AM	731	675	136	5	1406		
8:00 AM	686	594	127	5	1280		
8:15 AM	677	580	118	9	1257	Min. 1 Met	
8:30 AM	713	562	127	9	1275		
8:45 AM	749	612	167	9	1361		
9:00 AM	785	621	195	18	1406		
9:15 AM	721	610	204	9	1331	Min. 1 Met	
9:30 AM	635	606	195	23	1241		
9:45 AM	576	592	158	36	1168		
10:00 AM	535	592	131	32	1127		
10:15 AM	576	635	122	36	1211	Min. 1 Met	
10:30 AM	612	644	113	32	1256		
10:45 AM	644	681	109	27	1325		
11:00 AM	666	676	104	36	1342		
11:15 AM	715	668	113	41	1383	Min. 1 Met	
11:30 AM	738	627	127	36	1365		
11:45 AM	742	600	127	32	1342		
12:00 PM	711	604	131	27	1315		
12:15 PM	623	587	140	32	1210	Min. 1 Met	
12:30 PM	623	578	127	36	1201		
12:45 PM	632	556	163	32	1188		
1:00 PM	664	511	163	32	1175		
1:15 PM	687	484	176	27	1171	Min. 1 Met	
1:30 PM	701	470	181	36	1171		
1:45 PM	705	457	181	41	1162		
2:00 PM	741	475	213	32	1216		
2:15 PM	746	645	213	32	1391	Min. 1 Met	
2:30 PM	827	722	249	27	1549		

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

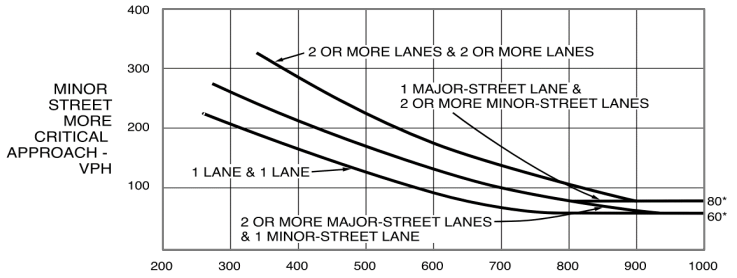
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood F
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	0
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	5

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
2:45 PM	298	201	405	30	499		
3:00 PM	298	201	405	30	499		
3:15 PM	260	218	341	23	478		Min. 1 Met
3:30 PM	260	218	341	23	478		
3:45 PM	260	218	341	23	478		
4:00 PM	260	218	341	23	478		
4:15 PM	246	177	310	21	423		Min. 1 Met
4:30 PM	246	177	310	21	423		
4:45 PM	246	177	310	21	423		
5:00 PM	246	177	310	21	423		
5:15 PM	163	123	205	9	286		
5:30 PM	163	123	205	9	286		
5:45 PM	163	123	205	9	286		
6:00 PM	163	123	205	9	286		
6:15 PM	153	104	63	4	257		
6:30 PM	153	104	63	4	257		
6:45 PM	153	104	63	4	257		
7:00 PM	153	104	63	4	257		
7:15 PM	156	90	40	4	246		
7:30 PM	156	90	40	4	246		
7:45 PM	156	90	40	4	246		
8:00 PM	156	90	40	4	246		
8:15 PM	159	95	141	4	254		
8:30 PM	159	95	141	4	254		
8:45 PM	159	95	141	4	254		
9:00 PM	159	95	141	4	254		
9:15 PM	124	76	27	6	200		
9:30 PM	124	76	27	6	200		
9:45 PM	124	76	27	6	200		
10:00 PM	124	76	27	6	200		
10:15 PM	84	52	51	3	136		
10:30 PM	84	52	51	3	136		
10:45 PM	84	52	51	3	136		
11:00 PM	84	52	51	3	136		
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

Top Hours for Figure 4C-1 - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	2:15 PM	3:15 PM	499	405
2nd Highest Hour	5:15 AM	6:15 AM	624	257
3rd Highest Hour	3:15 PM	4:15 PM	478	341
4th Highest Hour	4:15 PM	5:15 PM	423	310
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	2:15 PM	3:15 PM	499	405
2nd Highest Hour	3:15 PM	4:15 PM	478	341
3rd Highest Hour	4:15 PM	5:15 PM	423	310
4th Highest Hour	11:15 AM	12:15 PM	448	279
Top Hours for Figure 4C-1 - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	5:15 AM	6:15 AM	624	60
2nd Highest Hour	2:15 PM	3:15 PM	499	30
3rd Highest Hour	11:15 AM	12:15 PM	448	44
4th Highest Hour	6:15 AM	7:15 AM	454	39
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	5:15 AM	6:15 AM	624	60
2nd Highest Hour	2:15 PM	3:15 PM	499	30
3rd Highest Hour	11:15 AM	12:15 PM	448	44
4th Highest Hour	6:15 AM	7:15 AM	454	39

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd &
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	119	24	2		
12:15 AM	80	39	1		
12:30 AM	80	39	1		
12:45 AM	80	39	1		
1:00 AM	80	39	1		
1:15 AM	70	25	1		
1:30 AM	70	25	1		
1:45 AM	70	25	1		
2:00 AM	70	25	1		
2:15 AM	87	27	3		
2:30 AM	87	27	3		
2:45 AM	87	27	3		
3:00 AM	87	27	3		
3:15 AM	113	52	6		
3:30 AM	480	108	41		
3:45 AM	580	143	55		
4:00 AM	664	166	63	Y	Y
4:15 AM	125	0	0		
4:30 AM	125	0	0		
4:45 AM	454	168	39	Y	
5:00 AM	547	223	52	Y	Y
5:15 AM	624	257	60	Y	Y
5:30 AM	139	0	0		
5:45 AM	139	0	0		
6:00 AM	480	108	41		
6:15 AM	454	168	39	Y	
6:30 AM	454	168	39	Y	
6:45 AM	454	168	39	Y	
7:00 AM	454	168	39	Y	
7:15 AM	441	181	35	Y	
7:30 AM	441	181	35	Y	
7:45 AM	441	181	35	Y	
8:00 AM	441	181	35	Y	
8:15 AM	447	205	40	Y	
8:30 AM	447	205	40	Y	
8:45 AM	447	205	40	Y	
9:00 AM	447	205	40	Y	
9:15 AM	335	216	27	Y	
9:30 AM	335	216	27	Y	
9:45 AM	335	216	27	Y	
10:00 AM	335	216	27	Y	
10:15 AM	378	265	33	Y	
10:30 AM	378	265	33	Y	
10:45 AM	378	265	33	Y	
11:00 AM	378	265	33	Y	
11:15 AM	448	279	44	Y	
11:30 AM	448	279	44	Y	
11:45 AM	448	279	44	Y	

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

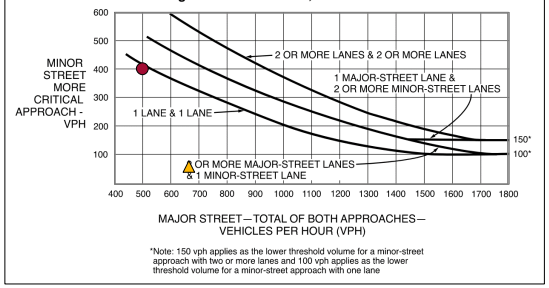
Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (EB)						
4C-3	2:15 PM	3:15 PM	499	405	668	Not Met
4C-4 (70% Factor)	2:15 PM	3:15 PM	499	405	369	Met
Minor Street 2 (WB)						
4C-3	4:00 AM	5:00 AM	664	63	434	Not Met
4C-4 (70% Factor)	4:00 AM	5:00 AM	664	63	212.96	Not Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd &
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

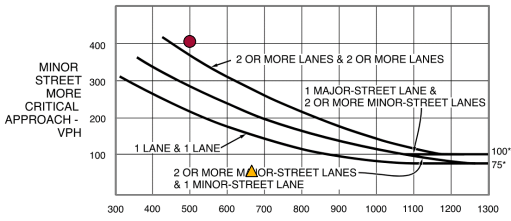
Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	448	279	44	Y	
12:15 PM	404	205	31	Y	
12:30 PM	404	205	31	Y	
12:45 PM	404	205	31	Y	
1:00 PM	404	205	31	Y	
1:15 PM	441	225	36	Y	
1:30 PM	441	225	36	Y	
1:45 PM	441	225	36	Y	
2:00 PM	441	225	36	Y	
2:15 PM	499	405	30	Y	Y
2:30 PM	499	405	30	Y	Y
2:45 PM	499	405	30	Y	Y
3:00 PM	499	405	30	Y	Y
3:15 PM	478	341	23	Y	Y
3:30 PM	478	341	23	Y	Y
3:45 PM	478	341	23	Y	Y
4:00 PM	478	341	23	Y	Y
4:15 PM	423	310	21	Y	
4:30 PM	423	310	21	Y	
4:45 PM	423	310	21	Y	
5:00 PM	423	310	21	Y	
5:15 PM	286	205	9	Y	
5:30 PM	286	205	9	Y	
5:45 PM	286	205	9	Y	
6:00 PM	286	205	9	Y	
6:15 PM	257	63	4		
6:30 PM	257	63	4		
6:45 PM	257	63	4		
7:00 PM	257	63	4		
7:15 PM	246	40	4		
7:30 PM	246	40	4		
7:45 PM	246	40	4		
8:00 PM	246	40	4		
8:15 PM	254	141	4		
8:30 PM	254	141	4		
8:45 PM	254	141	4		
9:00 PM	254	141	4		
9:15 PM	200	27	6		
9:30 PM	200	27	6		
9:45 PM	200	27	6		
10:00 PM	200	27	6		
10:15 PM	136	51	3		
10:30 PM	136	51	3		
10:45 PM	136	51	3		
11:00 PM	136	51	3		
11:15 PM	0	0	0		
11:30 PM	0	0	0		
11:45 PM	0	0	0		

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: IY with BIG (2033)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**Yes**	Condition A (70%) was met. Combination of A/B (56%) was met.
Warrant 2, Four-Hour Vehicular Volume	Yes	**Yes**	Figure 4C-2 (70% Factor).
Warrant 3, Peak Hour	Yes	**Yes**	Figure 4C-4 (70% Factor).
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
OY with BIG (2028)	Yes	Yes	Yes						
IY with BIG (2033)	Yes	Yes	Yes						
HY with BIG (2048)	Yes	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Jasper Rd
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes: Condition A (70%) was met. Combination of A/B (56%) was met.

Lanes	Adjusted Volumes			Condition A						Condition B						Combination A/B											
																Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%			70%			100%			70%			80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1				500	150	150	350	105	105	750	75	75	525	53	53	400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1	X		X	600	150	150	420	105	105	900	75	75	630	53	53	480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+	X	X		600	200	200	420	140	140	900	100	100	630	70	70	480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+				500	200	200	350	140	140	750	100	100	525	70	70	400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				**1**	**1**		**12**	**12**		**0**	**0**		**1**	**1**		**12**	**10**		**0**	**0**		**14**	**14**		**10**	**10**	
WARRANT SATISFIED (8+ Hours)?				**NO**			**YES**			**NO**			**NO**			**NO**						**YES**					
12:00 AM	129	32	2																								
12:15 AM	94	51	1																								
12:30 AM	94	51	1																								
12:45 AM	94	51	1																								
1:00 AM	94	51	1																								
1:15 AM	83	33	2																								
1:30 AM	83	33	2																								
1:45 AM	83	33	2																								
2:00 AM	83	33	2																								
2:15 AM	104	35	3																								
2:30 AM	104	35	3																								
2:45 AM	104	35	3																								
3:00 AM	104	35	3																								
3:15 AM	292	87	18																								
3:30 AM	580	143	55													X						X	X		X	X	X	X	X
3:45 AM	664	166	63										X	X	X	X													
4:00 AM	125	0	0																								
4:15 AM	125	0	0																								
4:30 AM	341	115	24																			X	X		X				
4:45 AM	454	168	39				X	X	X																				
5:00 AM	547	223	52													X	X		X							X	X	X	X
5:15 AM	624	257	60	X	X		X																						
5:30 AM	139	0	0																								
5:45 AM	139	0	0																								
6:00 AM	580	143	55				X	X	X							X						X	X		X	X	X	X	X
6:15 AM	547	223	52																								
6:30 AM	547	223	52																								
6:45 AM	547	223	52																								
7:00 AM	547	223	52				X	X	X							X	X		X			X	X		X	X	X	X	X
7:15 AM	525	239	46																								
7:30 AM	525	239	46																								
7:45 AM	525	239	46																								
8:00 AM	525	239	46				X	X	X							X	X		X			X	X		X	X	X	X	X
8:15 AM	547	272	53																								
8:30 AM	547	272	53																								
8:45 AM	547	272	53																								
9:00 AM	547	272	53				X	X	X							X	X		X			X	X		X	X	X	X	X
9:15 AM	408	286	36																								
9:30 AM	408	286	36																								
9:45 AM	408	286	36																								
10:00 AM	408	286	36																			X	X		X				
10:15 AM	463	351	43				X	X	X																				
10:30 AM	463	351	43																								
10:45 AM	463	351	43																								
11:00 AM	463	351	43																			X	X		X				
11:15 AM	556	369	58				X	X	X							X	X		X							X	X	X	X
11:30 AM	556	369	58																								
11:45 AM	556	369	58																								

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Jasper Rd
Jurisdiction: Barstow, I
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes: Condition A (70%) was met. Combination of A/B (56%) was met.

Lanes	Adjusted Volumes			Condition A									Condition B									Combination A/B											
																						Cond. A				Cond. B				Cond. A				Cond. B			
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%				70%					100%				70%					80%				80%				56%				56%			
				Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2			Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2			Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	
1 / 1				500	150	150		350	105	105			750	75	75		525	53	53			400	120	120		600	60	60		280	84	84		420	42	42	
2+ / 1	X		X	600	150	150		420	105	105			900	75	75		630	53	53			480	120	120		720	60	60		336	84	84		504	42	42	
2+ / 2+	X	X		600	200	200		420	140	140			900	100	100		630	70	70			480	160	160		720	80	80		336	112	112		504	56	56	
1 / 2+				500	200	200		350	140	140			750	100	100		525	70	70			400	160	160		600	80	80		280	112	112		420	56	56	
HOURS MET				1	1			12	12				0	0			1	1				12	10			0	0			14	14			10	10		
WARRANT SATISFIED (8+ Hours)?				NO				YES					NO				NO					NO								YES							
12:00 PM	556	369	58																											X	X		X				
12:15 PM	483	271	41					X	X		X											X	X		X												
12:30 PM	483	271	41																																		
12:45 PM	483	271	41																																		
1:00 PM	483	271	41																											X	X		X				
1:15 PM	530	297	48					X	X		X											X	X		X									X	X	X	X
1:30 PM	530	297	48																																		
1:45 PM	530	297	48																																		
2:00 PM	530	297	48																											X	X		X				
2:15 PM	577	535	39					X	X		X											X	X		X									X	X		X
2:30 PM	577	535	39																																		
2:45 PM	577	535	39																																		
3:00 PM	577	535	39																											X	X		X				
3:15 PM	539	450	31					X	X		X											X	X		X									X	X		X
3:30 PM	539	450	31																																		
3:45 PM	539	450	31																																		
4:00 PM	539	450	31																											X	X		X				
4:15 PM	484	410	28					X	X		X											X	X		X												
4:30 PM	484	410	28																																		
4:45 PM	484	410	28																																		
5:00 PM	484	410	28																											X	X		X				
5:15 PM	322	271	11																																		
5:30 PM	322	271	11																																		
5:45 PM	322	271	11																																		
6:00 PM	322	271	11																																		
6:15 PM	284	84	6																																		
6:30 PM	284	84	6																																		
6:45 PM	284	84	6																																		
7:00 PM	284	84	6																																		
7:15 PM	272	53	5																																		
7:30 PM	272	53	5																																		
7:45 PM	272	53	5																																		
8:00 PM	272	53	5																																		
8:15 PM	275	186	5																																		
8:30 PM	275	186	5																																		
8:45 PM	275	186	5																																		
9:00 PM	275	186	5																																		
9:15 PM	224	36	8																																		
9:30 PM	224	36	8																																		
9:45 PM	224	36	8																																		
10:00 PM	224	36	8																																		
10:15 PM	152	68	4																																		
10:30 PM	152	68	4																																		
10:45 PM	152	68	4																																		
11:00 PM	152	68	4																																		
11:15 PM	0	0	0																																		
11:30 PM	0	0	0																																		
11:45 PM	0	0	0																																		

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: No

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

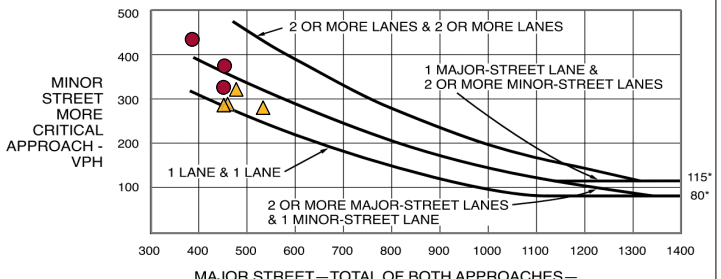
Apply 70% Reduction to Warrant Thresholds? No

Total Number of Unique Hours Met on Figure 4C-1	2
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	N/A

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Eastbound	Westbound	Northbound	Southbound			
12:00 AM	100	59	139	85	159		
12:15 AM	82	32	131	82	114		
12:30 AM	80	30	127	60	110		
12:45 AM	77	30	111	54	107		
1:00 AM	75	32	100	57	107		
1:15 AM	68	32	93	52	100		
1:30 AM	70	33	87	60	103		
1:45 AM	73	32	93	69	105		
2:00 AM	78	30	93	70	108		
2:15 AM	82	36	91	77	118		
2:30 AM	82	34	80	75	116		
2:45 AM	83	34	93	69	117		
3:00 AM	88	34	101	69	122		
3:15 AM	102	47	106	73	149		
3:30 AM	105	50	113	85	155		
3:45 AM	100	52	106	95	152		
4:00 AM	104	52	116	111	156		
4:15 AM	159	133	124	134	292		
4:30 AM	168	133	144	157	301		
4:45 AM	180	133	173	183	313		
5:00 AM	182	133	189	193	315		
5:15 AM	190	230	186	191	420		
5:30 AM	197	232	178	188	429		
5:45 AM	198	230	165	186	428		
6:00 AM	203	230	167	191	433		
6:15 AM	239	218	194	189	457		
6:30 AM	226	215	215	189	441		
6:45 AM	232	218	215	198	450		
7:00 AM	231	225	227	217	456		
7:15 AM	239	207	232	243	446		
7:30 AM	246	212	227	289	458		
7:45 AM	244	212	253	276	456		
8:00 AM	246	215	243	264	461		
8:15 AM	226	212	250	261	438		
8:30 AM	227	213	289	251	440		
8:45 AM	226	220	310	273	446		
9:00 AM	227	223	326	287	450		
9:15 AM	220	176	341	307	396		
9:30 AM	215	174	325	294	389		
9:45 AM	207	166	297	305	373		
10:00 AM	189	159	276	289	348		
10:15 AM	219	184	245	253	403		
10:30 AM	214	186	219	248	400		
10:45 AM	225	187	224	232	412		
11:00 AM	250	190	222	230	440		
11:15 AM	266	227	225	227	493		
11:30 AM	267	222	233	222	489		
11:45 AM	256	219	211	222	475		
12:00 PM	241	213	194	219	454		
12:15 PM	234	188	180	240	422		
12:30 PM	242	186	181	222	428		
12:45 PM	252	186	196	220	438		
1:00 PM	260	184	222	209	444		
1:15 PM	266	208	215	183	474		
1:30 PM	261	208	219	188	469		
1:45 PM	248	209	229	173	457		
2:00 PM	240	209	242	188	449		
2:15 PM	337	181	260	196	518		
2:30 PM	331	184	291	229	515		

Legend
- Minor Street 1 (NB)
- Minor Street 2 (SB)

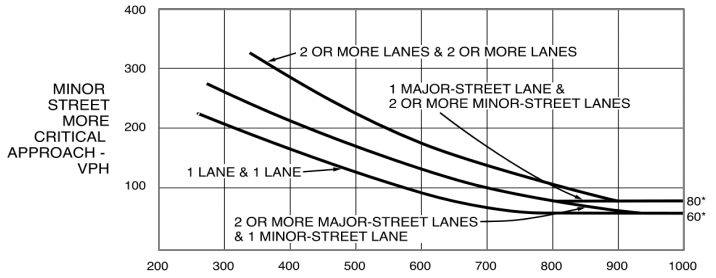
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood F
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	2
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	12

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
2:45 PM	355	222	535	39	577		
3:00 PM	355	222	535	39	577		
3:15 PM	303	236	450	31	539	Min. 1 Met	Min. 1 Met
3:30 PM	303	236	450	31	539		
3:45 PM	303	236	450	31	539		
4:00 PM	303	236	450	31	539		
4:15 PM	291	193	410	28	484		Min. 1 Met
4:30 PM	291	193	410	28	484		
4:45 PM	291	193	410	28	484		
5:00 PM	291	193	410	28	484		
5:15 PM	188	134	271	11	322		
5:30 PM	188	134	271	11	322		
5:45 PM	188	134	271	11	322		
6:00 PM	188	134	271	11	322		
6:15 PM	171	113	84	6	284		
6:30 PM	171	113	84	6	284		
6:45 PM	171	113	84	6	284		
7:00 PM	171	113	84	6	284		
7:15 PM	174	98	53	5	272		
7:30 PM	174	98	53	5	272		
7:45 PM	174	98	53	5	272		
8:00 PM	174	98	53	5	272		
8:15 PM	171	104	186	5	275		
8:30 PM	171	104	186	5	275		
8:45 PM	171	104	186	5	275		
9:00 PM	171	104	186	5	275		
9:15 PM	139	85	36	8	224		
9:30 PM	139	85	36	8	224		
9:45 PM	139	85	36	8	224		
10:00 PM	139	85	36	8	224		
10:15 PM	93	59	68	4	152		
10:30 PM	93	59	68	4	152		
10:45 PM	93	59	68	4	152		
11:00 PM	93	59	68	4	152		
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

Top Hours for Figure 4C-1 - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	2:15 PM	3:15 PM	577	535
2nd Highest Hour	3:15 PM	4:15 PM	539	450
3rd Highest Hour	11:15 AM	12:15 PM	556	369
4th Highest Hour	4:15 PM	5:15 PM	484	410
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	2:15 PM	3:15 PM	577	535
2nd Highest Hour	3:15 PM	4:15 PM	539	450
3rd Highest Hour	4:15 PM	5:15 PM	484	410
4th Highest Hour	11:15 AM	12:15 PM	556	369
Top Hours for Figure 4C-1 - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	5:15 AM	6:15 AM	624	60
2nd Highest Hour	11:15 AM	12:15 PM	556	58
3rd Highest Hour	2:15 PM	3:15 PM	577	39
4th Highest Hour	8:15 AM	9:15 AM	547	53
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	5:15 AM	6:15 AM	624	60
2nd Highest Hour	11:15 AM	12:15 PM	556	58
3rd Highest Hour	8:15 AM	9:15 AM	547	53
4th Highest Hour	6:15 AM	7:15 AM	547	52

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd &
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	129	32	2		
12:15 AM	94	51	1		
12:30 AM	94	51	1		
12:45 AM	94	51	1		
1:00 AM	94	51	1		
1:15 AM	83	33	2		
1:30 AM	83	33	2		
1:45 AM	83	33	2		
2:00 AM	83	33	2		
2:15 AM	104	35	3		
2:30 AM	104	35	3		
2:45 AM	104	35	3		
3:00 AM	104	35	3		
3:15 AM	136	69	7		
3:30 AM	480	108	41		
3:45 AM	580	143	55		
4:00 AM	664	166	63	Y	Y
4:15 AM	125	0	0		
4:30 AM	125	0	0		
4:45 AM	454	168	39	Y	
5:00 AM	547	223	52	Y	Y
5:15 AM	624	257	60	Y	Y
5:30 AM	139	0	0		
5:45 AM	139	0	0		
6:00 AM	580	143	55		
6:15 AM	547	223	52	Y	Y
6:30 AM	547	223	52	Y	Y
6:45 AM	547	223	52	Y	Y
7:00 AM	547	223	52	Y	Y
7:15 AM	525	239	46	Y	Y
7:30 AM	525	239	46	Y	Y
7:45 AM	525	239	46	Y	Y
8:00 AM	525	239	46	Y	Y
8:15 AM	547	272	53	Y	Y
8:30 AM	547	272	53	Y	Y
8:45 AM	547	272	53	Y	Y
9:00 AM	547	272	53	Y	Y
9:15 AM	408	286	36	Y	
9:30 AM	408	286	36	Y	
9:45 AM	408	286	36	Y	
10:00 AM	408	286	36	Y	
10:15 AM	463	351	43	Y	Y
10:30 AM	463	351	43	Y	Y
10:45 AM	463	351	43	Y	Y
11:00 AM	463	351	43	Y	Y
11:15 AM	556	369	58	Y	Y
11:30 AM	556	369	58	Y	Y
11:45 AM	556	369	58	Y	Y

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

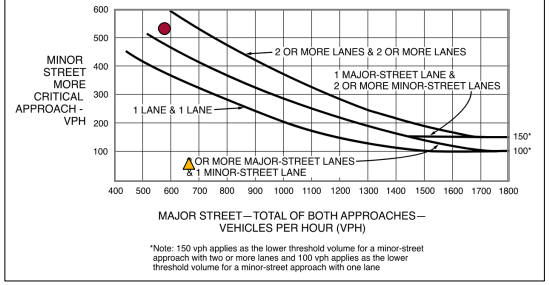
Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (EB)						
4C-3	2:15 PM	3:15 PM	577	535	616	Not Met
4C-4 (70% Factor)	2:15 PM	3:15 PM	577	535	322	Met
Minor Street 2 (WB)						
4C-3	4:00 AM	5:00 AM	664	63	434	Not Met
4C-4 (70% Factor)	4:00 AM	5:00 AM	664	63	212.96	Not Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd &
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

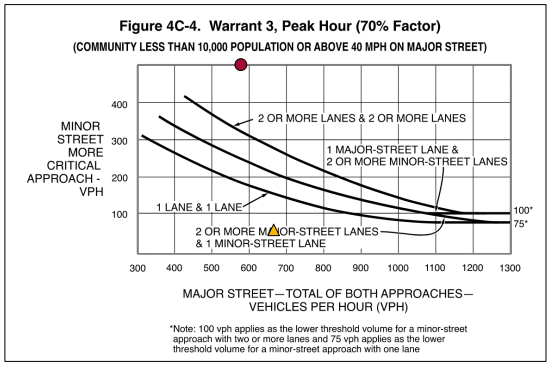
Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	556	369	58	Y	Y
12:15 PM	483	271	41	Y	
12:30 PM	483	271	41	Y	
12:45 PM	483	271	41	Y	
1:00 PM	483	271	41	Y	
1:15 PM	530	297	48	Y	Y
1:30 PM	530	297	48	Y	Y
1:45 PM	530	297	48	Y	Y
2:00 PM	530	297	48	Y	Y
2:15 PM	577	535	39	Y	Y
2:30 PM	577	535	39	Y	Y
2:45 PM	577	535	39	Y	Y
3:00 PM	577	535	39	Y	Y
3:15 PM	539	450	31	Y	Y
3:30 PM	539	450	31	Y	Y
3:45 PM	539	450	31	Y	Y
4:00 PM	539	450	31	Y	Y
4:15 PM	484	410	28	Y	Y
4:30 PM	484	410	28	Y	Y
4:45 PM	484	410	28	Y	Y
5:00 PM	484	410	28	Y	Y
5:15 PM	322	271	11	Y	
5:30 PM	322	271	11	Y	
5:45 PM	322	271	11	Y	
6:00 PM	322	271	11	Y	
6:15 PM	284	84	6		
6:30 PM	284	84	6		
6:45 PM	284	84	6		
7:00 PM	284	84	6		
7:15 PM	272	53	5		
7:30 PM	272	53	5		
7:45 PM	272	53	5		
8:00 PM	272	53	5		
8:15 PM	275	186	5	Y	
8:30 PM	275	186	5	Y	
8:45 PM	275	186	5	Y	
9:00 PM	275	186	5	Y	
9:15 PM	224	36	8		
9:30 PM	224	36	8		
9:45 PM	224	36	8		
10:00 PM	224	36	8		
10:15 PM	152	68	4		
10:30 PM	152	68	4		
10:45 PM	152	68	4		
11:00 PM	152	68	4		
11:15 PM	0	0	0		
11:30 PM	0	0	0		
11:45 PM	0	0	0		



TRAFFIC SIGNAL WARRANT ANALYSIS FINDINGS

Scenario: HY with BIG (2048)

	Included?	Warrant Satisfied?	Notes and Comments:
Warrant 1, Eight-Hour Vehicular Volume	Yes	**Yes**	Condition A (70%) was met. Combination of A/B (56%) was met.
Warrant 2, Four-Hour Vehicular Volume	Yes	**Yes**	Figure 4C-1 (100%). Figure 4C-2 (70% Factor).
Warrant 3, Peak Hour	Yes	**Yes**	Figure 4C-3 (100%). Figure 4C-4 (70% Factor).
Warrant 4, Pedestrian Volume	No		
Warrant 5, School Crossing	No		
Warrant 6, Coordinated Signal System	No		
Warrant 7, Crash Experience	No		
Warrant 8, Roadway Network	No		
Warrant 9, Intersection Near a Grade Crossing	No		

Conclusion: Enter Conclusion

Notes:

Results by Scenario									
Scenario	W1	W2	W3	W4	W5	W6	W7	W8	W9
OY with BIG (2028)	Yes	Yes	Yes						
IY with BIG (2033)	Yes	Yes	Yes						
HY with BIG (2048)	Yes	Yes	Yes						

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Jasper Rd
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes: Condition A (70%) was met. Combination of A/B (56%) was met.

Lanes	Adjusted Volumes			Condition A						Condition B						Combination A/B											
																Cond. A			Cond. B			Cond. A			Cond. B		
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%			70%			100%			70%			80%			80%			56%			56%		
				Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2	Maj.	Min. 1	Min. 2
1 / 1				500	150	150	350	105	105	750	75	75	525	53	53	400	120	120	600	60	60	280	84	84	420	42	42
2+ / 1	X		X	600	150	150	420	105	105	900	75	75	630	53	53	480	120	120	720	60	60	336	84	84	504	42	42
2+ / 2+	X	X		600	200	200	420	140	140	900	100	100	630	70	70	480	160	160	720	80	80	336	112	112	504	56	56
1 / 2+				500	200	200	350	140	140	750	100	100	525	70	70	400	160	160	600	80	80	280	112	112	420	56	56
HOURS MET				**7**	**7**		**13**	**13**		**0**	**0**		**5**	**5**		**13**	**12**		**0**	**0**		**15**	**15**		**13**	**13**	
WARRANT SATISFIED (8+ Hours)?				**NO**			**YES**			**NO**			**NO**			**NO**						**YES**					
12:00 AM	147	36	2																								
12:15 AM	110	59	1																								
12:30 AM	110	59	1																								
12:45 AM	110	59	1																								
1:00 AM	110	59	1																								
1:15 AM	99	39	2																								
1:30 AM	99	39	2																								
1:45 AM	99	39	2																								
2:00 AM	99	39	2																								
2:15 AM	124	41	4																								
2:30 AM	124	41	4																								
2:45 AM	124	41	4																								
3:00 AM	124	41	4																								
3:15 AM	292	87	18																								
3:30 AM	580	143	55													X						X	X		X	X	X	X	X
3:45 AM	664	166	63										X	X	X	X													
4:00 AM	125	0	0																								
4:15 AM	125	0	0																								
4:30 AM	390	132	28																			X	X		X				
4:45 AM	454	168	39				X	X	X																				
5:00 AM	547	223	52													X	X		X							X	X	X	X
5:15 AM	624	257	60	X	X		X																						
5:30 AM	139	0	0																								
5:45 AM	139	0	0																								
6:00 AM	664	166	63				X	X	X				X	X	X	X	X		X				X	X		X	X	X	X	X
6:15 AM	624	257	60	X	X		X																						
6:30 AM	624	257	60																								
6:45 AM	624	257	60																								
7:00 AM	624	257	60				X	X	X							X	X		X			X	X		X	X	X	X	X
7:15 AM	598	276	53																								
7:30 AM	598	276	53																								
7:45 AM	598	276	53																								
8:00 AM	598	276	53				X	X	X							X	X		X			X	X		X	X	X	X	X
8:15 AM	630	313	61	X	X		X						X	X	X	X													
8:30 AM	630	313	61																								
8:45 AM	630	313	61																								
9:00 AM	630	313	61				X	X	X							X	X		X			X	X		X	X	X	X	X
9:15 AM	471	330	42																								
9:30 AM	471	330	42																								
9:45 AM	471	330	42																								
10:00 AM	471	330	42				X	X	X													X	X		X				
10:15 AM	534	405	50													X	X		X							X	X	X	X
10:30 AM	534	405	50																								
10:45 AM	534	405	50																								
11:00 AM	534	405	50				X	X	X													X	X		X				
11:15 AM	641	426	66	X	X		X						X	X	X	X	X		X								X	X	X	X
11:30 AM	641	426	66																								
11:45 AM	641	426	66																								

WARRANT 1, EIGHT-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Jasper Rd
Jurisdiction: Barstow,
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Notes: Condition A (70%) was met. Combination of A/B (56%) was met.

Lanes	Adjusted Volumes			Condition A									Condition B									Combination A/B															
																						Cond. A				Cond. B				Cond. A				Cond. B			
Major/Minor	Major Street (NB/SB)	Minor Street 1 (EB)	Minor Street 2 (WB)	100%				70%					100%				70%					80%				80%				56%				56%			
				Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2			Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2			Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2		Maj.	Min. 1	Min. 2	
1 / 1				500	150	150		350	105	105			750	75	75		525	53	53			400	120	120		600	60	60		280	84	84		420	42	42	
2+ / 1	X		X	600	150	150		420	105	105			900	75	75		630	53	53			480	120	120		720	60	60		336	84	84		504	42	42	
2+ / 2+	X	X		600	200	200		420	140	140			900	100	100		630	70	70			480	160	160		720	80	80		336	112	112		504	56	56	
1 / 2+				500	200	200		350	140	140			750	100	100		525	70	70			400	160	160		600	80	80		280	112	112		420	56	56	
HOURS MET				7	7			13	13				0	0			5	5				13	12			0	0			15	15			13	13		
WARRANT SATISFIED (8+ Hours)?				NO				YES					NO				NO					NO								YES							
12:00 PM	641	426	66					X	X		X																			X	X		X				
12:15 PM	552	312	47																			X	X		X									X	X	X	X
12:30 PM	552	312	47																																			
12:45 PM	552	312	47																																			
1:00 PM	552	312	47					X	X		X																			X	X		X				
1:15 PM	606	343	56	X	X		X															X	X		X									X	X	X	X
1:30 PM	606	343	56																																			
1:45 PM	606	343	56																																			
2:00 PM	606	343	56					X	X		X																			X	X		X				
2:15 PM	658	618	45	X	X		X										X	X		X		X	X		X									X	X	X	X
2:30 PM	658	618	45																																			
2:45 PM	658	618	45																																			
3:00 PM	658	618	45					X	X		X																			X	X		X				
3:15 PM	610	519	35	X	X		X															X	X		X									X	X		X
3:30 PM	610	519	35																																			
3:45 PM	610	519	35																																			
4:00 PM	610	519	35					X	X		X																			X	X		X				
4:15 PM	550	473	32																			X	X		X									X	X		X
4:30 PM	550	473	32																																			
4:45 PM	550	473	32																																			
5:00 PM	550	473	32					X	X		X																			X	X		X				
5:15 PM	369	313	13																																			
5:30 PM	369	313	13																																			
5:45 PM	369	313	13																																			
6:00 PM	369	313	13																																			
6:15 PM	325	97	7																																			
6:30 PM	325	97	7																																			
6:45 PM	325	97	7																																			
7:00 PM	325	97	7																																			
7:15 PM	311	61	6																																			
7:30 PM	311	61	6																																			
7:45 PM	311	61	6																																			
8:00 PM	311	61	6																																			
8:15 PM	312	215	5																																			
8:30 PM	312	215	5																																			
8:45 PM	312	215	5																																			
9:00 PM	312	215	5																																			
9:15 PM	254	41	10																																			
9:30 PM	254	41	10																																			
9:45 PM	254	41	10																																			
10:00 PM	254	41	10																																			
10:15 PM	173	78	5																																			
10:30 PM	173	78	5																																			
10:45 PM	173	78	5																																			
11:00 PM	173	78	5																																			
11:15 PM	0	0	0																																			
11:30 PM	0	0	0																																			
11:45 PM	0	0	0																																			

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood Rd & Truck Freightliner Service Dwy
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (EB/WB)	2 or More Lanes
Minor Street 1 (NB)	1 Lane
Minor Street 2 (SB)	1 Lane

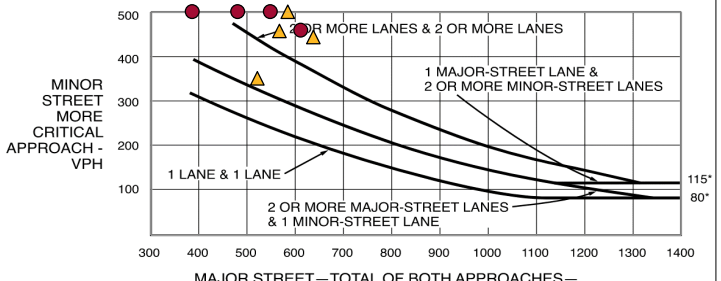
Apply 70% Reduction to Warrant Thresholds? No

Total Number of Unique Hours Met on Figure 4C-1	15
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	N/A

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Eastbound	Westbound	Northbound	Southbound			
12:00 AM	131	67	219	134	198		
12:15 AM	112	40	206	129	152		
12:30 AM	110	37	201	96	147		
12:45 AM	105	37	176	85	142		
1:00 AM	102	40	157	90	142		
1:15 AM	94	38	147	83	132		
1:30 AM	97	41	137	96	138		
1:45 AM	102	38	147	108	140		
2:00 AM	109	36	147	111	145		
2:15 AM	115	42	145	121	157		
2:30 AM	115	39	126	119	154		
2:45 AM	118	39	147	108	157		
3:00 AM	126	39	160	108	165		
3:15 AM	141	54	168	116	195		
3:30 AM	146	59	178	134	205		
3:45 AM	138	61	168	150	199		
4:00 AM	144	61	183	176	205		
4:15 AM	208	152	196	212	360		
4:30 AM	223	152	227	248	375		
4:45 AM	241	152	274	289	393		
5:00 AM	244	152	299	305	396		
5:15 AM	252	261	294	302	513		
5:30 AM	262	263	281	297	525		
5:45 AM	264	261	261	294	525		
6:00 AM	272	261	263	302	533		
6:15 AM	315	246	307	299	561		
6:30 AM	294	241	341	299	535	Min. 1 Met	
6:45 AM	304	246	341	312	550		
7:00 AM	302	257	359	343	559		
7:15 AM	312	237	367	385	549		
7:30 AM	322	244	359	457	566	Min. 1 Met	
7:45 AM	319	244	400	436	563		
8:00 AM	322	250	385	418	572		
8:15 AM	298	248	395	413	546		
8:30 AM	300	251	457	397	551	Min. 1 Met	
8:45 AM	298	261	490	431	559		
9:00 AM	300	266	516	454	566		
9:15 AM	286	215	539	485	501		
9:30 AM	278	213	514	465	491	Min. 1 Met	
9:45 AM	266	200	470	483	466		
10:00 AM	237	189	436	457	426		
10:15 AM	272	218	387	400	490		
10:30 AM	264	221	346	392	485	Min. 1 Met	
10:45 AM	282	223	354	367	505		
11:00 AM	321	229	351	364	550		
11:15 AM	342	266	356	359	608		
11:30 AM	345	258	369	351	603	Min. 1 Met	
11:45 AM	327	253	333	351	580		
12:00 PM	303	242	307	346	545		
12:15 PM	297	214	284	379	511		
12:30 PM	309	211	287	351	520	Min. 2 Met	
12:45 PM	325	211	310	348	536		
1:00 PM	338	208	351	330	546		
1:15 PM	342	235	341	289	577		
1:30 PM	334	235	346	297	569	Min. 1 Met	
1:45 PM	314	238	361	274	552		
2:00 PM	301	238	382	297	539		
2:15 PM	409	206	410	310	615		
2:30 PM	399	211	459	361	610	Min. 1 Met	

Legend
- Minor Street 1 (NB)
- Minor Street 2 (SB)

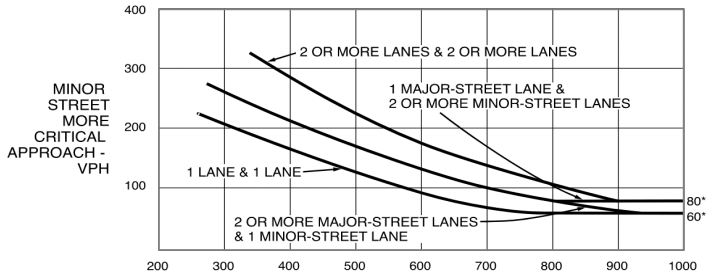
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood F
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	4
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	14

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
2:45 PM	413	245	618	45	658		
3:00 PM	413	245	618	45	658		Min. 1 Met
3:15 PM	349	261	519	35	610	Min. 1 Met	
3:30 PM	349	261	519	35	610		
3:45 PM	349	261	519	35	610		
4:00 PM	349	261	519	35	610		Min. 1 Met
4:15 PM	336	214	473	32	550	Min. 1 Met	
4:30 PM	336	214	473	32	550		
4:45 PM	336	214	473	32	550		
5:00 PM	336	214	473	32	550		Min. 1 Met
5:15 PM	218	151	313	13	369		
5:30 PM	218	151	313	13	369		
5:45 PM	218	151	313	13	369		
6:00 PM	218	151	313	13	369		Min. 1 Met
6:15 PM	197	128	97	7	325		
6:30 PM	197	128	97	7	325		
6:45 PM	197	128	97	7	325		
7:00 PM	197	128	97	7	325		
7:15 PM	200	111	61	6	311		
7:30 PM	200	111	61	6	311		
7:45 PM	200	111	61	6	311		
8:00 PM	200	111	61	6	311		
8:15 PM	195	117	215	5	312		
8:30 PM	195	117	215	5	312		
8:45 PM	195	117	215	5	312		
9:00 PM	195	117	215	5	312		
9:15 PM	159	95	41	10	254		
9:30 PM	159	95	41	10	254		
9:45 PM	159	95	41	10	254		
10:00 PM	159	95	41	10	254		
10:15 PM	107	66	78	5	173		
10:30 PM	107	66	78	5	173		
10:45 PM	107	66	78	5	173		
11:00 PM	107	66	78	5	173		
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

Top Hours for Figure 4C-1 - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	2:15 PM	3:15 PM	658	618
2nd Highest Hour	3:15 PM	4:15 PM	610	519
3rd Highest Hour	11:15 AM	12:15 PM	641	426
4th Highest Hour	4:15 PM	5:15 PM	550	473
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 1 (EB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	3:00 PM	4:00 PM	658	618
2nd Highest Hour	4:00 PM	5:00 PM	610	519
3rd Highest Hour	5:00 PM	6:00 PM	550	473
4th Highest Hour	12:00 PM	1:00 PM	641	426
Top Hours for Figure 4C-1 - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	6:00 AM	7:00 AM	664	63
2nd Highest Hour	11:15 AM	12:15 PM	641	66
3rd Highest Hour	8:15 AM	9:15 AM	630	61
4th Highest Hour	7:00 AM	8:00 AM	624	60
Top Hours for Figure 4C-2 (70% Factor) - Minor Street 2 (WB)				
	Start Time	End Time	Major Street	Minor Street
Top Hour	6:00 AM	7:00 AM	664	63
2nd Highest Hour	11:15 AM	12:15 PM	641	66
3rd Highest Hour	8:15 AM	9:15 AM	630	61
4th Highest Hour	7:00 AM	8:00 AM	624	60

WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd &
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 AM	147	36	2		
12:15 AM	110	59	1		
12:30 AM	110	59	1		
12:45 AM	110	59	1		
1:00 AM	110	59	1		
1:15 AM	99	39	2		
1:30 AM	99	39	2		
1:45 AM	99	39	2		
2:00 AM	99	39	2		
2:15 AM	124	41	4		
2:30 AM	124	41	4		
2:45 AM	124	41	4		
3:00 AM	124	41	4		
3:15 AM	160	79	9		
3:30 AM	480	108	41		
3:45 AM	580	143	55		
4:00 AM	664	166	63	Y	Y
4:15 AM	125	0	0		
4:30 AM	125	0	0		
4:45 AM	454	168	39	Y	
5:00 AM	547	223	52	Y	Y
5:15 AM	624	257	60	Y	Y
5:30 AM	139	0	0		
5:45 AM	139	0	0		
6:00 AM	664	166	63	Y	Y
6:15 AM	624	257	60	Y	Y
6:30 AM	624	257	60	Y	Y
6:45 AM	624	257	60	Y	Y
7:00 AM	624	257	60	Y	Y
7:15 AM	598	276	53	Y	Y
7:30 AM	598	276	53	Y	Y
7:45 AM	598	276	53	Y	Y
8:00 AM	598	276	53	Y	Y
8:15 AM	630	313	61	Y	Y
8:30 AM	630	313	61	Y	Y
8:45 AM	630	313	61	Y	Y
9:00 AM	630	313	61	Y	Y
9:15 AM	471	330	42	Y	Y
9:30 AM	471	330	42	Y	Y
9:45 AM	471	330	42	Y	Y
10:00 AM	471	330	42	Y	Y
10:15 AM	534	405	50	Y	Y
10:30 AM	534	405	50	Y	Y
10:45 AM	534	405	50	Y	Y
11:00 AM	534	405	50	Y	Y
11:15 AM	641	426	66	Y	Y
11:30 AM	641	426	66	Y	Y
11:45 AM	641	426	66	Y	Y

Category A: If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

A1: The total stopped-time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach

A2: The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes

A3: The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches

or

Category B: The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the more critical minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or 4 for the existing combination of approach lanes.

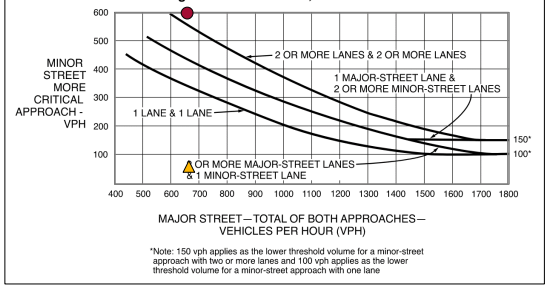
Category B:

Figure	Peak Hour Start Time	Peak Hour End Time	Major Traffic Volume	Minor Traffic Volume	Threshold Minor Traffic Volume	Met?
Minor Street 1 (EB)						
4C-3	2:15 PM	3:15 PM	658	618	564	Met
4C-4 (70% Factor)	2:15 PM	3:15 PM	658	618	277	Met
Minor Street 2 (WB)						
4C-3	4:00 AM	5:00 AM	664	63	434	Not Met
4C-4 (70% Factor)	4:00 AM	5:00 AM	664	63	212.96	Not Met

Note: The hours plotted may not always be the "peak" hour. The hours plotted are the hours that most dramatically meet the threshold.

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

Figure 4C-3. Warrant 3, Peak Hour



WARRANT 3, PEAK HOUR

Intersection Name: Lenwood Rd &
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

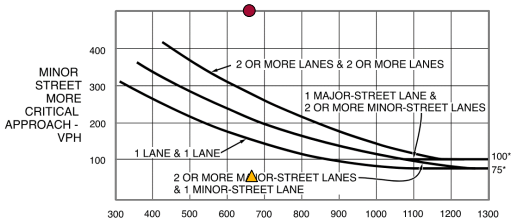
Is traffic at this intersection generated by office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time? **Yes**

Apply 70% Reduction to Warrant Thresholds? **Yes**

:Peak Hour :Conditions A2 and A3 meet

Hour Interval Beginning At	Major Street (NB/SB) Combined Vehicles Per Hour (VPH)	Minor Street 1 (EB) Vehicles Per Hour (VPH)	Minor Street 2 (WB) Vehicles Per Hour (VPH)	A2	A3
12:00 PM	641	426	66	Y	Y
12:15 PM	552	312	47	Y	Y
12:30 PM	552	312	47	Y	Y
12:45 PM	552	312	47	Y	Y
1:00 PM	552	312	47	Y	Y
1:15 PM	606	343	56	Y	Y
1:30 PM	606	343	56	Y	Y
1:45 PM	606	343	56	Y	Y
2:00 PM	606	343	56	Y	Y
2:15 PM	658	618	45	Y	Y
2:30 PM	658	618	45	Y	Y
2:45 PM	658	618	45	Y	Y
3:00 PM	658	618	45	Y	Y
3:15 PM	610	519	35	Y	Y
3:30 PM	610	519	35	Y	Y
3:45 PM	610	519	35	Y	Y
4:00 PM	610	519	35	Y	Y
4:15 PM	550	473	32	Y	Y
4:30 PM	550	473	32	Y	Y
4:45 PM	550	473	32	Y	Y
5:00 PM	550	473	32	Y	Y
5:15 PM	369	313	13	Y	
5:30 PM	369	313	13	Y	
5:45 PM	369	313	13	Y	
6:00 PM	369	313	13	Y	
6:15 PM	325	97	7		
6:30 PM	325	97	7		
6:45 PM	325	97	7		
7:00 PM	325	97	7		
7:15 PM	311	61	6		
7:30 PM	311	61	6		
7:45 PM	311	61	6		
8:00 PM	311	61	6		
8:15 PM	312	215	5	Y	
8:30 PM	312	215	5	Y	
8:45 PM	312	215	5	Y	
9:00 PM	312	215	5	Y	
9:15 PM	254	41	10		
9:30 PM	254	41	10		
9:45 PM	254	41	10		
10:00 PM	254	41	10		
10:15 PM	173	78	5		
10:30 PM	173	78	5		
10:45 PM	173	78	5		
11:00 PM	173	78	5		
11:15 PM	0	0	0		
11:30 PM	0	0	0		
11:45 PM	0	0	0		

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

Appendix M: Fair-Share Calculations

FAIR SHARE CALCULATION WORKSHEET

Project: Barstow International Gateway
Date: 25-Aug-25

HORIZON YEAR (2048) PLUS PROJECT

FAIR SHARE RESPONSIBILITY

Formula 1

$$FS\% = \frac{C - B}{C - A}$$

Formula 2

$$FS\% = \frac{D}{D + E}$$

Where:

FS% = The equitable share for the proposed project's traffic impact
A = The Existing traffic volumes entering the facility
B = The Horizon Year without Project traffic volumes entering the facility
C = The Horizon Year with Project traffic volumes entering the facility
D = BIG-related traffic
E = Cumulative Project traffic

Main Street	between Hinkley Road to Country Club Drive[a]							
ADT	FS% =	C - B / C - A	=	16,630 - 16,112 / 16,630 - 3,800	=	4.04%		
Lenwood Road	between Agate Road to Jasper Road[b]							
ADT	FS% =	D / D + E	=	3,652 / 3,652 + 6,667	=	35.39%		
Lenwood Road	between Main Street to High Desert Road[a]							
ADT	FS% =	C - B / C - A	=	26,770 - 19,317 / 26,770 - 4,270	=	33.13%		

[a]Formula 1 applied since there is volume growth in addition to BIG and the County's cumulative project.

[b]Formula 2 applied since the volume growth is related to BIG and County's cumulative project only. Therefore, contributions are split between BIG and County's cumulative project based on each projects addition of ADT along roadway segment.

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood F
Jurisdiction: Barstow, CA
Scenario: OY with BIG (2028)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

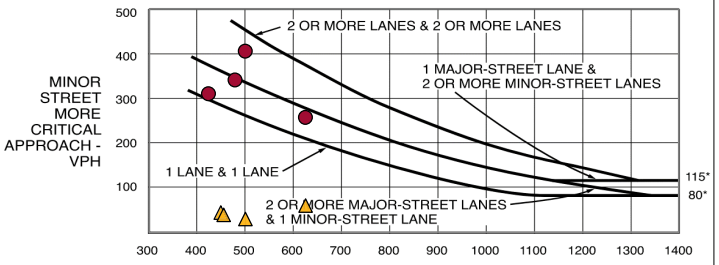
Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	0
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	5

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
12:00 AM	74	45	24	2	119		
12:15 AM	49	31	39	1	80		
12:30 AM	49	31	39	1	80		
12:45 AM	49	31	39	1	80		
1:00 AM	49	31	39	1	80		
1:15 AM	42	28	25	1	70		
1:30 AM	42	28	25	1	70		
1:45 AM	42	28	25	1	70		
2:00 AM	42	28	25	1	70		
2:15 AM	50	37	27	3	87		
2:30 AM	50	37	27	3	87		
2:45 AM	50	37	27	3	87		
3:00 AM	50	37	27	3	87		
3:15 AM	74	39	52	6	113		
3:30 AM	74	39	52	6	113		
3:45 AM	74	39	52	6	113		
4:00 AM	74	39	52	6	113		
4:15 AM	191	101	87	18	292		
4:30 AM	191	101	87	18	292		
4:45 AM	287	167	168	39	454		
5:00 AM	358	189	223	52	547		Min. 1 Met
5:15 AM	418	206	257	60	624		
5:30 AM	62	77	0	0	139		
5:45 AM	62	77	0	0	139		
6:00 AM	314	166	108	41	480		
6:15 AM	287	167	168	39	454		
6:30 AM	287	167	168	39	454		
6:45 AM	287	167	168	39	454		
7:00 AM	287	167	168	39	454		
7:15 AM	270	171	181	35	441		
7:30 AM	270	171	181	35	441		
7:45 AM	270	171	181	35	441		
8:00 AM	270	171	181	35	441		
8:15 AM	278	169	205	40	447		
8:30 AM	278	169	205	40	447		
8:45 AM	278	169	205	40	447		
9:00 AM	278	169	205	40	447		
9:15 AM	213	122	216	27	335		
9:30 AM	213	122	216	27	335		
9:45 AM	213	122	216	27	335		
10:00 AM	213	122	216	27	335		
10:15 AM	245	133	265	33	378		
10:30 AM	245	133	265	33	378		
10:45 AM	245	133	265	33	378		
11:00 AM	245	133	265	33	378		
11:15 AM	298	150	279	44	448		Min. 1 Met
11:30 AM	298	150	279	44	448		
11:45 AM	298	150	279	44	448		
12:00 PM	298	150	279	44	448		
12:15 PM	257	147	205	31	404		
12:30 PM	257	147	205	31	404		
12:45 PM	257	147	205	31	404		
1:00 PM	257	147	205	31	404		
1:15 PM	293	148	225	36	441		
1:30 PM	293	148	225	36	441		
1:45 PM	293	148	225	36	441		
2:00 PM	293	148	225	36	441		
2:15 PM	298	201	405	30	499		Min. 1 Met
2:30 PM	298	201	405	30	499		

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

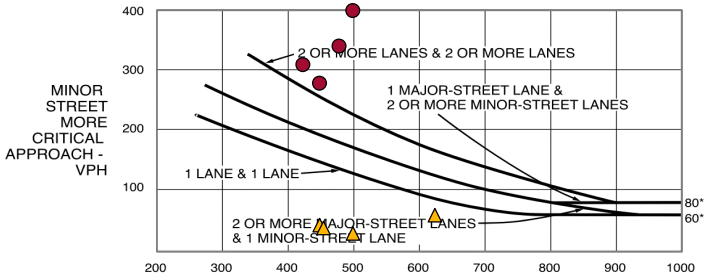
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood F
Jurisdiction: Barstow, CA
Scenario: IY with BIG (2033)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

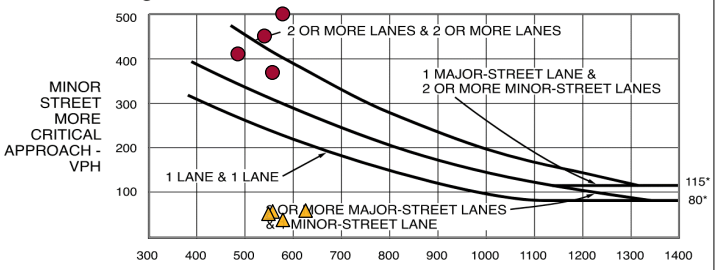
Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	2
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	12

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
12:00 AM	79	50	32	2	129		
12:15 AM	58	36	51	1	94		
12:30 AM	58	36	51	1	94		
12:45 AM	58	36	51	1	94		
1:00 AM	58	36	51	1	94		
1:15 AM	50	33	33	2	83		
1:30 AM	50	33	33	2	83		
1:45 AM	50	33	33	2	83		
2:00 AM	50	33	33	2	83		
2:15 AM	62	42	35	3	104		
2:30 AM	62	42	35	3	104		
2:45 AM	62	42	35	3	104		
3:00 AM	62	42	35	3	104		
3:15 AM	91	45	69	7	136		
3:30 AM	91	45	69	7	136		
3:45 AM	91	45	69	7	136		
4:00 AM	91	45	69	7	136		
4:15 AM	227	114	115	24	341		
4:30 AM	227	114	115	24	341		
4:45 AM	287	167	168	39	454		
5:00 AM	358	189	223	52	547		Min. 1 Met
5:15 AM	418	206	257	60	624		
5:30 AM	62	77	0	0	139		
5:45 AM	62	77	0	0	139		
6:00 AM	391	189	143	55	580		
6:15 AM	358	189	223	52	547		Min. 1 Met
6:30 AM	358	189	223	52	547		
6:45 AM	358	189	223	52	547		
7:00 AM	358	189	223	52	547		
7:15 AM	333	192	239	46	525		Min. 1 Met
7:30 AM	333	192	239	46	525		
7:45 AM	333	192	239	46	525		
8:00 AM	333	192	239	46	525		
8:15 AM	356	191	272	53	547		Min. 1 Met
8:30 AM	356	191	272	53	547		
8:45 AM	356	191	272	53	547		
9:00 AM	356	191	272	53	547		
9:15 AM	270	138	286	36	408		Min. 1 Met
9:30 AM	270	138	286	36	408		
9:45 AM	270	138	286	36	408		
10:00 AM	270	138	286	36	408		
10:15 AM	311	152	351	43	463		Min. 1 Met
10:30 AM	311	152	351	43	463		
10:45 AM	311	152	351	43	463		
11:00 AM	311	152	351	43	463		
11:15 AM	383	173	369	58	556		Min. 1 Met
11:30 AM	383	173	369	58	556		
11:45 AM	383	173	369	58	556		
12:00 PM	383	173	369	58	556		
12:15 PM	316	167	271	41	483		Min. 1 Met
12:30 PM	316	167	271	41	483		
12:45 PM	316	167	271	41	483		
1:00 PM	316	167	271	41	483		
1:15 PM	361	169	297	48	530		Min. 1 Met
1:30 PM	361	169	297	48	530		
1:45 PM	361	169	297	48	530		
2:00 PM	361	169	297	48	530		
2:15 PM	355	222	535	39	577	Min. 1 Met	Min. 1 Met
2:30 PM	355	222	535	39	577		

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

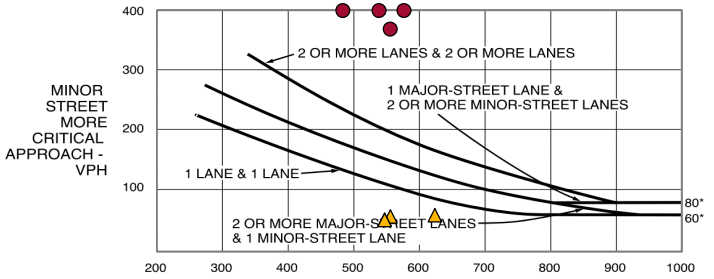
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME

Intersection Name: Lenwood F
Jurisdiction: Barstow, CA
Scenario: HY with BIG (2048)

Warrant Met: Yes

Number of Lanes for Moving Traffic on Each Approach	
Major Street (NB/SB)	2 or More Lanes
Minor Street 1 (EB)	2 or More Lanes
Minor Street 2 (WB)	1 Lane

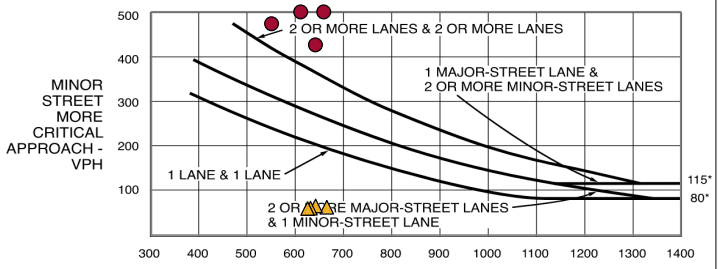
Apply 70% Reduction to Warrant Thresholds? Yes

Total Number of Unique Hours Met on Figure 4C-1	4
Total Number of Unique Hours Met on Figure 4C-2 (70% Factor)	14

Hour Interval Beginning At	Approach Vehicles Per Hour (VPH)				Total Major Approach Volumes	Hour Met?	Hour Met? (70% Factor)
	Major		Minor 1	Minor 2			
	Northbound	Southbound	Eastbound	Westbound			
12:00 AM	90	57	36	2	147		
12:15 AM	68	42	59	1	110		
12:30 AM	68	42	59	1	110		
12:45 AM	68	42	59	1	110		
1:00 AM	68	42	59	1	110		
1:15 AM	60	39	39	2	99		
1:30 AM	60	39	39	2	99		
1:45 AM	60	39	39	2	99		
2:00 AM	60	39	39	2	99		
2:15 AM	74	50	41	4	124		
2:30 AM	74	50	41	4	124		
2:45 AM	74	50	41	4	124		
3:00 AM	74	50	41	4	124		
3:15 AM	108	52	79	9	160		
3:30 AM	108	52	79	9	160		
3:45 AM	108	52	79	9	160		
4:00 AM	108	52	79	9	160		
4:15 AM	264	126	132	28	390		
4:30 AM	264	126	132	28	390		
4:45 AM	287	167	168	39	454		
5:00 AM	358	189	223	52	547		Min. 1 Met
5:15 AM	418	206	257	60	624		
5:30 AM	62	77	0	0	139		
5:45 AM	62	77	0	0	139		
6:00 AM	458	206	166	63	664		Min. 1 Met
6:15 AM	418	206	257	60	624		
6:30 AM	418	206	257	60	624		
6:45 AM	418	206	257	60	624		
7:00 AM	418	206	257	60	624		Min. 1 Met
7:15 AM	389	209	276	53	598		
7:30 AM	389	209	276	53	598		
7:45 AM	389	209	276	53	598		
8:00 AM	389	209	276	53	598		Min. 1 Met
8:15 AM	420	210	313	61	630		
8:30 AM	420	210	313	61	630		
8:45 AM	420	210	313	61	630		
9:00 AM	420	210	313	61	630		Min. 1 Met
9:15 AM	318	153	330	42	471		
9:30 AM	318	153	330	42	471		
9:45 AM	318	153	330	42	471		
10:00 AM	318	153	330	42	471		Min. 1 Met
10:15 AM	367	167	405	50	534		
10:30 AM	367	167	405	50	534		
10:45 AM	367	167	405	50	534		
11:00 AM	367	167	405	50	534		Min. 1 Met
11:15 AM	452	189	426	66	641	Min. 1 Met	
11:30 AM	452	189	426	66	641		
11:45 AM	452	189	426	66	641		
12:00 PM	452	189	426	66	641		Min. 1 Met
12:15 PM	369	183	312	47	552		
12:30 PM	369	183	312	47	552		
12:45 PM	369	183	312	47	552		
1:00 PM	369	183	312	47	552		Min. 1 Met
1:15 PM	422	184	343	56	606		
1:30 PM	422	184	343	56	606		
1:45 PM	422	184	343	56	606		
2:00 PM	422	184	343	56	606		Min. 1 Met
2:15 PM	413	245	618	45	658	Min. 1 Met	
2:30 PM	413	245	618	45	658		

Legend
- Minor Street 1 (EB)
- Minor Street 2 (WB)

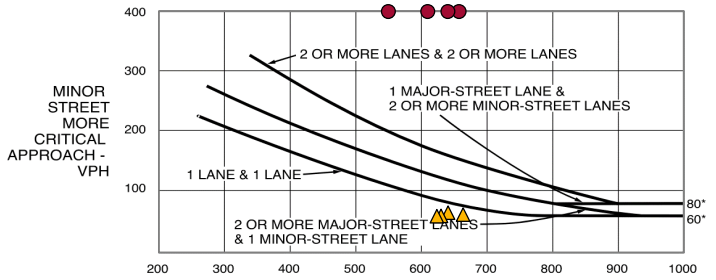
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane