Appendix H

Northside Specific Plan Traffic Impact Analysis

NORTHSIDE SPECIFIC PLAN
TRAFFIC IMPACT ANALYSIS
REVISED: FEBRUARY 28, 2020
JOB NUMBER: 17964-AT

RICK ENGINEERING COMPANY

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NORTHSIDE SPECIFIC PLAN
TRAFFIC IMPACT ANALYSIS

Revised: February 28, 2020

Prepared for:

City of Riverside
3900 Main Street
Riverside, CA 92522





Prepared by:

RICK
ENGINEERING COMPANY

Job Number 17964-AT

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NORTHSIDE SPECIFIC PLAN
TRAFFIC IMPACT ANALYSIS

Revised: February 28, 2020

INTRODUCTION

The following Traffic Impact Analysis (TIA) has been prepared to determine any traffic-related impacts within the project area roadways and intersections due to the proposed land uses within the Northside Specific Plan in the Cities of Riverside and Colton, California. The site is generally bound by the Santa Ana River Trail to the west, the I-215 freeway to the east, SR-60 to the south and Pellissier Ranch to the North. **Exhibit 1** shows the project vicinity map.

This TIA was prepared in accordance with the City of Riverside Public Works Department *Traffic Impact Analysis Preparation Guide* publication, dated April 2019.

PROJECT DESCRIPTION

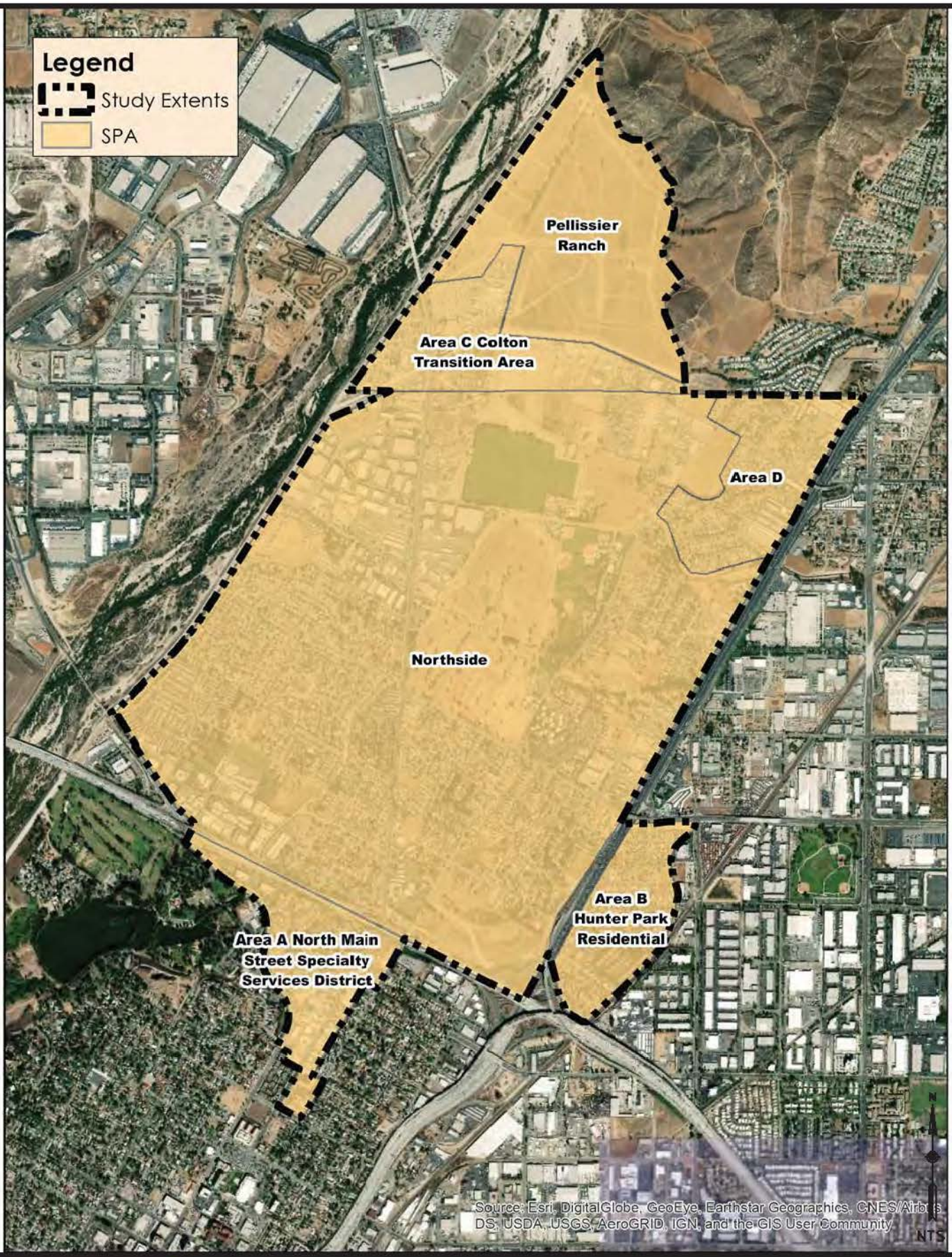
The Northside Specific Plan consists of a total of 17 subareas covering approximately 1,689 acres in the Cities of Riverside and Colton. The land use designations, as proposed by the Northside Specific Plan, would result in a buildout of approximately:

- 6,880-8,748 dwelling units in Subareas 1, 3-7, 9-13;
- 2,430 dwelling units in Colton Residential Overlay;
- 3.9 to 4.2 million square feet of Commercial, Office, Business/Office Park, and Light Industrial Uses;
- 1.8 million square feet of Business Park in Pellissier Ranch;
- 8 acres of Spanish Town Heritage Village, which would be a collection of structures representing the historic settlement of the region; and,
- 232 acres of park, with opportunities for both private and public recreation and open space.

The Specific Plan also includes Complete Street concepts to encourage pedestrian and bicycle activity, and an Urban Transit Connector to establish a mobility link to Downtown. The locations of the proposed uses were refined to reduce vehicular trips and trip lengths, and to encourage non-vehicular and short vehicular trips between adjacent uses.

There are two land use scenarios proposed for the Specific Plan. **Exhibit 2** and **Exhibit 3** show the Northside Specific Plan subareas and proposed land uses for land use Scenario One and Scenario Two, respectively.

The proposed roadway classifications within the Northside Specific Plan area are illustrated in **Exhibit 4**.



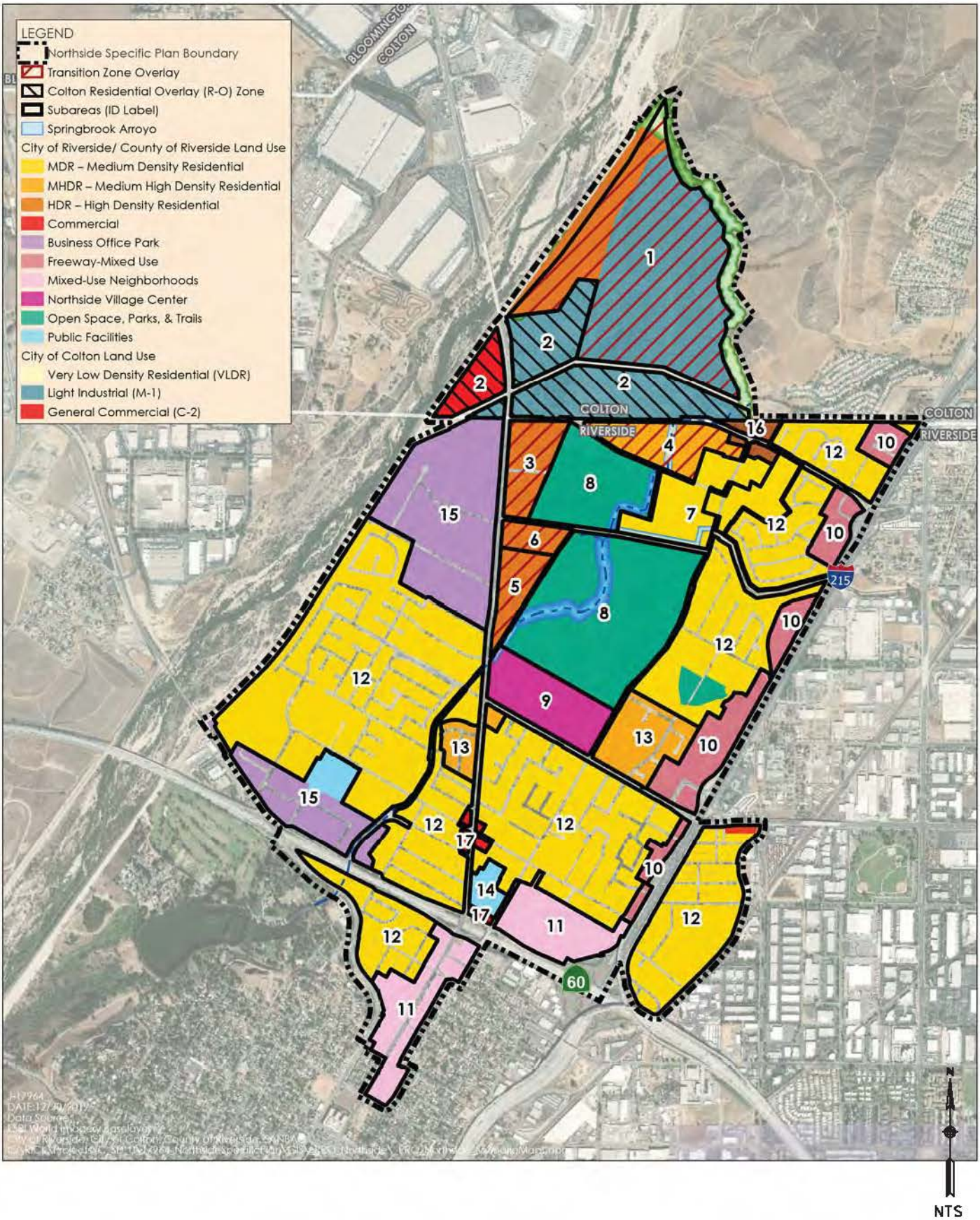
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EXHIBIT 1
VICINITY MAP

NORTHSIDE SPECIFIC PLAN

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EXHIBIT 2

NORTHSIDE SPECIFIC PLAN CONCEPTUAL MAP: SCENARIO ONE

NORTHSIDE SPECIFIC PLAN

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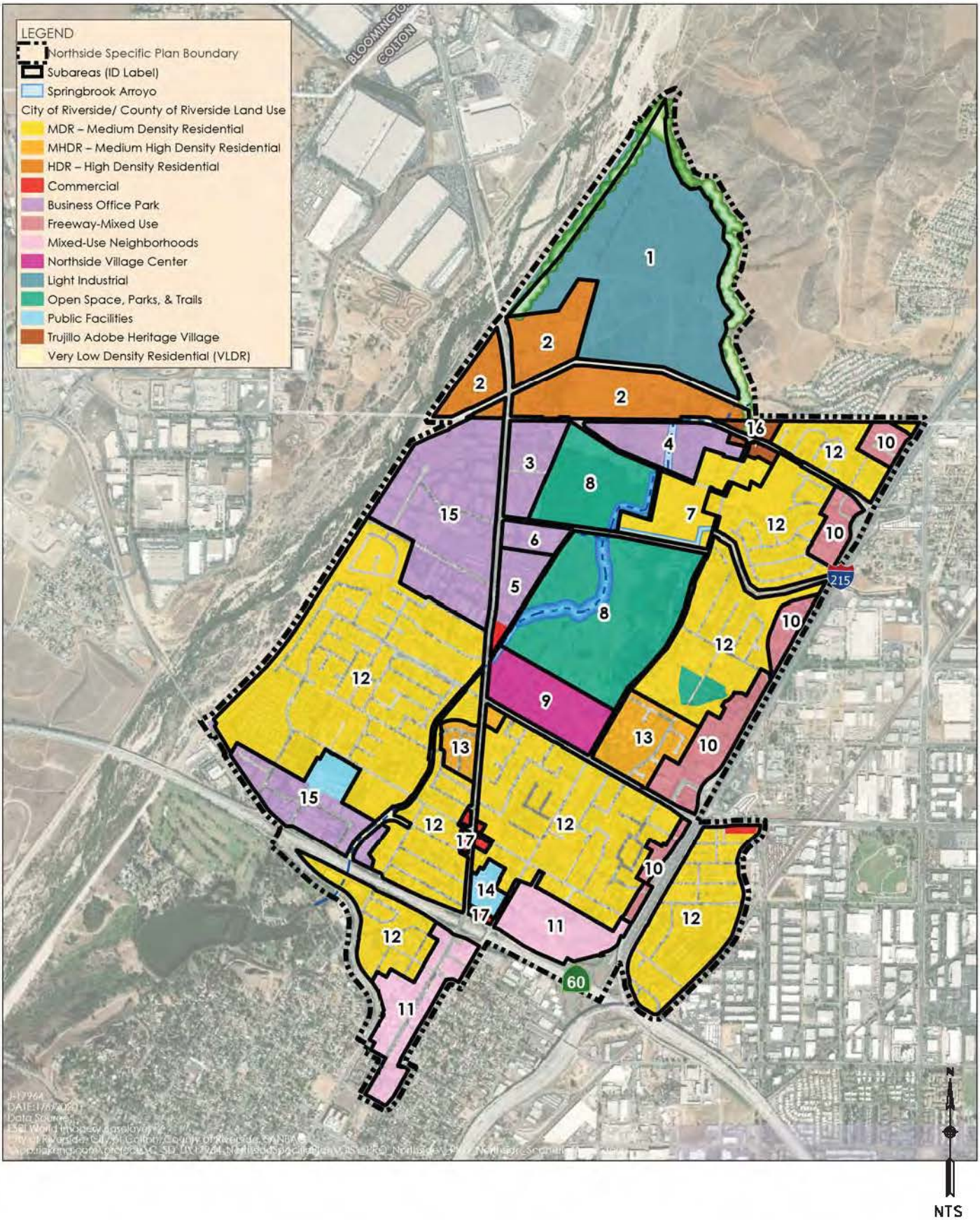


EXHIBIT 3

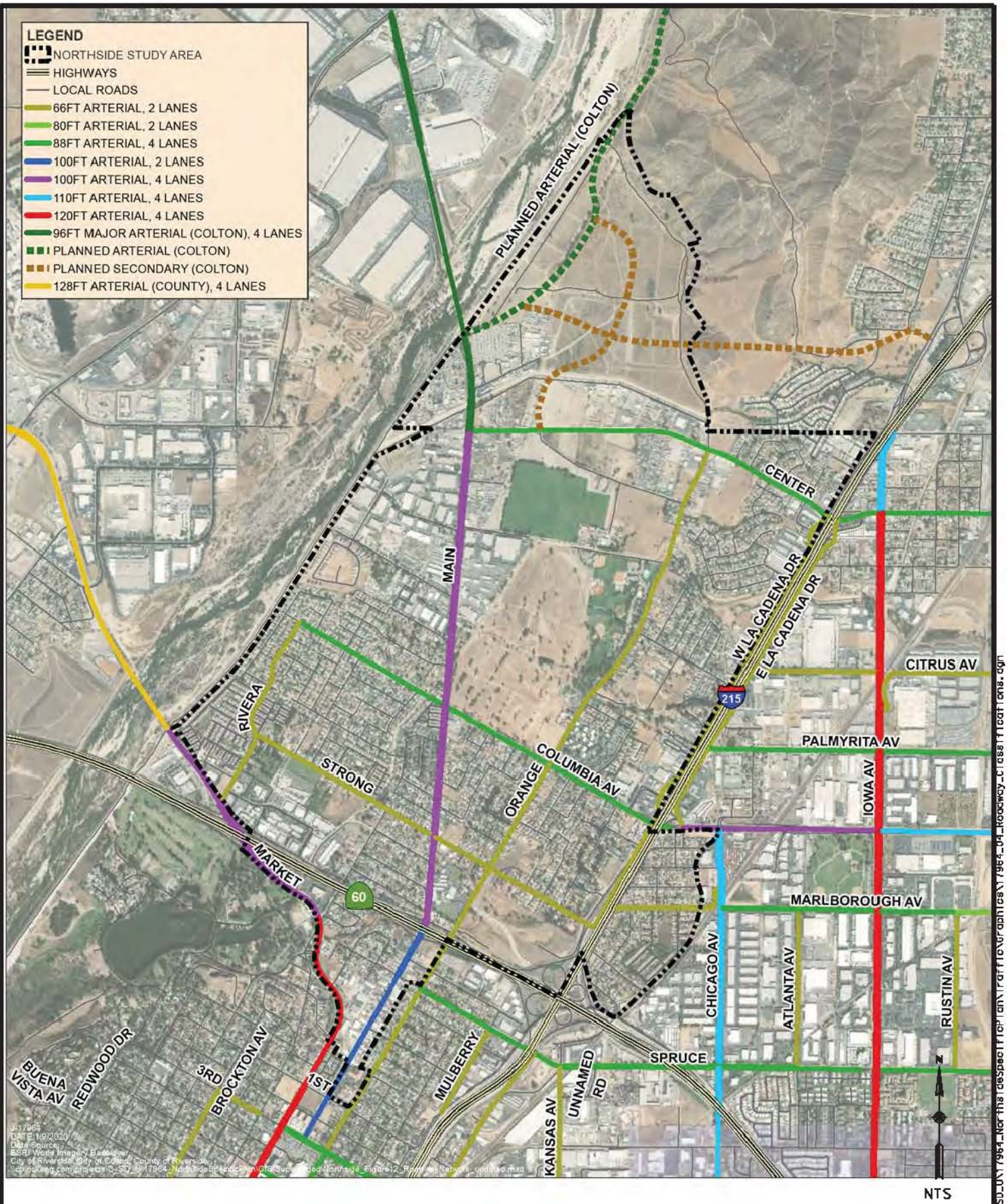
NORTHSIDE SPECIFIC PLAN CONCEPTUAL MAP: SCENARIO TWO

NORTHSIDE SPECIFIC PLAN

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EXHIBIT 4

NORTHSIDE SPECIFIC PLAN PROPOSED ROADWAY CLASSIFICATION

NORTHSIDE SPECIFIC PLAN

PROJECT STUDY AREA

The project study area includes the following intersections and roadway segments, which are also illustrated in **Exhibit 5**:

	Study Intersection	Jurisdiction
1	Center Street / Stephens Avenue	County of Riverside
2	West La Cadena Drive / I-215 SB Ramps-Stephens Avenue	County of Riverside
3	East La Cadena Drive / I-215 NB Ramps-Highgrove Place	County of Riverside
4	Center Street / Highgrove Place	County of Riverside
5	Columbia Avenue / Primer Street	City of Riverside
6	West La Cadena Drive / I-215 SB Ramps-Interchange Drive	City of Riverside
7	East La Cadena Drive / I-215 NB Ramps	City of Riverside
8	Columbia Avenue / East La Cadena Drive	City of Riverside
9	Main Street / Placentia Lane (Center Street)	City of Riverside / City of Colton
10	Main Street / Garner Road	City of Riverside
11	Main Street / Columbia Avenue	City of Riverside
12	Main Street / Strong Street	City of Riverside
13	Main Street / Oakley Avenue-SR-60 WB On-Ramp	City of Riverside
14	Main Street / SR-60 EB Ramps	City of Riverside
15	Main Street / Spruce Street	City of Riverside
16	Orange Street / Oakley Avenue-SR-60 WB Off-Ramp	City of Riverside
17	Orange Street / Strong Street	City of Riverside
18	Orange Street / Columbia Avenue	City of Riverside
19	Orange Street / Garner Road	City of Riverside
20	Orange Street / Center Street	City of Riverside
21	Market Street / Rivera Street	City of Riverside
22	South Riverside Avenue / Pellisier Road (future intersection)	City of Colton

	Study Roadway Segment	Jurisdiction
1	South Riverside Avenue, between future Pellisier Road and Placentia Lane-Center Street	City of Colton
2	Main Street, between Placentia Lane/Center Street and Garner Road	City of Riverside
3	Main Street, between Garner Road and Columbia Avenue	City of Riverside
4	Main Street, between Columbia Avenue and Strong Street	City of Riverside
5	Main Street, between Strong Street and Oakley Avenue	City of Riverside
6	Main Street, between SR-60 EB Ramps and Spruce Street	City of Riverside
7	Main Street, between Spruce Street and Poplar Street	City of Riverside
8	Orange Street, between future Pellisier Road and Center Street *(Year 2040 With Orange Street Extension Scenarios only)*	City of Colton
9	Orange Street, between Center Street and Garner Road	City of Riverside
10	Orange Street, between Garner Road and Columbia Avenue	City of Riverside
11	Orange Street, between Columbia Avenue and Spring Street	City of Riverside
12	Orange Street, between Strong Street and Oakley Avenue	City of Riverside
13	West La Cadena Drive, between Chase Road and I-215 SB Ramps	City of Riverside
14	Pellisier Road, between South Riverside Avenue and Roquet Ranch *(Year 2040 scenarios only)*	City of Colton
15	Center Street/Placentia Lane, between Main Street and Orange Street	City of Riverside / City of Colton
16	Center Street, between Orange Street and Stephens Avenue	City of Riverside / County of Riverside
17	Center Street, between Stephens Avenue and Highgrove Place	County of Riverside
18	Garner Road, between Main Street and Orange Street	City of Riverside
19	Columbia Avenue, between Main Street and Orange Street	City of Riverside
20	Columbia Avenue, between Orange Street and Primer Street	City of Riverside
21	Columbia Avenue, between Primer Street and East La Cadena Drive	City of Riverside
22	Strong Street, between Main Street and Orange Street	City of Riverside
23	Strong Street, between Orange Street and West La Cadena Drive	City of Riverside
24	Market Street, between Rivera Street and SR 60 WB Ramps	City of Riverside

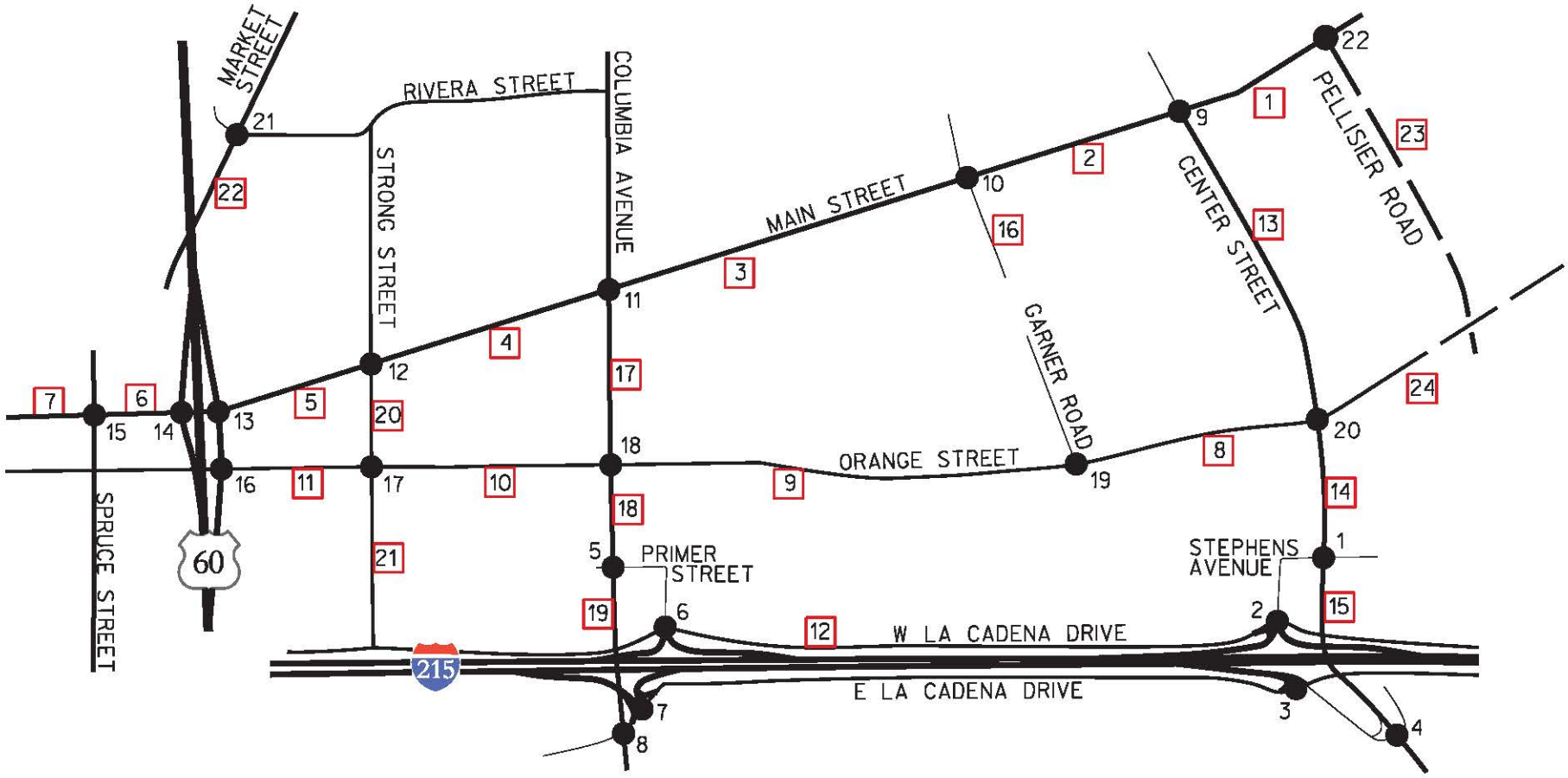


EXHIBIT 5

STUDY INTERSECTIONS AND ROADWAY SEGMENTS

NORTHSIDE SPECIFIC PLAN

LEGEND

= INTERSECTION

[#] = SEGMENT

= FUTURE ROAD

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TRAFFIC ANALYSIS METHODOLOGY

Analysis Scenarios

The intersections and roadways within the project area were analyzed for the following scenarios:

- Existing Conditions
- Existing Plus Project Conditions: Specific Plan Scenario One
- Existing Plus Project Conditions: Specific Plan Scenario Two
- Horizon Year 2040 Baseline (Without Project): Current General Plan Land Uses
- Horizon Year 2040 Specific Plan Scenario One: Without Orange Street Extension
- Horizon Year 2040 Specific Plan Scenario One: With Orange Street Extension
- Horizon Year 2040 Specific Plan Scenario Two: Without Orange Street Extension
- Horizon Year 2040 Specific Plan Scenario Two: With Orange Street Extension

Specific Plan Scenario One proposes to rezone several of the subareas from Industrial/Business Park uses to Medium and High Density Residential. Scenario One is proposed as the "base" scenario for the Specific Plan.

The Specific Plan also includes a Transition Overlay Zone that allows for existing uses within the City of Colton to continue operating under a Business/Office Park and Commercial land use designation, which is evaluated under Specific Plan Scenario Two. Scenario Two also consists of a Residential Overlay Zone for Subarea 2 within the City of Colton, in which the current Light Industrial land use designation is proposed to be rezoned to Medium/High Density Residential (up to 30 DU per acre).

The two Specific Plan land use scenarios for Horizon Year 2040 were evaluated both with and without the future Orange Street extension north of Center Street. The Existing Plus Project and Horizon Year 2040 Without Project scenarios do not include the Orange Street extension.

Intersection Analysis Methodology

Levels of service (LOS) were determined at the study area intersections for the weekday AM and PM peak hours. The AM peak hour intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 7:00 AM and 9:00 AM. The PM peak hour intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 4:00 PM and 6:00 PM. The AM peak hour coincides with the AM school peak in the study area, while the PM peak hour occurs approximately two hours after the PM school peak.

The Level of Service (LOS) for signalized intersections was analyzed using the methodologies described in Chapter 19 of the 6th Edition Highway Capacity Manual (HCM 6). The LOS for signalized intersections is defined in terms of control delay, which is made up of several factors that relate to right-of-way control, geometrics and traffic volumes. The signalized intersection analysis also considers intersection spacing and coordination.

The LOS for two-way and all-way stop controlled intersections was calculated using the methodologies described in Chapters 20 and 21 of the 6th Edition HCM. The LOS for a two-way stop controlled intersection is determined by the computed control delay for each minor street movement and major street left-turns, and not for the intersection as a whole. The LOS reported

reflects the highest delay and associated LOS for an individual movement, typically occurring on the stop controlled approach.

The computerized analysis of signalized and unsignalized intersection operations was performed utilizing the *Synchro 10* traffic analysis software. The *Synchro 10* software supports the HCM-6 methodologies for signalized and stop controlled intersections and was utilized to produce the analysis results.

Signal timing data and parameters such as cycle lengths, splits, clearance intervals, etc. were obtained from the current signal timing sheets provided by the City and calibrated into the Synchro model. Synchro reports delays, which correspond to a particular LOS, to describe the overall operation of an intersection.

The criteria for the LOS grade designations at intersections are provided in **Table 1**. LOS provides a quick overview of how well an intersection is performing. Within the City of Riverside, LOS D or better is accepted for all roadways and intersections. At some key locations such as freeway interchanges and arterial roadways used as a freeway bypass by regional through traffic, LOS E is accepted on a case-by-case basis. For the purposes of this study, LOS D or better is considered acceptable and LOS E and F are considered deficient operations for all study intersections within the study area.

TABLE 1
LOS CRITERIA FOR INTERSECTIONS

LOS	CONTROL DELAY (SEC/VEH)		DESCRIPTION
	SIGNALIZED INTERSECTIONS	UNSIGNALIZED INTERSECTIONS	
A	≤10	≤10	Operations with very low delay and most vehicles do not stop.
B	>10 and ≤20	>10 and ≤15	Operations with good progression but with some restricted movements.
C	>20 and ≤35	>15 and ≤25	Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	>35 and ≤55	>25 and ≤35	Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines.
E	>55 and ≤80	>35 and ≤50	Operations where there is significant delay, extensive queuing, and poor progression.
F	>80	>50	Operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

Source: *6th Edition Highway Capacity Manual.*

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Roadway Segment Analysis Methodology

Roadway segments were analyzed based on the volume-to-capacity (v/c) ratios and the City of Riverside's daily LOS capacity thresholds per Exhibit D of the City of Riverside's *Traffic Impact Analysis Preparation Guide* (April 2019). Roadway segments within the City of Colton and unincorporated County of Riverside were analyzed using Exhibit E (Level of Service Standards) in the County of Riverside's *Traffic Impact Analysis Preparation Guide* (April 2008), as the City of Colton does not have specific LOS criteria for roadway segments.

Within the City of Riverside, City of Colton and unincorporated Riverside County, LOS D or better is accepted for all roadways and intersections. At some key locations such as freeway interchanges and arterial roadways used as a freeway bypass by regional through traffic, LOS E is accepted on a case-by-case basis. For the purposes of this study, LOS D or better is considered acceptable and LOS E is considered deficient operations for all study roadway segments within the study area. The LOS criteria within the City of Riverside do not include the threshold from LOS E to LOS F for roadway segment operations.

Table 2 presents the roadway segment capacity and LOS thresholds utilized by the City of Riverside. The roadway segment capacity and LOS thresholds used by the City of Colton and County of Riverside are shown in **Table 3**.

TABLE 2
CITY OF RIVERSIDE LOS CRITERIA FOR ROADWAY SEGMENTS

ROADWAY CLASSIFICATION	NUMBER OF LANES	LEVEL OF SERVICE (LOS)				
		A [1]	B [1]	C	D	E
Local	2	0-2,099	2,100-2,499	2,500-2,799	2,800-3,099	3,100+
Collector (66' or 80')	2	0-8,699	8,700-9,899	9,900-11,199	11,200-12,499	12,500+
Arterial	2	0-12,599	12,600-14,399	14,400-16,199	16,200-17,999	18,000+
Arterial (88')	4	0-14,199	14,200-16,799	16,800-19,399	19,400-21,199	22,000+
Arterial (100')	4	0-22,999	23,000-26,199	26,200-29,599	29,600-32,999	33,000+
Arterial (120')	6	0-34,699	34,700-38,699	38,700-44,099	44,100-49,499	49,500+
Arterial (144')	8	0-45,499	45,500-50,599	50,600-57,799	57,800-64,999	65,000+

Source: Exhibit D of the City of Riverside's *Traffic Impact Analysis Preparation Guide* (April 2019).

[1] The City's Roadway Segment Capacity Thresholds (Exhibit D of the City's *Traffic Impact Analysis Preparation Guide*) does not provide LOS thresholds for LOS A or LOS B. The LOS A and B thresholds based on ADT as shown in Table 2 were interpolated based on the volume-to-capacity ratios of the LOS C and D thresholds.

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TABLE 3
CITY OF COLTON / COUNTY OF RIVERSIDE
LOS CRITERIA FOR ROADWAY SEGMENTS

ROADWAY CLASSIFICATION	NUMBER OF LANES	LEVEL OF SERVICE (LOS)				
		A [1]	B [1]	C	D	E
Collector	2	7,800	9,100	10,400	11,700	13,000
Secondary	4	15,500	18,100	20,700	23,300	25,900
Major	4	20,500	23,900	27,300	30,700	34,100
Arterial	2	10,800	12,600	14,400	16,200	18,000
Arterial	4	21,500	25,100	28,700	32,300	35,900
Urban Arterial	4	21,500	25,100	28,700	32,300	35,900
Urban Arterial	6	32,300	37,700	43,100	48,500	53,900
Urban Arterial	8	43,000	50,300	57,400	64,600	71,800

Source: Exhibit E of the County of Riverside's *Traffic Impact Analysis Preparation Guide* (April 2008).

[1] Exhibit E of the County of Riverside's *Traffic Impact Analysis Preparation Guide* does not provide LOS thresholds for LOS A or LOS B. The LOS A and B thresholds based on ADT as shown in Table 3 were interpolated based on the volume-to-capacity ratios of the LOS C and D thresholds.

SIGNIFICANCE CRITERIA

The Existing Plus Project intersection and roadway segment operations for each Specific Plan scenario were compared to the Existing conditions operations using the criteria below to determine significant impacts under Existing Plus Project conditions.

Intersection and roadway segment operations for each Horizon Year 2040 Specific Plan scenario were compared to the Horizon Year 2040 Baseline (Without Project) scenario operations using the criteria below to determine significant impacts associated with the Specific Plan scenarios.

Below are the significance criteria for each jurisdiction within the Specific Plan study area:

City of Riverside Significance Criteria

As discussed in Exhibit F of the City of Riverside's *Traffic Impact Analysis Preparation Guide* (April 2019), for projects that propose uses or intensities above that contained in the General Plan, a significant impact at a study intersection occurs when the addition of project traffic causes either peak hour LOS to degrade from acceptable (LOS D or better) to unacceptable (LOS E or F) or peak hour delay to increase as follows:

LOS A/B	=	By 10.0 seconds
LOS C	=	By 8.0 seconds
LOS D	=	By 5.0 seconds
LOS E	=	By 2.0 seconds
LOS F	=	By 1.0 second

A significant impact is also identified on any study intersection forecast to operate at LOS F during the peak hours in order to achieve the goal of Policy CCM-2.4 in the City's General Plan Mobility Element.

The City of Riverside's *Traffic Impact Analysis Preparation Guide* (April 2019) does not provide significance criteria for roadway segment operations. However, Exhibit F (Level of Service Standards) of the City's *Traffic Impact Analysis Preparation Guide* does state that that LOS D is the maximum acceptable threshold for both intersections and roadways. Therefore, for the purposes of this study, a significant impact is identified on a roadway segment when one of the following occurs:

- The addition of project traffic causes LOS to degrade from acceptable (LOS D or better) to unacceptable (LOS E or F); OR
- The project adds traffic to a roadway segment that operates at an unacceptable LOS (LOS E or F) without the project.

City of Colton Significance Criteria

The City of Colton does not have specific significance criteria for intersections and roadway segments; therefore, the significance criteria in the *San Bernardino County Transportation Impact Study Guidelines* (July 2019) are used to determine significant impacts in the City of Colton, which are as follows:

Signalized Intersections

- Any signalized study intersection that is operating at an acceptable LOS D or better without project traffic in which the addition of project traffic causes the intersection to degrade to an LOS E or F shall identify improvements to improve operations to LOS D or better; OR
- Any signalized study intersection that is operating at LOS 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.

Unsignalized Intersections

- The addition of project related traffic causes the intersection to degrade from an LOS D or better to a LOS E or worse; OR
- 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 E or F; AND
- One or both of the following conditions are met:
    1) The project adds ten (10) or more trips to any minor street approach; OR
    2) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

County of Riverside Significance Criteria

The County of Riverside does not have specific significance criteria for intersections and roadway segments; however, the *Riverside County Transportation Department Traffic Impact Analysis Preparation Guide* (April 2008) requires mitigation measures for intersections and roadway segments that do not meet the County's minimum standard of LOS D. Therefore, for the purposes of this study, a significant impact within unincorporated Riverside County is identified at an intersection or on a roadway segment when one of the following occurs:

- The addition of project traffic causes LOS to degrade from acceptable (LOS D or better) to unacceptable (LOS E or F); OR
- The project adds traffic to a roadway segment that operates at an unacceptable LOS (LOS E or F) without the project.

EXISTING CONDITIONS

Existing Roadway Network

The City of Riverside's General Plan Mobility Element identifies a roadway network that is comprised of the following classifications:

Local Streets principally provide vehicular, pedestrian, and bicycle access to property directly abutting the public right of way, with movement of through traffic discouraged. Local streets are designated to be thirty-six feet wide curb to curb within a sixty-six-foot right-of-way and have two through lanes (one in each direction).

Collector Streets are intended to serve as intermediate routes to handle traffic between Local Streets and streets of higher classification. Collector Streets also provide access to abutting property and are two lanes in width. Collector Streets may handle some localized through traffic from one local street to another; however, their primary purpose is not to provide for through traffic but to connect the local street system to the arterial network.

The City has two Collector Street widths, the first designated to be forty feet wide curb to curb within a sixty-six-foot right-of-way, and the second also measuring forty feet wide curb to curb but within an eighty-foot right-of-way to give room for landscaping, non-contiguous sidewalk, etc.

Arterial Streets carry through traffic and connect to the state highway system with restricted access to abutting properties. They are designed to have the highest traffic carrying capacity in the roadway system with the highest speeds and limited interference with traffic flow by driveways. Riverside has five arterial classifications:

- Eighty-eight feet of right-of-way with sixty-four feet of paving and four lanes.
- One hundred feet of right-of-way with eighty feet of paving, a raised median and four lanes.
- One hundred ten feet of right-of-way with eighty-six feet of paving, a raised median and four lanes.
- One hundred twenty feet of right-of-way with one hundred feet of paving, a raised median and six lanes.
- One hundred forty-four feet of right-of-way with one hundred twenty-four feet of paving, a raised median and eight lanes.

Some of the roads are designated as scenic boulevards and/or parkways; these require special landscaping and additional right-of-way may be required. There are also several special boulevards which have a two lane divided roadway of variable geometric design. The following is a description of the study roadways outlined in this report that were observed to be critical to the mobility network of the community:

Center Street is classified as an Arterial in the Riverside 2025 General Plan. Within the project area, it is a two-way roadway with one lane in each direction. Curb to curb width ranges from 28' to 64' throughout the specific plan area. Sidewalks are generally provided near driveways along both sides of the roadway. On street parking is permitted. Bike lanes and bus stops are not provided. The posted speed limit is 40 mph. A traffic signal is provided at its intersection with Stephens Avenue. Center Street is stop-controlled at its intersections with Orange Street and Main Street.

Garner Road is an unclassified street in the Riverside 2025 General Plan. Within the project area, it is a two-lane roadway with one lane in each direction. There is an unpaved portion in the middle that divides the roadway into two segments, preventing its use for through traffic. Curb to curb width is 45' feet on the western segment and 28' on the eastern segment. Sidewalks are provided on both segments. On street parking is only permitted on the north side of the western segment. The roadway utilizes speed bumps to slow down traffic on the eastern segment adjacent to recreational spaces. Bike lanes and bus stops are not provided. There is no posted speed limit on either segment. Garner Road is stop-controlled at its intersections with Main Street and Orange Street.

Columbia Avenue is classified as an Arterial in the Riverside 2025 General Plan. Within the project area, it is a two-way roadway with two lanes in each direction and turn pockets where necessary. Curb to curb width ranges from 40' in the western area of the specific plan to 64' in the eastern area of the specific plan. Sidewalks are generally provided along both sides of the roadway. Although bike lanes are not provided in the planning area along Columbia Avenue, bike lanes are present east of the I-215. Bus stops are provided between Main Street and La Cadena Drive. The posted speed limit ranges from 35 mph near the west city limit to 45 mph near the east city limit, and on-street parking is permitted between Salmon River Road and Main Street. Within the project area, there are traffic signals provided at Main Street, Orange Street, Primer Street, and La Cadena Drive. Salmon River Road is stop-controlled at its intersection with Columbia Avenue.

Strong Street is classified as a Collector in the Riverside 2025 General Plan. Within the project area, it is a two-way street with one lane in each direction. Curb to curb width ranges from 40' to 32' along the segment. Sidewalks are generally provided along both sides of the roadway. On street parking is permitted. Bike lanes and bus stops are not provided. The posted speed limit is 25 mph and on-street parking is permitted. A traffic signal is provided at Main Street. Orange Street and W. La Cadena Drive are both stop-controlled at its intersection with Strong Street.

Market Street is classified as an Arterial in the City of Riverside 2025 General Plan. Within the project area, it is a two-way street with two lanes in each direction east of Rivera Street and one lane in each direction west of Rivera Street. Bus stops are provided. Curb to curb width is 40' west of Rivera Street and ranges from 80' to 90' east of Rivera Street. Sidewalks are generally provided along both sides of the roadway. A bike lane is provided on the northern side of the roadway, west of Rivera Street that connects to the Santa Ana River Trail. On-street parking is not provided. The roadway provides direct access to SR-60 just east of Rivera Street. The posted speed limit is 35 mph. Within the project area, traffic signals are provided at Rivera Street and the SR-60 ramps.

Main Street is classified as an Arterial in the City of Riverside 2025 General Plan. Within the project area, it is a two-way street with two lanes in each direction and both painted and raised medians throughout. The Specific Plan will minimize the median breaks along Main Street, with a minimum separation of 600 feet. Two-way left-turn lanes are provided north of Bartlett Avenue, between Garner Road and Alamo Street and between the SR-60 eastbound ramps and Spruce Street. Curb to curb width ranges from 84' in the northern area of the specific plan to 56' in the southern area of the specific plan. Sidewalks are provided along both sides of the roadway. Bike lanes and bus stops are provided. On street parking is not permitted. The posted speed limit varies between 35-50 mph. Within the specific plan area, traffic signals are provided at Columbia Avenue, Strong Street, both intersections at the SR-60 Ramps, and Spruce Street.

Orange Street is classified as a Collector in the City of Riverside 2025 General Plan. Within the specific plan area, it is a two-way undivided roadway with one lane in each direction. Curb to curb width ranges from 26' in the northern area of the specific plan to 40' in the southern area of the specific plan. Sidewalks are provided along both sides of the roadway with the exception of the segment between Center Street and Garner Road. Bus stops are provided. Bike lanes are not provided. On street parking is permitted throughout a majority of the segment. The posted speed limit is 35 mph. Within the specific plan area, a traffic signal is provided at Columbia Avenue. Orange Street is stop-controlled at its intersections with Center Street, Strong Street and Oakley Avenue.

West La Cadena Drive is classified as a Collector in the Riverside 2025 General Plan. Within the specific plan area, it is a two-way undivided roadway with one lane in each direction and serves as a frontage road to the I-215. Curb to curb width ranges from 26' to 36' throughout the roadway. Sidewalks are not generally provided with the exception of the area around Columbia Avenue. Bus stops are only provided on the west side of the street. Bike lanes are not provided and on-street parking is not permitted. The posted speed limit varies between 40-45 mph. Within the specific plan area, West La Cadena Drive is stop-controlled at the I-215 SB ramps.

Exhibit 6 illustrates the existing lane geometrics and traffic controls for the project study area intersections.

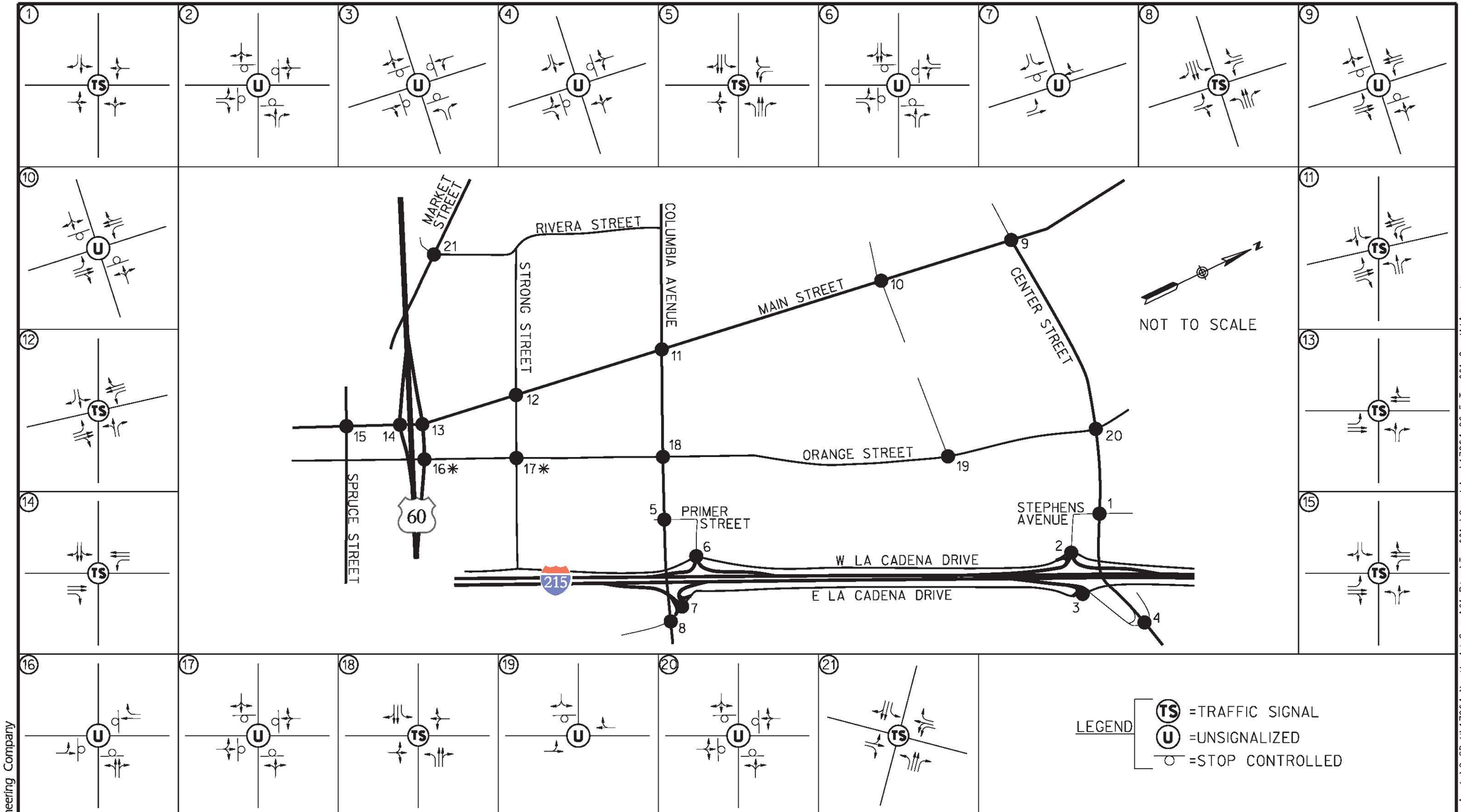
Existing Transit Network

The Northside Specific Plan Area is served by the Riverside Transit Agency (RTA) for public transit. Currently, the area is served by local bus service, as described below. Bus stops within the Northside Specific Plan Area are illustrated in **Exhibit 7**.

Bus Service

One main bus route serves the Northside Specific Plan Area, Route 12 (Downtown Riverside to Center Street). Stops are present along Main Street, Columbia Avenue, Orange Street, Center Street and W La Cadena Street. There is also an alternative route which loops around Garner Road west of Main Street, Rivera Street and Alamo Street. This route provides access for residents to local destinations such as the existing Reid Park and regional destinations such as Downtown Riverside. Frequency for this bus route is typically 60 minutes.

An additional bus route, Route 29 (Downtown Riverside to Eastvale) has a few stops along Market Street, but does not directly interact with the rest of the Northside Specific Plan Area community. Frequency for this bus route is typically 60 minutes.



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EXHIBIT 6

EXISTING INTERSECTION LANE GEOMETRICS AND TRAFFIC CONTROLS

NORTHSIDE SPECIFIC PLAN

* THE EXCHANGE DEVELOPMENT IS CONDITIONED TO INSTALL TRAFFIC SIGNALS AT INTERSECTIONS #16 AND #17. THE HORIZON YEAR 2040 SCENARIOS BOTH WITHOUT AND WITH THE SPECIFIC PLAN INCLUDE SIGNALIZATION AT THESE TWO INTERSECTIONS.

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EXHIBIT 7

EXISTING TRANSIT STOP LOCATIONS

NORTHSIDE SPECIFIC PLAN

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Existing Pedestrian Network

Generally, the sidewalk network across the neighborhood provides access to most land uses and facilities with the exception of gaps along Orange Street and Center Street closer to the industrial areas. **Exhibit 8** outlines the existing sidewalk network for the Northside Specific Planning Area.

Sidewalks encourage interconnectivity for pedestrians in the entire neighborhood, with an emphasis on connecting people to the park and school facilities in the Northside Specific Planning Area. Pedestrian volume counts that were conducted at the study intersections during weekdays showed that there are higher pedestrian volumes in areas around the local schools than there are around the parks.

Existing Bicycle Facilities Network

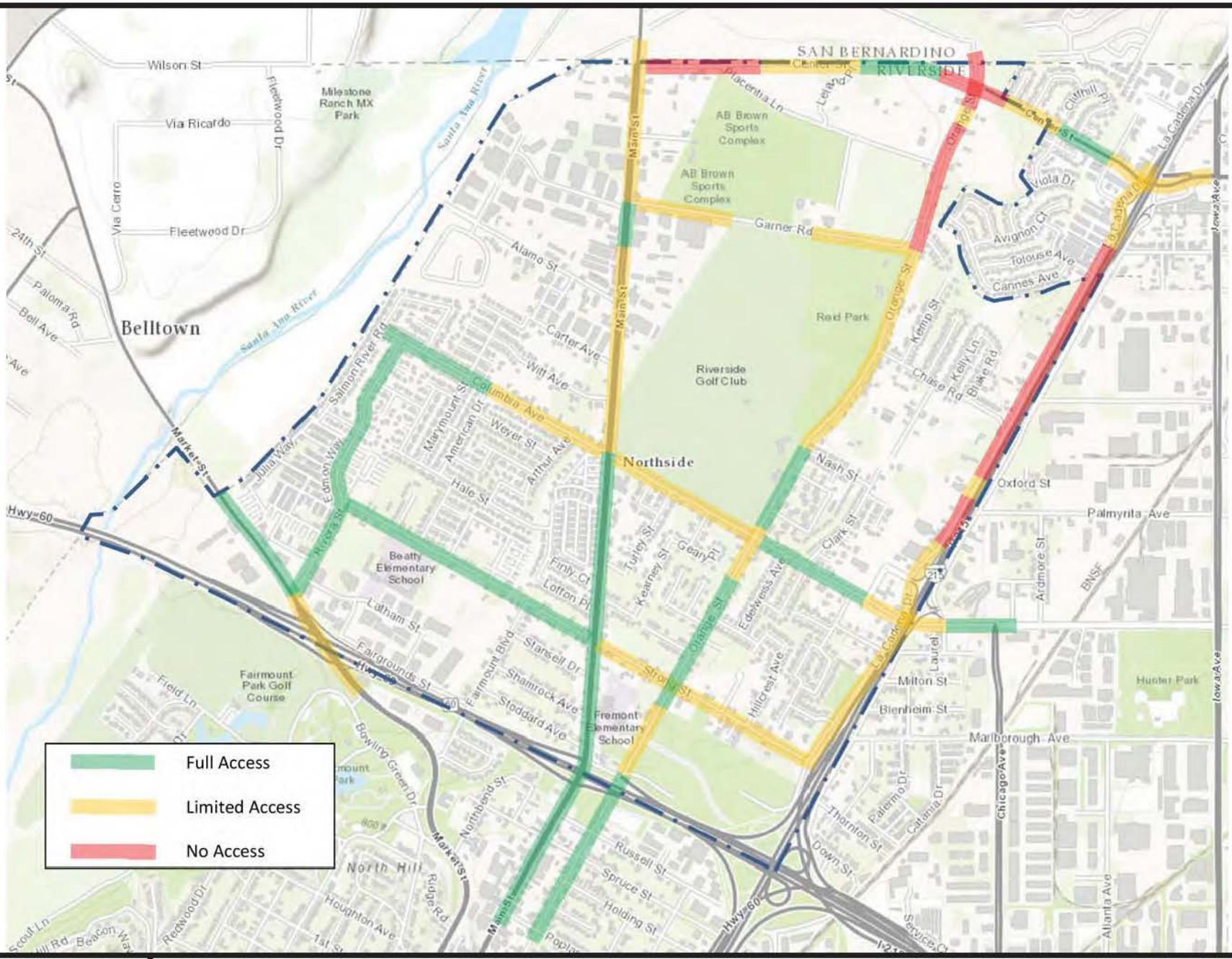
The Northside Specific Plan Area generally lacks an existing network of Class II (bike lane) and Class III (bike route) bicycle facilities. The main bicycle corridors in the Northside Specific Plan Area are the Class I Santa Ana River Trail that runs along the west perimeter of the planning area, the Class II bike lane along Main Street between Center Street to Oakley Street, and the Class I bike trail that runs adjacent to the canal between Market Street and Columbia Avenue. In addition, there is a small Class II bike lane segment striped on Columbia Avenue from Rivera Street to Main Street.

Per the City of Riverside General Plan 2025 and the City's *Bicycle Master Plan* (May 2007), there are plans to provide a Class II bike lane on Columbia Avenue Class II Bike lane from Main Street to the existing bike lane east of the I-215, as well as extend the Class III bike trail north to Garner Road and then towards the existing canal east of the I-215.

The Northside Specific Plan proposes to provide a Class I bike path along the eastern boundary of Pellisier Ranch to connect with a future extension of the Santa Ana River Trail, and new Class IV (contraflow) bike lanes are also proposed to be provided along the following roadways:

- Main Street from Center Street to SR-60
- Orange Street from Center Street to SR-60
- West La Cadena Drive from Center Street to SR-60
- Center Street from Main Street to I-215
- Columbia Avenue from Santa Ana River Trail to I-215

Exhibit 9 shows the existing and proposed bicycle facilities network in the Northside Specific Plan Area.



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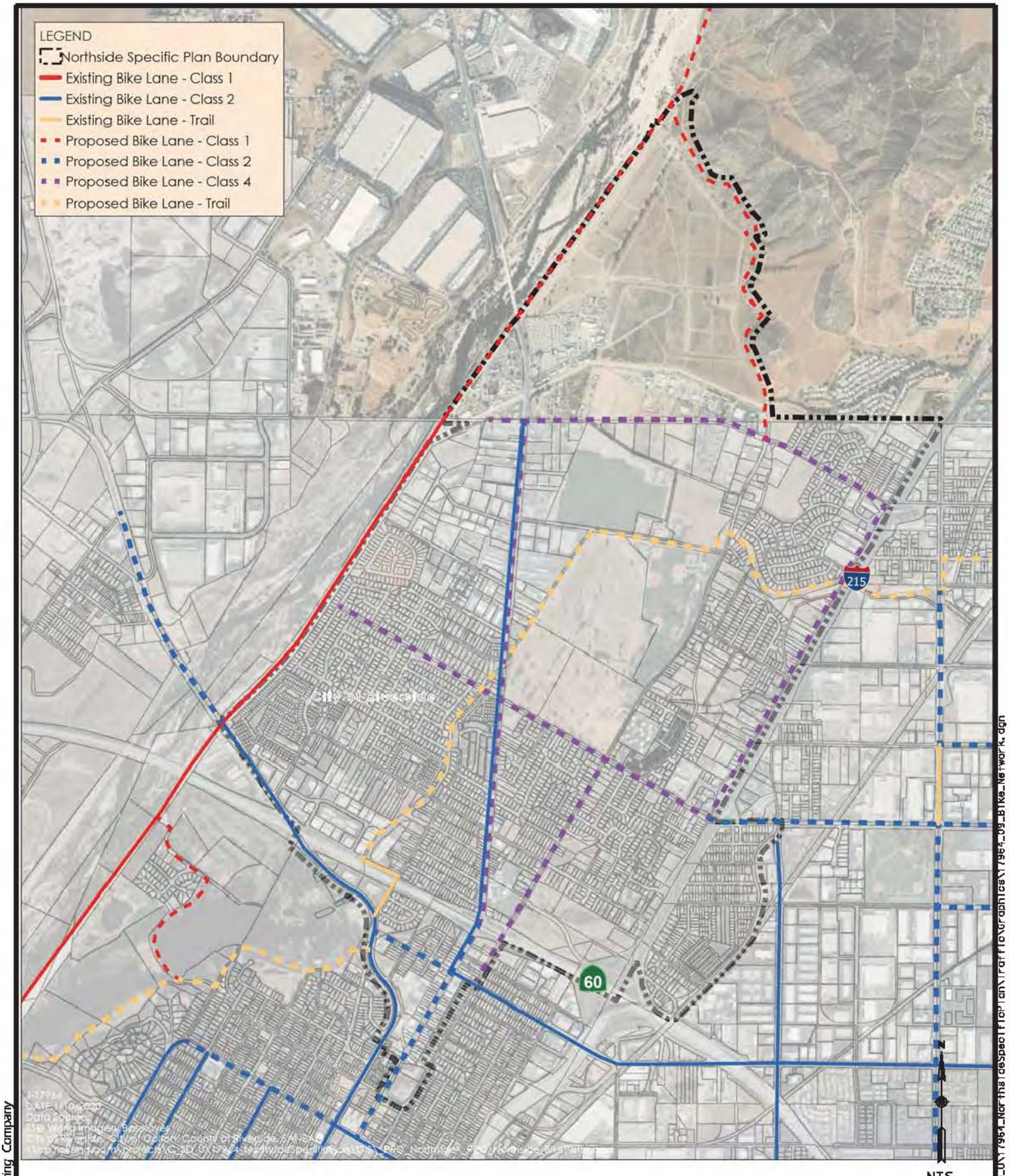
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EXHIBIT 8

EXISTING SIDEWALK NETWORK

NORTHSIDE SPECIFIC PLAN

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EXHIBIT 9

BICYCLE FACILITIES NETWORK

NORTHSIDE SPECIFIC PLAN

Existing Traffic Volumes

Existing traffic volumes at the project area intersections were obtained from traffic counts conducted by Veracity Traffic Group on Tuesday, February 21, 2017, Thursday, February 23, 2017, Tuesday, February 28, 2017, and March 2, 2017. The turning movement counts were conducted during the morning and afternoon peak periods (7:00am–9:00am and 4:00pm-6:00pm). Heavy vehicles were counted separately at the study intersections due to the high percentage of truck traffic in the study area. The AM peak period counts overlap with the typical morning school traffic peak, while the PM peak period counts were collected approximately 1-2 hours after the afternoon school traffic peak.

Average daily traffic (ADT) volumes were collected over a 24-hour period by Veracity Traffic Group on Tuesday, February 21, 2017, Wednesday, February 22, 2017, Thursday, February 23, 2017, and March 2, 2017. The ADT counts were collected by vehicle classification to determine the percentage of heavy vehicles on the study roadway segments.

The most recent traffic counts that are available within the study area were collected at the Columbia Avenue / East La Cadena Drive intersection in February 2019 for the *Commercial Plaza SWC of Columbia Avenue and Chicago Avenue Traffic Impact Study* (K2 Traffic Engineering, March 21, 2019). These counts were collected close to the date when the Notice of Preparation (NOP) was sent out (March 28, 2019) on the Draft Environment Impact Report (EIR) for the Northside Specific Plan.

The February 2019 counts at the Columbia Avenue / East La Cadena Drive intersection were compared against the February 2017 counts collected for this study, and it was found that the counts varied by only 1.3% during the PM peak hour. Although this comparison only reflects one intersection in the study area, it appears that the traffic counts collected in 2017 are consistent with traffic conditions near the March 2019 date when the NOP on the Draft EIR was sent out. The preparation of this TIA report and other technical documents for the Draft EIR began with the collection of traffic counts in February 2017, and the TIA is expected to be completed by March 2020.

Exhibit 10 shows the existing traffic volumes within the study area. **Appendix A** contains the manual turning movement count sheets at the study intersections and ADT volume count sheets for the study roadway segments.

Heavy Vehicle Volumes

The Northside community consists of many industrial land uses and therefore generates heavy vehicle traffic throughout the street network. In general, the roadways carry a significant amount of heavy vehicle volumes on Main Street, Colombia Avenue and circulating around the freeway interchanges. Exhibit 11 shows the existing heavy vehicle turning movement volumes at the study area intersections. Vehicles classified as Class #4 (Buses) or larger were identified as heavy vehicles for this study. Heavy vehicle percentages were calculated at each intersection approach based on the proportion of heavy vehicle volumes to total intersection volumes and were input into the Synchro intersection analysis model for both existing and future conditions.

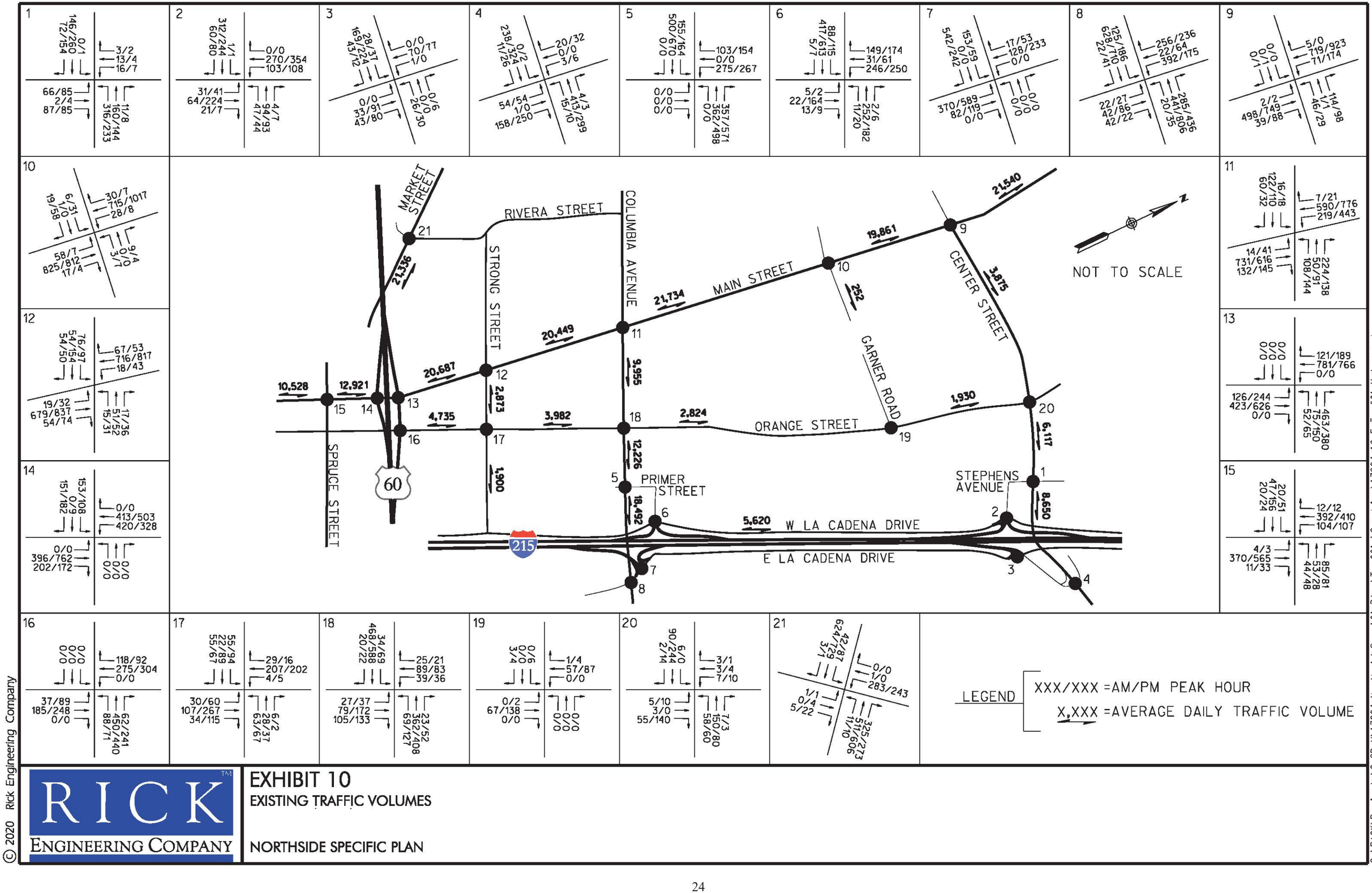


EXHIBIT 10
EXISTING TRAFFIC VOLUMES

NORTHSIDE SPECIFIC PLAN

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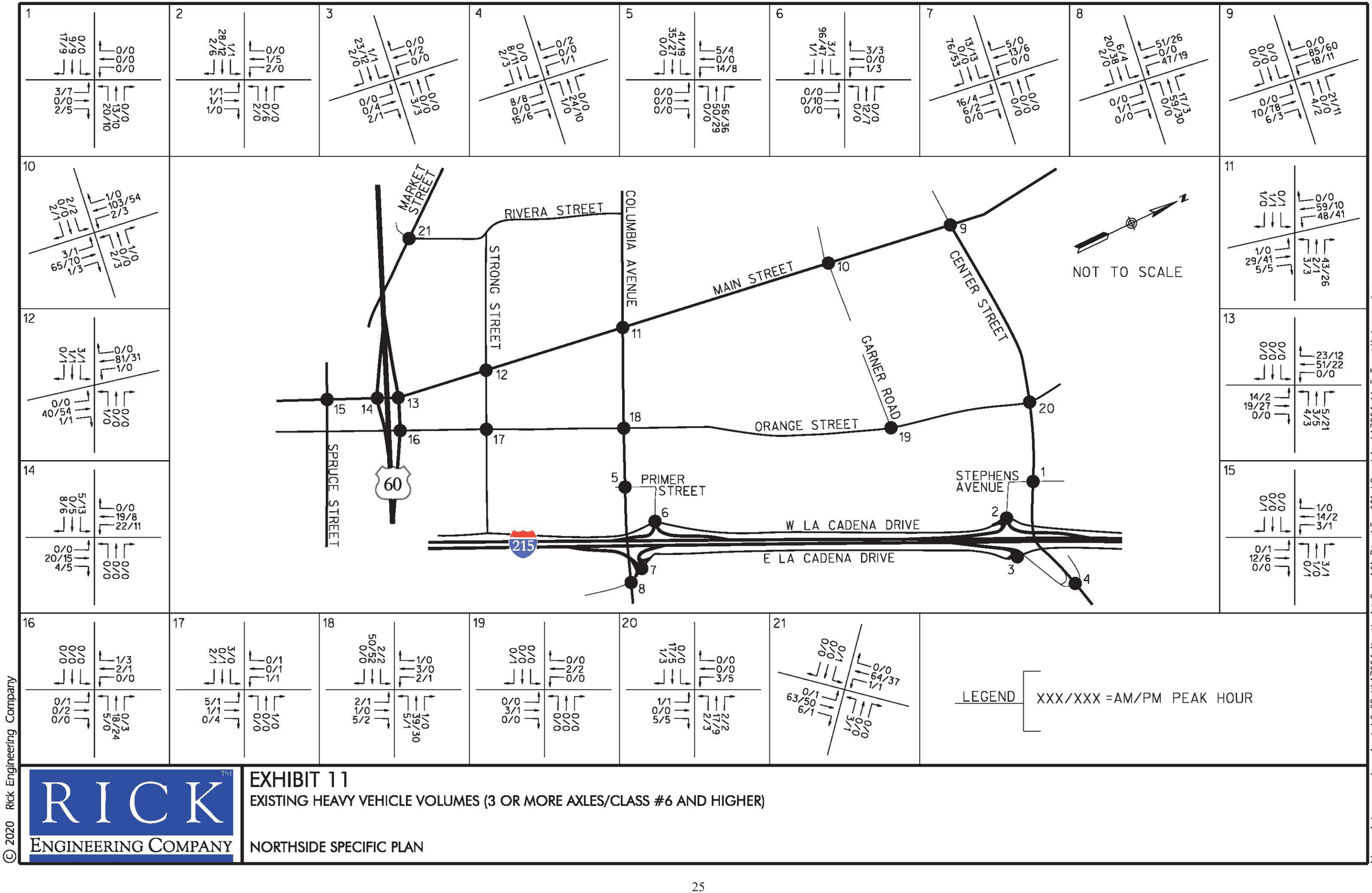


EXHIBIT 11

EXISTING HEAVY VEHICLE VOLUMES (3 OR MORE AXLES/CLASS #6 AND HIGHER)

NORTHSIDE SPECIFIC PLAN

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Existing Traffic Operations

Intersection Operations

Existing traffic operations were analyzed for twenty-one (21) intersections within the project boundary. The intersection operations worksheets are provided in **Appendix B**.

Table 4 shows that all study area intersections currently operate at Level of Service (LOS) D or better with the exception of the following intersections:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM: LOS E; PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Strong Street (PM: LOS E)
- Orange Street / Oakley Avenue / SR-60 WB Off-Ramp (PM: LOS E)

Roadway Segment Operations

Existing traffic operations were analyzed for twenty (20) roadway segments within the project boundary. **Table 5** shows that all study area roadway segments currently operate at an acceptable LOS with the exception of the following roadways:

- Orange Street, Columbia Avenue to Strong Street
- Orange Street, Strong Street to Oakley Avenue
- W La Cadena Drive, Chase Road to I-215 SB Ramps

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TABLE 4
NORTHSIDE SPECIFIC PLAN
EXISTING INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK / MOVEMENT	EXISTING	
			DELAY	LOS
1 Center Street / Stephens Avenue (S)	**County of Riverside**			
		AM peak		
			39.8	D
		PM Peak		
			23.6	C
2 W La Cadena Drive / I-215 SB Ramps / Stephens Avenue (U)	**County of Riverside**			
		AM peak		
			37.1	**E**
		PM Peak		
			52.0	**F**
3 E La Cadena Drive / I-215 NB Ramps / Highgrove Place (U)	**County of Riverside**			
		AM peak		
			9.6	A
		PM Peak		
			10.6	B
4 West Center Street / Highgrove Place (U)	**County of Riverside**			
		AM peak		
		NBL	22.2	C
		PM Peak		
		NBL	19.2	C
5 Columbia Avenue / Primer Street (S)	**City of Riverside**			
		AM peak		
			10.7	B
		PM Peak		
			11.0	B
6 W La Cadena Drive / I-215 SB Ramps / Interchange Drive (U)	**City of Riverside**			
		AM peak		
			23.5	C
		PM Peak		
			50.2	**F**
7 E La Cadena Drive / I-215 NB Ramps (U)	**City of Riverside**			
		AM peak		
		EBL	**>200**	**F**
		PM Peak		
		EBL	**>200**	**F**
8 Columbia Avenue / E La Cadena Drive (S)	**City of Riverside**			
		AM peak		
			26.0	C
		PM Peak		
			38.9	D
9 Main Street / Placentia Lane (U)	**City of Riverside**			
		AM peak		
		WBL	**57.8**	**F**
		PM Peak		
		WBL	**>200**	**F**

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TABLE 4
NORTHSIDE SPECIFIC PLAN
EXISTING INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK / MOVEMENT	EXISTING	
			DELAY	LOS
10 Main Street / Garner Road (U)	**City of Riverside**			
		AM peak		
		EBL	**74.2**	**F**
		PM Peak		
		EBL	**83.5**	**F**
11 Main Street / Columbia Avenue (S)	**City of Riverside**			
		AM peak		
			22.1	C
		PM Peak		
			25.1	C
12 Main Street / Strong Street (S)	**City of Riverside**			
		AM peak		
			26.1	C
		PM Peak		
			39.9	D
13 Main Street / Oakley Avenue / SR60 WB ON Ramp (S)	**City of Riverside**			
		AM peak		
			37.7	D
		PM Peak		
			37.3	D
14 Main Street / SR60 EB Ramps (S)	**City of Riverside**			
		AM peak		
			24.1	C
		PM Peak		
			22.5	C
15 Main Street / Spruce Street (S)	**City of Riverside**			
		AM peak		
			10.8	B
		PM Peak		
			12.1	B
16 Orange Street / Oakley Avenue / SR60 WB Off Ramp (U)	**City of Riverside**			
		AM peak		
			20.3	C
		PM Peak		
			44.0	**E**
17 Orange Street / Strong Street (U)	**City of Riverside**			
		AM peak		
			10.8	B
		PM Peak		
			26.1	D
18 Orange Street / Columbia Avenue (S)	**City of Riverside**			
		AM peak		
			13.5	B
		PM Peak		
			16.5	B

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TABLE 4
NORTHSIDE SPECIFIC PLAN
EXISTING INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK / MOVEMENT	EXISTING	
			DELAY	LOS
19 Orange Street / Garner Road (U)	**City of Riverside**			
		AM peak		
			8.8	A
		PM Peak		
		EBL	10.1	B
20 Orange Street / Center Street (U)	**City of Riverside**			
		AM peak		
			9.1	A
		PM Peak		
			9.9	A
21 Market Street / Rivera Street (S)	**City of Riverside**			
		AM peak		
			13.1	B
		PM Peak		
			14.4	B

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).

DELAY is measured in seconds

LOS = Level of Service

NB = Northbound, SB = Southbound, etc.

T=thru movement, R=right-turn movement, etc.

(S) = Signalized intersection

(U) = Unsignalized intersection

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TABLE 5
EXISTING ROADWAY SEGMENT OPERATIONS

	STREET SEGMENT	JURISDICTION	EXISTING CONDITIONS					
			EXISTING CLASSIFICATION	Capacity[1]	ADT	% Heavy Vehicles	V/C	LOS
1	S. Riverside Avenue, Pellisier Road to Center Street	City of Colton	MAJOR / 4	34,100	21,540	21.5%	0.63	B
2	Main Street, Center Street to Garner Road	City of Riverside	100' ARTERIAL	33,000	19,861	18.7%	0.60	A
3	Main Street, Garner Road to Columbia Avenue	City of Riverside	100' ARTERIAL	33,000	21,734	20.6%	0.66	A
4	Main Street, Columbia Avenue to Strong Street	City of Riverside	*4-LANE ARTERIAL*	22,000	20,449	14.5%	0.93	D
5	Main Street, Strong Street to Oakley Avenue	City of Riverside	*4-LANE ARTERIAL*	22,000	20,687	16.7%	0.94	D
6	Main Street, SR60 EB to Spruce Street	City of Riverside	*4-LANE ARTERIAL*	22,000	12,921	11.7%	0.59	A
7	Main Street, Spruce Street to Poplar Street	City of Riverside	*4-LANE ARTERIAL*	22,000	10,528	2.6%	0.48	A
8	Orange Street, Center Street to Garner Road	City of Riverside	*2-LANE LOCAL*	3,100	1,930	12.6%	0.62	A
9	Orange Street, Garner Road to Columbia Avenue	City of Riverside	*2-LANE LOCAL*	3,100	2,824	6.2%	0.91	D
10	Orange Street, Columbia Avenue to Strong Street	City of Riverside	*2-LANE LOCAL*	3,100	3,982	8.8%	**1.28**	**E**
11	Orange Street, Strong Street to Oakley Avenue	City of Riverside	*2-LANE LOCAL*	3,100	4,735	6.2%	**1.53**	**E**
12	W. La Cadena Drive, Chase Road to I-215 SB Ramps	City of Riverside	*2-LANE LOCAL*	3,100	5,620	11.6%	**1.81**	**E**
13	Center Street, Main Street to Orange Street	City of Riverside	*2-LANE COLLECTOR*	12,500	3,875	18.8%	0.31	A
14	Center Street, Orange Street to Stephens Avenue	City/County of Riverside	*2-LANE COLLECTOR*	12,500	6,117	21.7%	0.49	A
15	Center Street, Stephens Avenue to Highgrove Place	County of Riverside	*2-LANE COLLECTOR*	12,500	8,650	17.7%	0.69	A
16	Garner Road, Main Street to Orange Street	City of Riverside	*2-LANE LOCAL*	3,100	252	6.0%	0.08	A
17	Columbia Avenue, Main Street to Orange Street	City of Riverside	88' ARTERIAL	22,000	9,955	20.7%	0.45	A
18	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL	22,000	12,226	17.2%	0.56	A
19	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL	22,000	18,492	17.3%	0.84	C
20	Strong Street, Main Street to Orange Street	City of Riverside	*2-LANE LOCAL*	3,100	2,873	9.7%	0.93	D
21	Strong Street, Orange Street to W La Cadena Drive	City of Riverside	*2-LANE LOCAL*	3,100	1,900	5.9%	0.61	A
22	Market Street, Rivera Street to SR60 WB Ramps	City of Riverside	100' ARTERIAL	33,000	21,336	7.5%	0.65	A
23	Pellisier Road, S. Riverside Avenue to Roquet Ranch	City of Colton	DOES NOT EXIST					

Footnote:
LOS A and LOS B capacity thresholds were derived; City of Riverside deems anything better than LOS C as acceptable.
Roadway classification and pavement width shown in ***bold italics*** indicates proposed change from existing classification.
V/C and LOS shown in **bold** indicate deficient LOS based on ADT and roadway capacity.

EXISTING PLUS PROJECT CONDITIONS

The study intersections and roadway segments were analyzed with the addition of traffic associated with the Specific Plan land uses to the existing traffic volumes. Because the total land use yields at buildout of the Northside Specific Plan also include the existing land uses, the Existing Plus Project analysis focuses on the new development that is expected to occur within the Specific Plan area.

Existing Plus Project Trip Generation

The trip generation for the Northside Specific Plan land use scenarios was calculated by the 2040 Riverside County Transportation Analysis Model (RivTAM), which is discussed in greater detail later in this report (see Horizon Year 2040 Model Runs chapter). The specific land uses and unit yields for the Northside Specific Plan Scenarios One and Two were input into the Travel Analysis Zones (TAZs) within the 2040 RivTAM model to derive the Scenario One and Scenario Two traffic volumes for Horizon Year 2040. However, because the Horizon Year 2040 traffic volumes also include trips from the existing land uses, new development trips were estimated for Existing Plus Project conditions based on the proposed uses in the vacant land areas within the Northside Specific Plan.

Table 6 and **Table 7** show the estimated trip generation by TAZ of the new development areas for Specific Plan Scenario One and Scenario Two, respectively. These new development trips were added to the existing traffic volumes to derive the Existing Plus Project traffic volumes.

As shown in Table 6, the Northside Specific Plan Scenario One land uses within the new development areas are forecast to generate an increase of approximately 80,607 daily trips, with an increase of approximately 5,836 trips occurring during the AM peak hour, and an increase of approximately 7,453 trips occurring during the PM peak hour.

Table 7 shows that the Northside Specific Plan Scenario Two land uses within the new development areas are forecast to generate an increase of approximately 61,321 daily trips, with an increase of approximately 4,789 trips occurring during the AM peak hour, and an increase of approximately 5,729 trips occurring during the PM peak hour.

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TABLE 6
EXISTING PLUS PROJECT TRIP GENERATION BY RIVTAM MODEL TAZ
SPECIFIC PLAN SCENARIO ONE

RivTAM TAZ	Specific Plan Land Use	Quantity	Units	ADT	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
3508	C - Commercial*	438.32	TSF	4,617	106	265	371	279	146	425
3515	B/OP - Business/Office Park*	62.617	TSF	21,583	347	1,290	1,637	1,375	610	1,985
	C - Commercial*	506.3	TSF							
	HDR - High Density Residential	2,889	DU							
	MDR - Medium Density Residential*	442	DU							
	MHDR - Medium High Density Residential*	432	DU							
	OS - Open Space/Natural Resources	190.13	AC							
3531	C - Commercial*	187.85	TSF	2,048	46	114	161	122	71	193
5175	B/OP - Business/Office Park*	115.118	TSF	34,149	1,184	1,072	2,256	1,482	1,683	3,165
	C - Commercial*	555.4	TSF							
5182	B/OP - Business/Office Park*	1,684.88	TSF	18,210	374	1,037	1,411	1,110	575	1,685
	C - Commercial*	196.02	TSF							
	LI - Light Industrial (Colton)	1,480.00	TSF							
	MDR - Medium Density Residential*	1,620	DU							
	OS - Open Space/Natural Resources	42	AC							
TOTAL TRIPS				**80,607**	**2,057**	**3,778**	**5,836**	**4,369**	**3,084**	**7,453**

Source: Riverside Traffic Analysis Model (RivTAM)

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TABLE 7
EXISTING PLUS PROJECT TRIP GENERATION BY RIVTAM MODEL TAZ
SPECIFIC PLAN SCENARIO TWO

RivTAM TAZ	Specific Plan Land Use	Quantity	Units	ADT	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
3508	C - Commercial*	438.32	TSF	4,560	104	263	367	276	197	473
3515	B/OP - Business/Office Park*	5,261.32	TSF	11,155	206	646	852	692	340	1,032
	C - Commercial*	549.8	TSF							
	HDR - High Density Residential	1,200	DU							
	MDR - Medium Density Residential*	442	DU							
	OS - Open Space/Natural Resources	190.13	AC							
3531	C - Commercial*	187.85	TSF	1,994	45	113	157	120	68	188
5175	LI - Light Industrial (Colton)	255.818	TSF	22,482	834	913	1,747	1,061	1,029	2,090
5182	HDR - High Density Residential	2,430	TSF	21,130	369	1,297	1,666	1,349	597	1,946
	LI - Light Industrial (Colton)	3,744.18	TSF							
	VLDR - Very Low Density Residential (Colton)	6	DU							
TOTAL TRIPS				**61,321**	**1,558**	**3,231**	**4,789**	**3,498**	**2,231**	**5,729**

Source: Riverside Traffic Analysis Model (RivTAM)

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Heavy Vehicle Volume Adjustments

The Northside Specific Plan project proposes to restrict heavy vehicles from using Main Street south of Center Street, and to re-route heavy vehicles to Center Street between Main Street and I-215. Because the most recently adopted restrictions for heavy vehicles along City arterials have restricted vehicles with 3 or more axles, this analysis studied a 3 or more axle restriction on Main Street, with 2-axle vehicles being allowed on Main Street south of Center Street.

Review of the daily vehicle classification counts revealed that the Class #4 and #5 heavy vehicles (Buses and Single-Unit 2-Axle Trucks) represent approximately 50% of the total heavy vehicles, and approximately 50% of the total heavy vehicles consist of 3-axle vehicles (Class #6) or larger. Therefore, the 3 or more axle heavy vehicle restriction would apply to approximately 50% of the total heavy vehicles.

The percent proportions of Class #4/5 and Class #6 and higher vehicles to the total heavy vehicles (Class #4 or higher) are shown below for segments of Main Street and Columbia Avenue:

Roadway Segment	Total HV ADT	HV % of Total	HV Class 4-5 ADT	HV Class 4-5 %	HV Class 6+ ADT	HV Class 6+ %
Main Street, Center Street to Garner Road	3,723	18.7%	1,896	51%	1,827	49%
Columbia Avenue, Main Street to Orange Street	2,058	20.7%	983	48%	1,075	52%
Average Heavy Vehicle Percentages:		**19.7%**		**49%**		**51%**

Heavy vehicles with 3 or more axles (Class #6 and higher) were collected separately from other vehicles for the turning movement counts at the study intersections. Therefore, all turning movement volumes identified as Class #6 or higher were diverted from Main Street and Columbia Avenue and onto Center Street. The heavy vehicle factors in the SYNCHRO traffic analysis program were then decreased by 50% for the intersection turning movements along Main Street and Columbia Avenue to account for the reduced percentage of heavy vehicles. The SYNCHRO heavy vehicle factors were also increased by 50% for the intersection turning movements along Center Street to account for the higher percentage of heavy vehicles as a result of the diversion of 3 or more axle heavy vehicles from Main Street to Center Street.

Exhibit 12 shows the diversion of heavy vehicle trips from Main Street and Columbia Avenue to Center Street based on the proposed 3 or more axle heavy vehicle restriction on Main Street south of Center Street.

Although the percentage of heavy vehicles on Center Street would increase significantly with the proposed heavy vehicle restriction on Main Street, the existing and forecast future traffic volumes are significantly lower on Center Street than on Main Street and Columbia Avenue. In addition, the Specific Plan proposes to improve Center Street to four lanes between Main Street and I-215. Therefore, Center Street is anticipated to be able to accommodate the increase in heavy vehicle traffic without impacts to levels of service at the study intersections and roadway segments along Center Street. It is recommended that the City of Riverside update its Traffic Index map to account for projected heavy vehicle rates along the roadways within the Northside Specific Plan area.

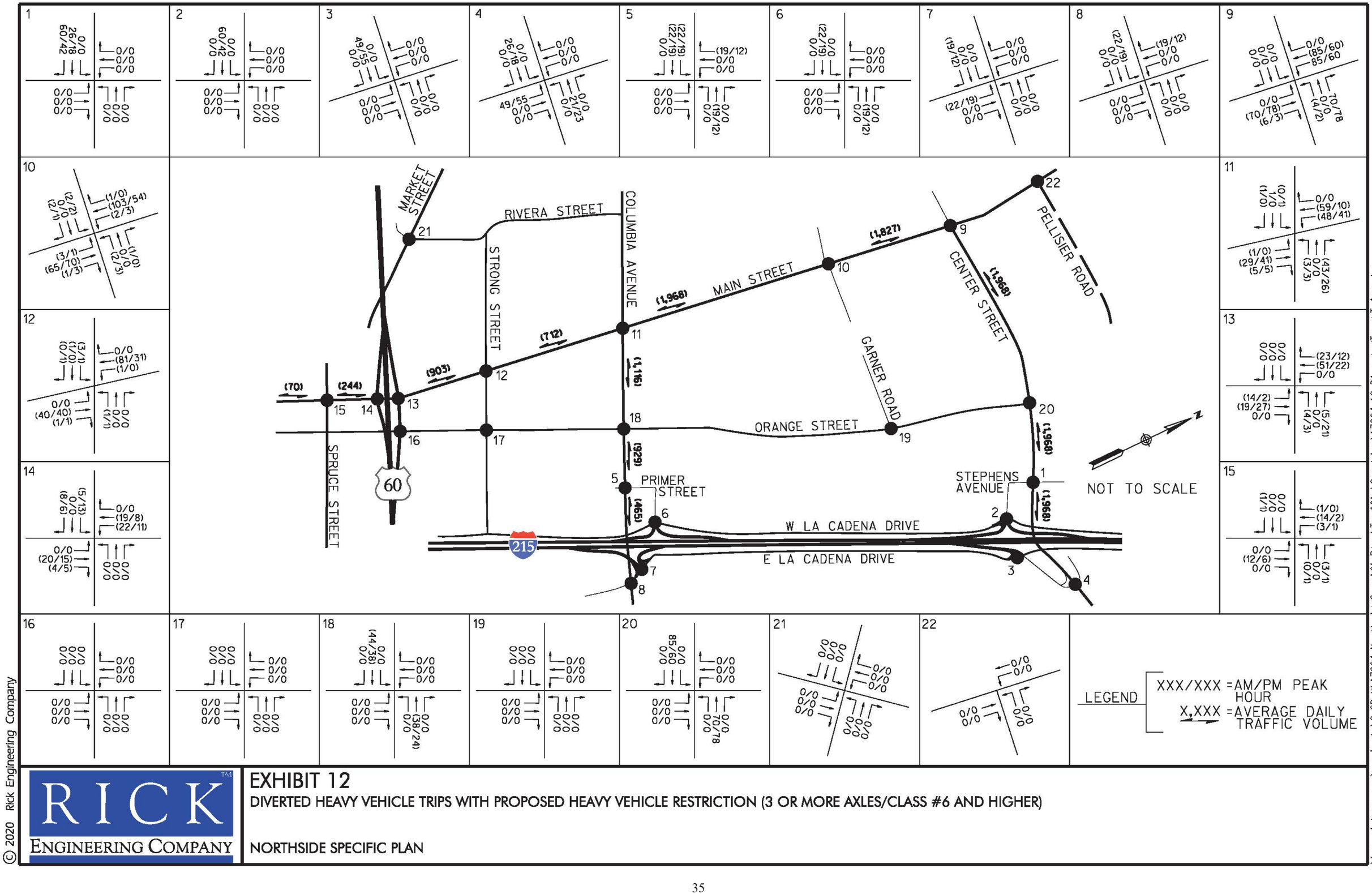


EXHIBIT 12

DIVERTED HEAVY VEHICLE TRIPS WITH PROPOSED HEAVY VEHICLE RESTRICTION (3 OR MORE AXLES/CLASS #6 AND HIGHER)

NORTHSIDE SPECIFIC PLAN

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Existing Plus Project Traffic Volumes

Existing Plus Project traffic volumes were derived by adding the new development project trips shown in Tables 6 and 7 to the existing traffic counts, and also by adjusting the existing heavy vehicle volumes to reflect the proposed heavy vehicle restriction on Main Street south of Center Street.

The project trips that were added to the existing traffic counts were derived based on a proportion of the trip generation based on new development (as shown in Tables 6 and 7) to the total Horizon Year 2040 trip generation for Specific Plan Scenarios One and Two (as shown later in this report in Tables 13 and 14).

The existing heavy vehicle percentages at the study intersections during the peak hours were adjusted to reflect the diverted heavy vehicle trips from Main Street to Center Street. The heavy vehicle percentages were also adjusted to reflect the additional heavy vehicle trips that would occur with the proposed industrial and business park uses within the Specific Plan area, particularly the sub-areas within the City of Colton.

The heavy vehicle percentages for the Specific Plan Light Industrial and Business Park uses were calculated using the proportional values of the heavy vehicle to total vehicle trip rates in the *City of Fontana Truck Trip Generation Study* (August 2003). The heavy vehicle percentages derived from the *City of Fontana Truck Trip Generation Study* were also compared with heavy vehicle trip rates and percentages from the *High Cube Warehouse Vehicle Trip Generation Analysis* prepared by the Institute of Transportation Engineers (October 2016). A comparison of the heavy vehicle trip rates and percentages between the *City of Fontana Truck Trip Generation Study* and ITE *High Cube Warehouse Vehicle Trip Generation Analysis* is provided below:

Land Use	AM Trip Rates			PM Trip Rates		
	Heavy Vehicles	Total Vehicles	Heavy Vehicle %	Heavy Vehicles	Total Vehicles	Heavy Vehicle %
Fontana Truck Trip Generation Rates						
Light Industrial	0.268	0.679	**39.5%**	0.101	0.436	**23.2%**
Industrial Park (used for Business Park use)	0.039	0.095	**41.1%**	0.048	0.096	**50.0%**
ITE High-Cube Warehouse Truck Trip Generation Rates						
High-Cube Warehouse	0.024	0.082	**29.3%**	0.023	0.108	**21.3%**

As shown above, the heavy vehicle percentages that were derived from the *City of Fontana Truck Trip Generation Study* based on the Light Industrial and Industrial Park truck trip rates are substantially higher than the heavy vehicle percentages derived from the High-Cube Warehouse truck trip rates used in the *High Cube Warehouse Vehicle Trip Generation Analysis.* Therefore, the heavy vehicle percentages applied to the project trips in the Specific Plan scenarios are conservative. The trip rates for Light Industrial and Industrial Park from the *City of Fontana Truck Trip Generation Study* and High-Cube Warehouse from the *High Cube Warehouse Vehicle Trip Generation Analysis* are provided in **Appendix C**.

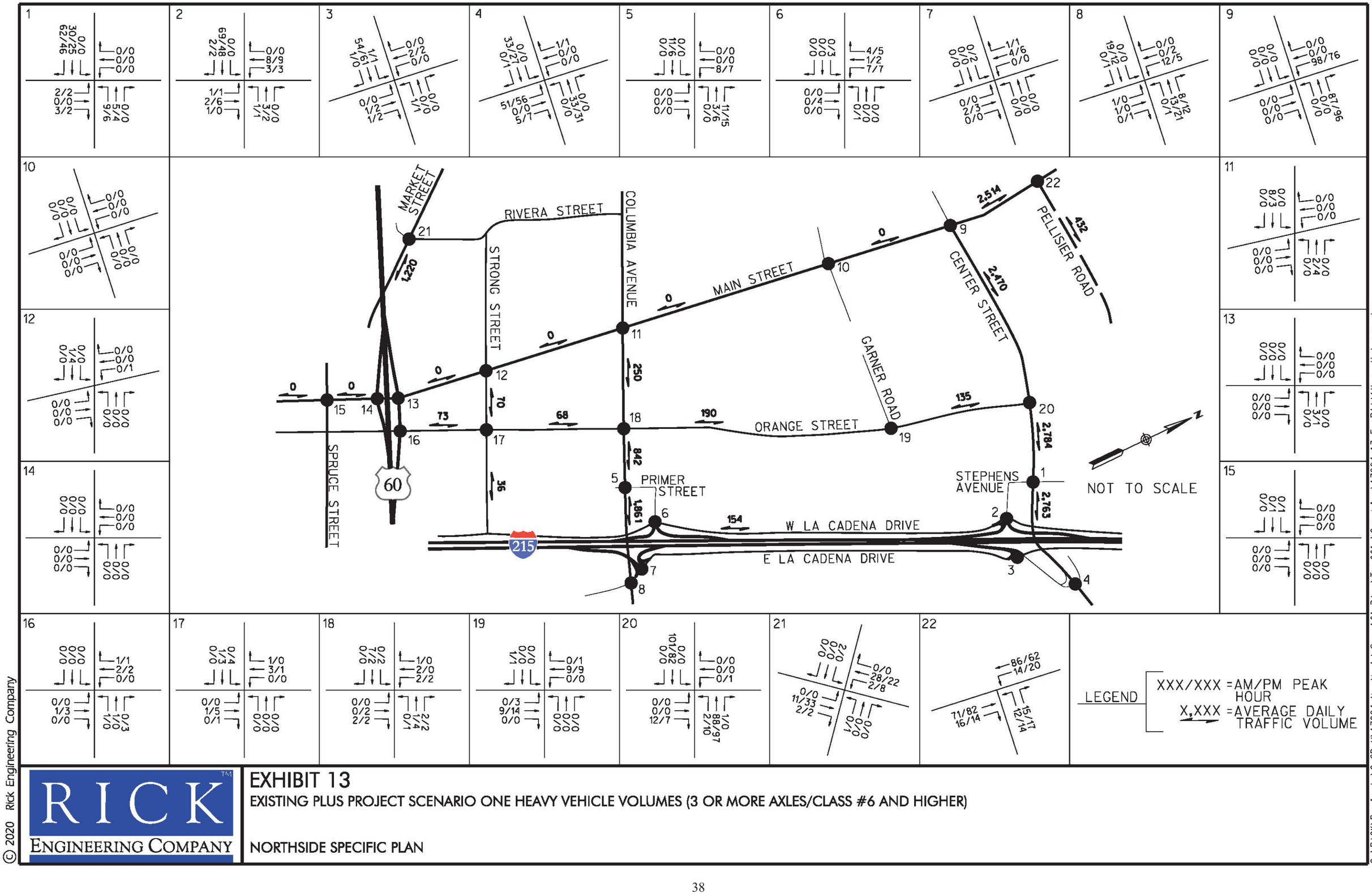
The proportion of heavy vehicle trips to total vehicle trips varies between Specific Plan Scenario One and Scenario Two based on the proposed land uses in the two scenarios. Scenario One includes a higher proportion of residential uses while Scenario Two includes a higher proportion of industrial and business park uses. Therefore, Scenario Two includes a higher proportion of heavy vehicle trips than Scenario One.

The heavy vehicle percentages associated with the Specific Plan Scenario One and Scenario Two uses were then adjusted at the study intersections and roadway segments based on the proportion of the trips generated by truck-intensive uses to the total Specific Plan project trips. Daily heavy vehicle project trips were calculated based on the average of the AM and PM peak hour heavy vehicle percentages that were calculated for Scenario One and Scenario Two.

Exhibit 13 and **Exhibit 14** show the volumes for heavy vehicles with 3 or more axles under Existing Plus Specific Plan Scenario One and Scenario Two, respectively. The Horizon Year 2040 heavy vehicle volumes are provided under their respective scenarios later in this report.

The total new project trips associated with Specific Plan Scenario One are illustrated in **Exhibit 15**. **Exhibit 16** shows the total new project trips associated with Specific Plan Scenario Two.

Exhibit 17 illustrates the total Existing Plus Project traffic volumes for Specific Plan Scenario One, and the total Existing Plus Project traffic volumes for Specific Plan Scenario Two are shown in **Exhibit 18**.



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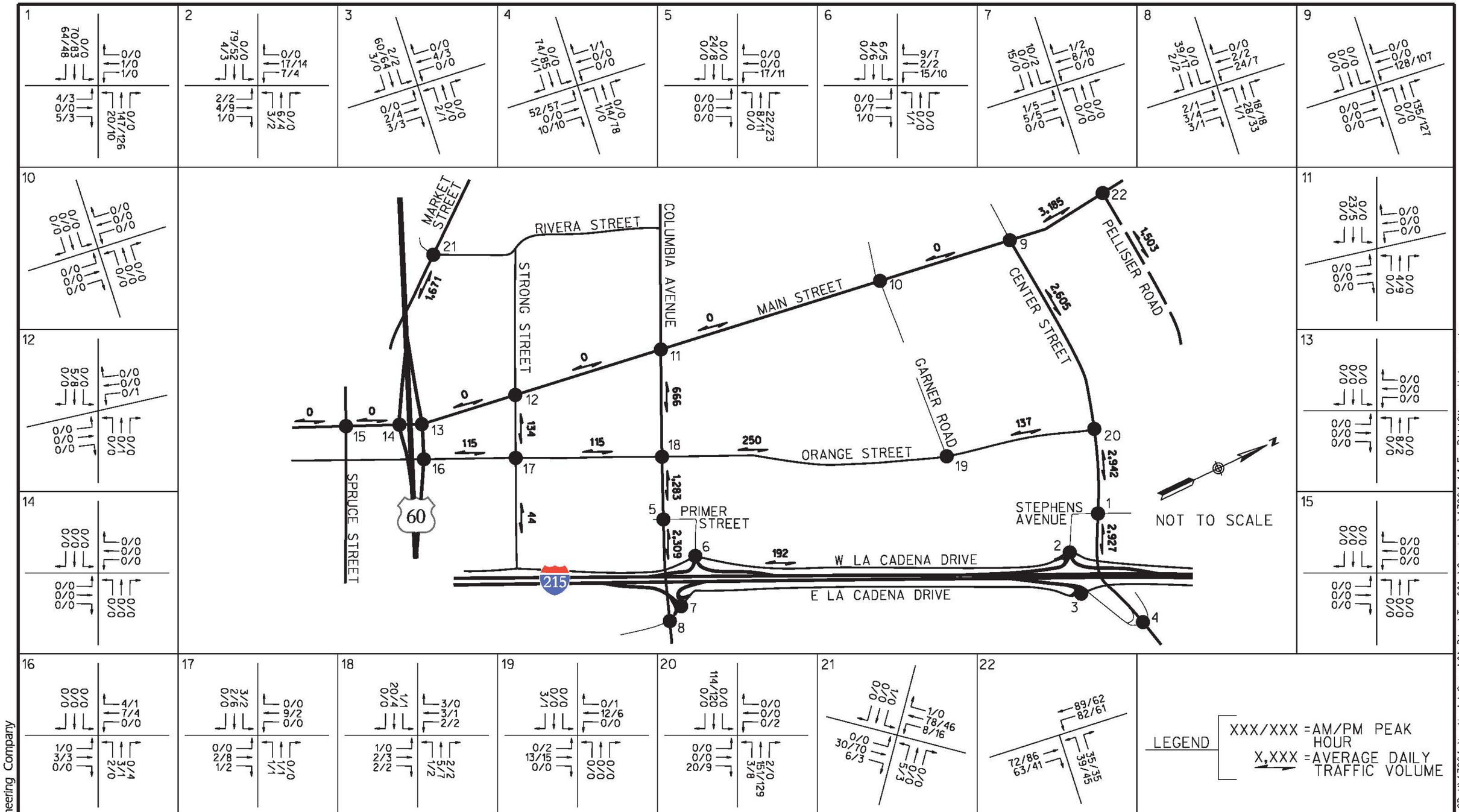
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EXHIBIT 13

EXISTING PLUS PROJECT SCENARIO ONE HEAVY VEHICLE VOLUMES (3 OR MORE AXLES/CLASS #6 AND HIGHER)

NORTHSIDE SPECIFIC PLAN

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EXHIBIT 14

EXISTING PLUS PROJECT SCENARIO TWO HEAVY VEHICLE VOLUMES (3 OR MORE AXLES/CLASS #6 AND HIGHER)

NORTHSIDE SPECIFIC PLAN

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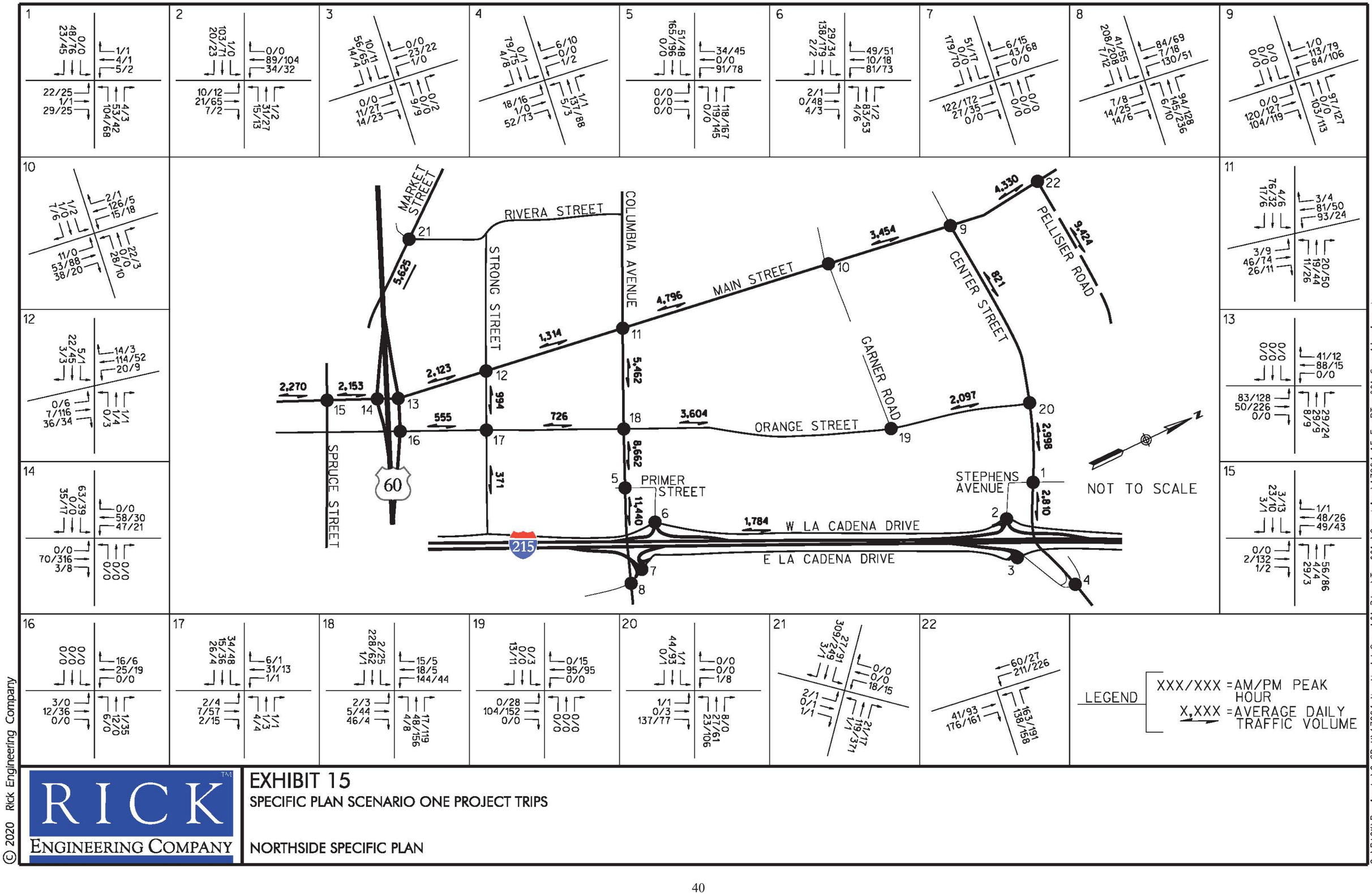


EXHIBIT 15

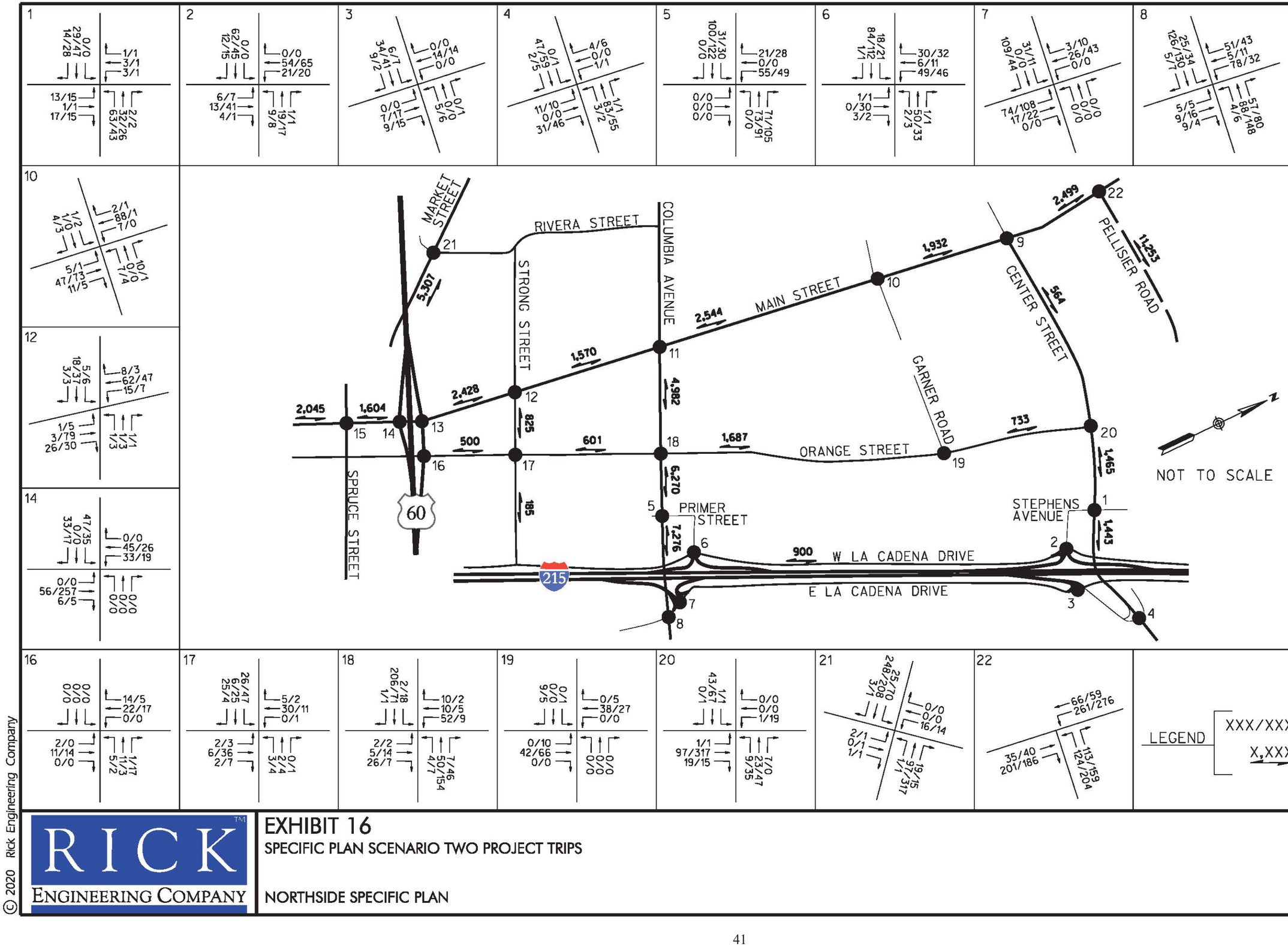
SPECIFIC PLAN SCENARIO ONE PROJECT TRIPS

NORTHSIDE SPECIFIC PLAN

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EXHIBIT 16

SPECIFIC PLAN SCENARIO TWO PROJECT TRIPS

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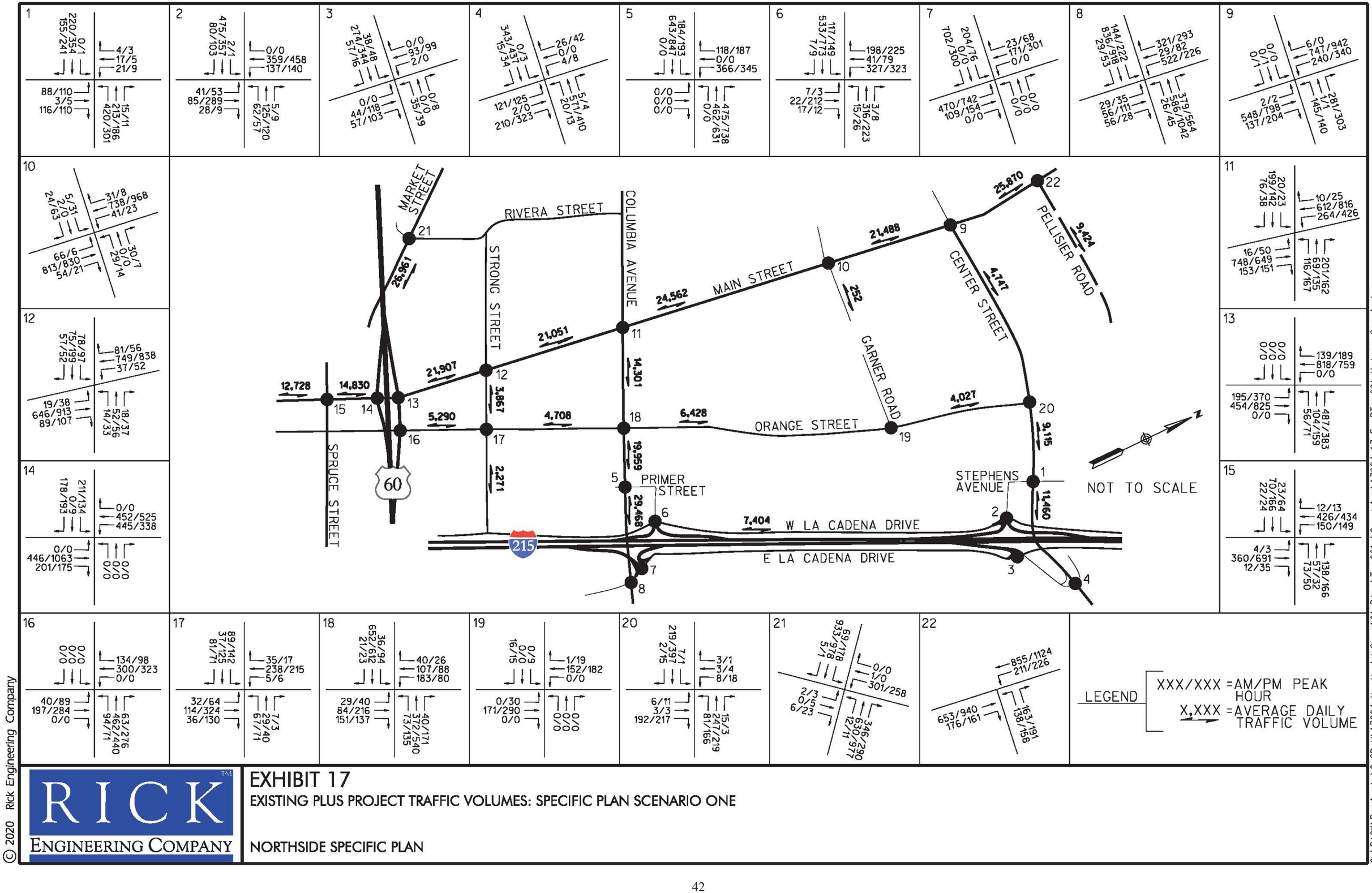


EXHIBIT 17

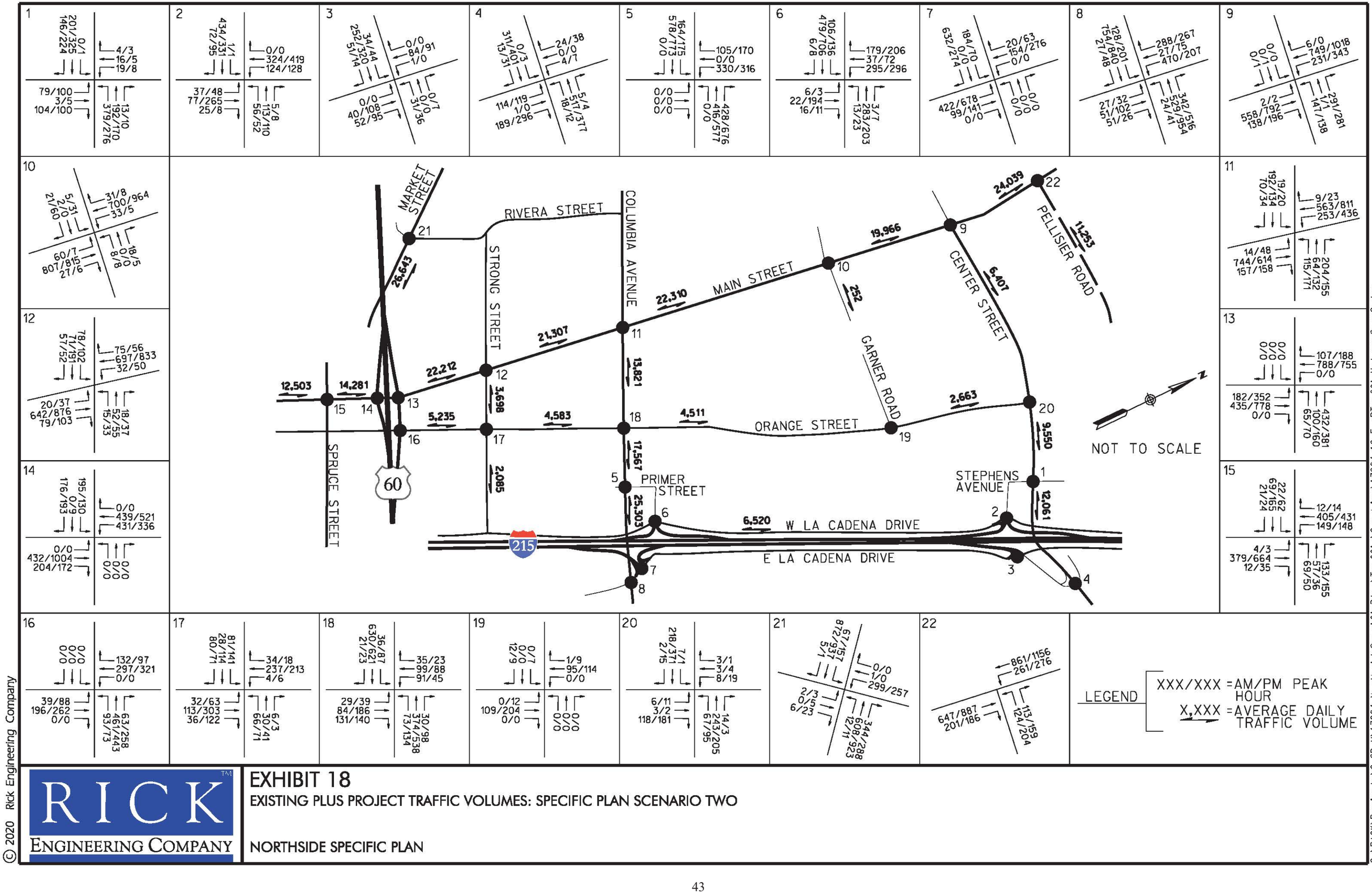
EXISTING PLUS PROJECT TRAFFIC VOLUMES: SPECIFIC PLAN SCENARIO ONE

NORTHSIDE SPECIFIC PLAN

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EXHIBIT 18

EXISTING PLUS PROJECT TRAFFIC VOLUMES: SPECIFIC PLAN SCENARIO TWO

NORTHSIDE SPECIFIC PLAN

Existing Plus Project Operations Analysis: Specific Plan Scenario One

The results of the intersection operations analysis for Existing Plus Project Specific Plan Scenario One are provided in **Table 8**. The intersection operations worksheets are provided in **Appendix B**.

As shown in the table, the following intersections are forecast to operate at a deficient LOS (LOS E or F) under Existing Plus Project Specific Plan Scenario One conditions:

- Center Street / Stephens Avenue (AM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- Center Street / Highgrove Place (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM/PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Columbia Avenue / E. La Cadena Drive (AM: LOS E; PM: LOS F)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Strong Street (PM: LOS E)
- Orange Street / Oakley Avenue / SR-60 WB Off-Ramp (PM: LOS F)
- Orange Street / Strong Street (PM: LOS F)
- S. Riverside Avenue / Pellisier Road (PM: LOS F)

Table 8 also shows that project-related significant impacts were identified at the following intersections under Existing Plus Project Specific Plan Scenario One conditions:

- Center Street / Stephens Avenue (AM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- Center Street / Highgrove Place (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM/PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Columbia Avenue / E. La Cadena Drive (AM: LOS E; PM: LOS F)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Strong Street (PM: LOS E)
- Main Street / Oakley Avenue / SR-60 WB On-Ramp (AM/PM: LOS D)
- Orange Street / Oakley Avenue / SR-60 WB Off-Ramp (PM: LOS F)
- Orange Street / Strong Street (PM: LOS F)
- Orange Street / Center Street (PM: LOS C)
- S. Riverside Avenue / Pellisier Road (PM: LOS F)

It should be noted that although significant impacts were identified at the Orange Street / Oakley Avenue / SR-60 WB Off-Ramp and Orange Street / Strong Street intersections, no mitigation measures are required. The approved Exchange development is conditioned to install traffic signals at these two intersections, which would mitigate the impact that was identified for the Specific Plan project under Existing Plus Project Scenario One conditions.

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TABLE 8
NORTHSIDE SPECIFIC PLAN
EXISTING + PROJECT SPECIFIC PLAN SCENARIO ONE INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK HOUR	EXISTING		EXISTING + PROJECT SCENARIO ONE		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
1 Center Street / Stephens Avenue (S)	**County of Riverside**							
		AM peak	39.8	D	**125.6**	**F**	85.8	**YES**
		PM Peak	23.6	C	47.4	D	23.8	NO
2 W La Cadena Drive / I-215 SB Ramps / Stephens Avenue (U)	**County of Riverside**							
		AM peak	**37.1**	**E**	**157.0**	**F**	119.9	**YES**
		PM Peak	**52.0**	**F**	**179.3**	**F**	127.3	**YES**
3 E La Cadena Drive / I-215 NB Ramps / Highgrove Place (U)	**County of Riverside**							
		AM peak	9.6	A	13.3	B	3.7	NO
		PM Peak	10.6	B	17.2	C	6.6	NO
4 West Center Street / Highgrove Place (U)	**County of Riverside**							
		AM peak	22.2	C	**139.8**	**F**	117.6	**YES**
		PM Peak	19.2	C	**82.4**	**F**	63.2	**YES**
5 Columbia Avenue / Primer Street (S)	**City of Riverside**							
		AM peak	10.7	B	13.0	B	2.3	NO
		PM Peak	11.0	B	13.9	B	2.9	NO
6 W La Cadena Drive / I-215 SB Ramps / Interchange Drive (U)	**City of Riverside**							
		AM peak	23.5	C	**60.0**	**F**	36.5	**YES**
		PM Peak	**50.2**	**F**	**125.3**	**F**	75.1	**YES**
7 E La Cadena Drive / I-215 NB Ramps (U)	**City of Riverside**							
		AM peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
8 Columbia Avenue / E La Cadena Drive (S)	**City of Riverside**							
		AM peak	26.0	C	**58.0**	**E**	32.0	**YES**
		PM Peak	38.9	D	**77.9**	**E**	39.0	**YES**

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TABLE 8
NORTHSIDE SPECIFIC PLAN
EXISTING + PROJECT SPECIFIC PLAN SCENARIO ONE INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK HOUR	EXISTING		EXISTING + PROJECT SCENARIO ONE		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
9 Main Street / Placentia Lane (U)	**City of Riverside / City of Colton**							
		AM peak	**57.8**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
10 Main Street / Garner Road (U)	**City of Riverside**							
		AM peak	**74.2**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**83.5**	**F**	**114.7**	**F**	31.2	**YES**
11 Main Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	22.1	C	26.8	C	4.7	NO
		PM Peak	25.1	C	28.2	C	3.1	NO
12 Main Street / Strong Street (S)	**City of Riverside**							
		AM peak	26.1	C	30.6	C	4.5	NO
		PM Peak	39.9	D	**55.8**	**E**	15.9	**YES**
13 Main Street / Oakley Avenue / SR60 WB On Ramp (S)	**City of Riverside**							
		AM peak	37.7	D	46.0	D	8.3	**YES**
		PM Peak	37.3	D	42.5	D	5.2	**YES**
14 Main Street / SR60 EB Ramps (S)	**City of Riverside**							
		AM peak	24.1	C	27.5	C	3.4	NO
		PM Peak	22.5	C	25.6	C	3.1	NO
15 Main Street / Spruce Street (S)	**City of Riverside**							
		AM peak	10.8	B	12.4	B	1.6	NO
		PM Peak	12.1	B	14.4	B	2.3	NO
16 Orange Street / Oakley Avenue / SR60 WB Off Ramp (S)	**City of Riverside**							
		AM peak	20.3	C	22.9	C	2.6	NO
		PM Peak	**44.0**	**E**	**60.7**	**F**	16.7	**YES**

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TABLE 8
NORTHSIDE SPECIFIC PLAN
EXISTING + PROJECT SPECIFIC PLAN SCENARIO ONE INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK HOUR	EXISTING		EXISTING + PROJECT SCENARIO ONE		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
17 Orange Street / Strong Street (S)	**City of Riverside**							
		AM peak	10.8	B	13.0	B	2.2	NO
		PM Peak	26.1	D	**65.9**	**F**	39.8	**YES**
18 Orange Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	13.5	B	19.2	B	5.7	NO
		PM Peak	16.5	B	19.8	C	3.3	NO
19 Orange Street / Garner Road (U)	**City of Riverside**							
		AM peak	8.8	A	9.9	A	1.1	NO
		PM Peak	10.1	B	12.7	B	2.6	NO
20 Orange Street / Center Street (U)	**City of Riverside**							
		AM peak	9.1	A	15.0	B	5.9	NO
		PM Peak	9.9	A	23.9	C	14.0	**YES**
21 Market Street / Rivera Street (S)	**City of Riverside**							
		AM peak	13.1	B	16.6	B	3.5	NO
		PM Peak	14.4	B	21.2	C	6.8	NO
22 S. Riverside Avenue / Pellisier Road (U)	**City of Colton**							
		AM peak	-	-	16.6	B	-	NO
		PM Peak	-	-	**>200**	**F**	-	**YES**

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).
DELAY is measured in seconds
LOS = Level of Service
NB = Northbound, SB = Southbound, etc.
T=thru movement, R=right-turn movement, etc.
(S) = Signalized intersection
(U) = Unsignalized intersection

The results of the roadway segment operations analysis for Existing Plus Project Specific Plan Scenario One conditions are provided in **Table 9**.

As shown in the table, the following roadway segments are forecast to operate at a deficient LOS (LOS E) under Existing Plus Project Specific Plan Scenario One conditions:

- Orange Street, from Center Street to Garner Road
- Orange Street, from Garner Road to Columbia Avenue
- Orange Street, from Columbia Avenue to Strong Street
- Orange Street, from Strong Street to Oakley Avenue
- W. La Cadena Drive, from Chase Road to I-215 Southbound Ramps
- Columbia Avenue, from Primer Street to E. La Cadena Drive
- Strong Street, from Main Street to Orange Street

The above-listed deficient roadway segments would also be significantly impacted by the proposed Specific Plan Scenario One project based on the City's significance criteria described earlier in the report.

Table 9 also shows that with the street classifications proposed by the Specific Plan, the study roadway segments would operate at an acceptable LOS under Existing Plus Project Specific Plan Scenario One conditions except for the following:

- Columbia Avenue, from Primer Street to E. La Cadena Drive

The proposed Specific Plan street classification does not increase the roadway capacity for the above-listed segment of Columbia Avenue thereby resulting in a significant impact.

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TABLE 9
EXISTING PLUS PROJECT ROADWAY SEGMENT OPERATIONS: SPECIFIC PLAN SCENARIO ONE

	STREET SEGMENT	JURISDICTION	EXISTING CONDITIONS						EXISTING PLUS PROJECT SCENARIO 1 WITH EXISTING STREET CLASSIFICATION							EXISTING PLUS PROJECT SCENARIO 1 WITH GENERAL PLAN OR PROPOSED CLASSIFICATION					
			EXISTING FUNCTIONAL CLASSIFICATION / NO. LANES	Capacity[1]	ADT	% Heavy Vehicles	V/C	LOS	Daily Project Trips	Diverted Truck Trips	NET ADT	% Heavy Vehicles	V/C	LOS	Signi-ficant?	PROPOSED CLASSIFICATION / NO. LANES	Capacity[1]	ADT	V/C	LOS	Signi-ficant?
1	S. Riverside Avenue, Pellisier Road to Center Street	City of Colton	MAJOR / 4	34,100	21,540	21.5%	0.63	B	4,330	0	25,870	21.1%	0.76	C		MAJOR / 4	34,100	25,870	0.76	C	
2	Main Street, Center Street to Garner Road	City of Riverside	100' ARTERIAL / 4	33,000	19,861	18.7%	0.60	A	3,454	-1,827	21,488	8.8%	0.65	A		100' ARTERIAL / 4	33,000	21,488	0.65	A	
3	Main Street, Garner Road to Columbia Avenue	City of Riverside	100' ARTERIAL / 4	33,000	21,734	20.6%	0.66	A	4,796	-1,968	24,562	10.2%	0.74	B		100' ARTERIAL / 4	33,000	24,562	0.74	B	
4	Main Street, Columbia Avenue to Strong Street	City of Riverside	88' ARTERIAL / 4	22,000	20,449	14.5%	0.93	D	1,314	-712	21,051	10.7%	0.96	D		100' ARTERIAL / 4	33,000	21,051	0.64	A	
5	Main Street, Strong Street to Oakley Avenue	City of Riverside	88' ARTERIAL / 4	22,000	20,687	16.7%	0.94	D	2,123	-903	21,907	11.7%	1.00	D		100' ARTERIAL / 4	33,000	21,907	0.66	A	
6	Main Street, SR60 EB to Spruce Street	City of Riverside	88' ARTERIAL / 4	22,000	12,921	11.7%	0.59	A	2,153	-244	14,830	8.5%	0.67	B		***100' ARTERIAL / 2***	***18,000***	14,830	0.82	C	
7	Main Street, Spruce Street to Poplar Street	City of Riverside	88' ARTERIAL / 4	22,000	10,528	2.6%	0.48	A	2,270	-70	12,728	1.6%	0.58	A		***100' ARTERIAL / 2***	***18,000***	12,728	0.71	B	
8	Orange Street, Center Street to Garner Road	City of Riverside	LOCAL / 2	3,100	1,930	12.6%	0.62	A	2,097	0	4,027	10.8%	**1.30**	**E**	**YES**	66' COLLECTOR / 2	12,500	4,027	0.32	A	
9	Orange Street, Garner Road to Columbia Avenue	City of Riverside	LOCAL / 2	3,100	2,824	6.2%	0.91	D	3,604	0	6,428	7.8%	**2.07**	**E**	**YES**	66' COLLECTOR / 2	12,500	6,428	0.51	A	
10	Orange Street, Columbia Avenue to Strong Street	City of Riverside	LOCAL / 2	3,100	3,982	8.8%	**1.28**	**E**	726	0	4,708	8.8%	**1.52**	**E**	**YES**	66' COLLECTOR / 2	12,500	4,708	0.38	A	
11	Orange Street, Strong Street to Oakley Avenue	City of Riverside	LOCAL / 2	3,100	4,735	6.2%	**1.53**	**E**	555	0	5,290	6.5%	**1.71**	**E**	**YES**	66' COLLECTOR / 2	12,500	5,290	0.42	A	
12	W. La Cadena Drive, Chase Road to I-215 SB Ramps	City of Riverside	LOCAL / 2	3,100	5,620	11.6%	**1.81**	**E**	1,784	0	7,404	11.0%	**2.39**	**E**	**YES**	66' COLLECTOR / 2	12,500	7,404	0.59	A	
13	Center Street, Main Street to Orange Street	City of Riverside	COLLECTOR / 2	12,500	3,875	18.8%	0.31	A	872	1,968	4,747	65.1%	0.38	A		88' ARTERIAL / 4	22,000	4,747	0.22	A	
14	Center Street, Orange Street to Stephens Avenue	City/County of Riverside	COLLECTOR / 2	12,500	6,117	21.7%	0.49	A	2,998	1,968	9,115	42.6%	0.73	B		88' ARTERIAL / 4	22,000	9,115	0.41	A	
15	Center Street, Stephens Avenue to Highgrove Place	County of Riverside	COLLECTOR / 2	12,500	8,650	17.7%	0.69	A	2,810	1,968	11,460	35.5%	0.92	D		88' ARTERIAL / 4	22,000	11,460	0.52	A	
16	Garner Road, Main Street to Orange Street	City of Riverside	LOCAL / 2	3,100	252	6.0%	0.08	A	0	0	252	6.0%	0.08	A		LOCAL / 2	3,100	252	0.08	A	
17	Columbia Avenue, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	9,955	20.7%	0.45	A	5,462	-1,116	14,301	10.1%	0.65	B		***110' ARTERIAL / 4***	***33,000***	14,301	0.43	A	
18	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	22,000	12,226	17.2%	0.56	A	8,662	-929	19,959	9.9%	0.91	D		88' ARTERIAL / 4	22,000	19,959	0.91	D	
19	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	22,000	18,492	17.3%	0.84	C	11,440	-465	29,468	12.8%	**1.34**	**E**	**YES**	88' ARTERIAL / 4	22,000	29,468	**1.34**	**E**	**YES**
20	Strong Street, Main Street to Orange Street	City of Riverside	LOCAL / 2	3,100	2,873	9.7%	0.93	D	994	0	3,867	9.6%	**1.25**	**E**	**YES**	66' COLLECTOR / 2	12,500	3,867	0.31	A	
21	Strong Street, Orange Street to W La Cadena Drive	City of Riverside	LOCAL / 2	3,100	1,900	5.9%	0.61	A	371	0	2,271	6.5%	0.73	B		66' COLLECTOR / 2	12,500	2,271	0.18	A	
22	Market Street, Rivera Street to SR60 WB Ramps	City of Riverside	100' ARTERIAL / 4	33,000	21,336	7.5%	0.65	A	5,625	0	26,961	7.8%	0.82	C		100' ARTERIAL / 4	33,000	26,961	0.82	C	
23	Pellisier Road, S. Riverside Avenue to Roquet Ranch	City of Colton	DOES NOT EXIST						9,424	0	9,424	9.2%	0.72	C		SECONDARY / 2	13,000	9,424	0.72	C	

Footnote:

Roadway classifications and capacity threesholds shown in ***bold italics*** indicate proposed change from General Plan classification.

V/C and LOS shown in **bold** indicate deficient LOS based on ADT and roadway capacity.

1) The City's Roadway Segment Capacity Thresholds does not provide LOS thresholds for LOS A or LOS B. The LOS A and B thresholds based on ADT as shown in Table 2 were interpolated based on the volume-to-capacity ratios of the LOS C and D thresholds.

Existing Plus Project Operations Analysis: Specific Plan Scenario Two

The results of the intersection operations analysis for Existing Plus Project Specific Plan Scenario Two are provided in **Table 10**. The intersection operations worksheets are provided in **Appendix B**.

As shown in the table, the following intersections are forecast to operate at a deficient LOS (LOS E or F) under Existing Plus Project Specific Plan Scenario Two conditions:

- Center Street / Stephens Avenue (AM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- Center Street / Highgrove Place (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM: LOS E; PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Columbia Avenue / E. La Cadena Drive (PM: LOS E)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Strong Street (PM: LOS E)
- Orange Street / Oakley Avenue / SR-60 WB Off-Ramp (PM: LOS F)
- Orange Street / Strong Street (PM: LOS F)
- S. Riverside Avenue / Pellisier Road (AM/PM: LOS F)

Table 10 also shows that project-related significant impacts were identified at the following intersections under Existing Plus Project Specific Plan Scenario Two conditions:

- Center Street / Stephens Avenue (AM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- Center Street / Highgrove Place (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM: LOS E; PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Columbia Avenue / E. La Cadena Drive (AM: LOS D; PM: LOS E)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Strong Street (PM: LOS E)
- Orange Street / Oakley Avenue / SR-60 WB Off-Ramp (PM: LOS F)
- Orange Street / Strong Street (PM: LOS F)
- S. Riverside Avenue / Pellisier Road (AM/PM: LOS F)

It should be noted that although significant impacts were identified at the Orange Street / Oakley Avenue / SR-60 WB Off-Ramp and Orange Street / Strong Street intersections, no mitigation measures are required. The approved Exchange development is conditioned to install traffic signals at these two intersections, which would mitigate the impact that was identified for the Specific Plan project under Existing Plus Project Scenario Two conditions.

The results of the roadway segment operations analysis for Existing Plus Project Specific Plan Scenario Two conditions are provided in **Table 11**.

As shown in the table, the following roadway segments are forecast to operate at a deficient LOS (LOS E) under Existing Plus Project Specific Plan Scenario Two conditions:

- Main Street, from Strong Street to Oakley Avenue
- Orange Street, from Garner Road to Columbia Avenue
- Orange Street, from Columbia Avenue to Strong Street
- Orange Street, from Strong Street to Oakley Avenue
- W. La Cadena Drive, from Chase Road to I-215 Southbound Ramps
- Columbia Avenue, from Primer Street to E. La Cadena Drive
- Strong Street, from Main Street to Orange Street

The above-listed deficient roadway segments would also be significantly impacted by the proposed Specific Plan Scenario Two project based on the City's significance criteria described earlier in the report.

Table 11 also shows that with the street classifications proposed by the Specific Plan, the study roadway segments would operate at an acceptable LOS under Existing Plus Project Specific Plan Scenario Two conditions except for the following:

- Columbia Avenue, from Primer Street to E. La Cadena Drive

The proposed Specific Plan street classification does not increase the roadway capacity for the above-listed segment of Columbia Avenue thereby resulting in a significant impact.

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TABLE 10
NORTHSIDE SPECIFIC PLAN
EXISTING + PROJECT SPECIFIC PLAN SCENARIO TWO INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK HOUR	EXISTING		EXISTING + PROJECT SCENARIO TWO		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
1 Center Street / Stephens Avenue (S)	**County of Riverside**							
		AM peak	39.8	D	**93.5**	**F**	53.7	**YES**
		PM Peak	23.6	C	36.0	D	12.4	NO
2 W La Cadena Drive / I-215 SB Ramps / Stephens Avenue (U)	**County of Riverside**							
		AM peak	**37.1**	**E**	**109.0**	**F**	71.9	**YES**
		PM Peak	**52.0**	**F**	**130.4**	**F**	78.4	**YES**
3 E La Cadena Drive / I-215 NB Ramps / Highgrove Place (U)	**County of Riverside**							
		AM peak	9.6	A	11.9	B	2.3	NO
		PM Peak	10.6	B	14.8	B	4.2	NO
4 West Center Street / Highgrove Place (U)	**County of Riverside**							
		AM peak	22.2	C	**81.9**	**F**	59.7	**YES**
		PM Peak	19.2	C	**55.3**	**F**	36.1	**YES**
5 Columbia Avenue / Primer Street (S)	**City of Riverside**							
		AM peak	10.7	B	11.5	B	0.8	NO
		PM Peak	11.0	B	12.3	B	1.3	NO
6 W La Cadena Drive / I-215 SB Ramps / Interchange Drive (U)	**City of Riverside**							
		AM peak	23.5	C	**39.7**	**E**	16.2	**YES**
		PM Peak	**50.2**	**F**	**87.4**	**F**	37.2	**YES**
7 E La Cadena Drive / I-215 NB Ramps (U)	**City of Riverside**							
		AM peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
8 Columbia Avenue / E La Cadena Drive (S)	**City of Riverside**							
		AM peak	26.0	C	43.2	D	17.2	**YES**
		PM Peak	38.9	D	**63.8**	**E**	24.9	**YES**

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TABLE 10
NORTHSIDE SPECIFIC PLAN
EXISTING + PROJECT SPECIFIC PLAN SCENARIO TWO INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK HOUR	EXISTING		EXISTING + PROJECT SCENARIO TWO		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
9 Main Street / Placentia Lane (U)	**City of Riverside / City of Colton**							
		AM peak	**57.8**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
10 Main Street / Garner Road (U)	**City of Riverside**							
		AM peak	**74.2**	**F**	**85.6**	**F**	11.4	**YES**
		PM Peak	**83.5**	**F**	**58.7**	**F**	-24.8	**YES**
11 Main Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	22.1	C	25.3	C	3.2	NO
		PM Peak	25.1	C	27.7	C	2.6	NO
12 Main Street / Strong Street (S)	**City of Riverside**							
		AM peak	26.1	C	29.4	C	3.3	NO
		PM Peak	39.9	D	**57.0**	**E**	17.1	**YES**
13 Main Street / Oakley Avenue / SR60 WB On Ramp (S)	**City of Riverside**							
		AM peak	37.7	D	41.3	D	3.6	NO
		PM Peak	37.3	D	40.7	D	3.4	NO
14 Main Street / SR60 EB Ramps (S)	**City of Riverside**							
		AM peak	24.1	C	26.5	C	2.4	NO
		PM Peak	22.5	C	24.9	C	2.4	NO
15 Main Street / Spruce Street (S)	**City of Riverside**							
		AM peak	10.8	B	12.3	B	1.5	NO
		PM Peak	12.1	B	14.0	B	1.9	NO
16 Orange Street / Oakley Avenue / SR60 WB Off Ramp (S)	**City of Riverside**							
		AM peak	20.3	C	22.6	C	2.3	NO
		PM Peak	**44.0**	**E**	**51.3**	**F**	7.3	**YES**

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TABLE 10
NORTHSIDE SPECIFIC PLAN
EXISTING + PROJECT SPECIFIC PLAN SCENARIO TWO INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK HOUR	EXISTING		EXISTING + PROJECT SCENARIO TWO		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
17 Orange Street / Strong Street (S)	**City of Riverside**							
		AM peak	10.8	B	12.5	B	1.7	NO
		PM Peak	26.1	D	**52.4**	**F**	26.3	**YES**
18 Orange Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	13.5	B	15.2	B	1.7	NO
		PM Peak	16.5	B	17.8	B	1.3	NO
19 Orange Street / Garner Road (U)	**City of Riverside**							
		AM peak	8.8	A	9.3	A	0.5	NO
		PM Peak	10.1	B	10.7	B	0.6	NO
20 Orange Street / Center Street (U)	**City of Riverside**							
		AM peak	9.1	A	12.6	B	3.5	NO
		PM Peak	9.9	A	16.0	C	6.1	NO
21 Market Street / Rivera Street (S)	**City of Riverside**							
		AM peak	13.1	B	15.8	B	2.7	NO
		PM Peak	14.4	B	19.3	B	4.9	NO
22 S. Riverside Avenue / Pellisier Road (U)	**City of Colton**							
		AM peak	-	-	**>200**	**F**	-	**YES**
		PM Peak	-	-	**>200**	**F**	-	**YES**

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).
DELAY is measured in seconds
LOS = Level of Service
NB = Northbound, SB = Southbound, etc.
T=thru movement, R=right-turn movement, etc.
(S) = Signalized intersection
(U) = Unsignalized intersection

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TABLE 11
EXISTING PLUS PROJECT ROADWAY SEGMENT OPERATIONS: SPECIFIC PLAN SCENARIO TWO

	STREET SEGMENT	JURISDICTION	EXISTING CONDITIONS						EXISTING PLUS PROJECT SCENARIO 2 WITH EXISTING STREET CLASSIFICATION							EXISTING PLUS PROJECT SCENARIO 2 WITH GENERAL PLAN OR PROPOSED CLASSIFICATION					
			EXISTING FUNCTIONAL CLASSIFICATION / NO. LANES	Capacity[1]	ADT	% Heavy Vehicles	V/C	LOS	Daily Project Trips	Diverted Truck Trips	NET ADT	% Heavy Vehicles	V/C	LOS	Signi-ficant?	PROPOSED CLASSIFICATION / NO. LANES	Capacity[1]	ADT	V/C	LOS	Signi-ficant?
1	S. Riverside Avenue, Pellisier Road to Center Street	City of Colton	MAJOR / 4	34,100	21,540	21.5%	0.63	B	2,499	0	24,039	28.3%	0.70	C		MAJOR / 4	34,100	24,039	0.70	C	
2	Main Street, Center Street to Garner Road	City of Riverside	100' ARTERIAL / 4	33,000	19,861	18.7%	0.60	A	1,932	-1,827	19,966	9.5%	0.61	A		100' ARTERIAL / 4	33,000	19,966	0.61	A	
3	Main Street, Garner Road to Columbia Avenue	City of Riverside	100' ARTERIAL / 4	33,000	21,734	20.6%	0.66	A	2,544	-1,968	22,310	11.3%	0.68	A		100' ARTERIAL / 4	33,000	22,310	0.68	A	
4	Main Street, Columbia Avenue to Strong Street	City of Riverside	88' ARTERIAL / 4	22,000	20,449	14.5%	0.93	D	1,570	-712	21,307	10.6%	0.97	D		100' ARTERIAL / 4	33,000	21,307	0.65	A	
5	Main Street, Strong Street to Oakley Avenue	City of Riverside	88' ARTERIAL / 4	22,000	20,687	16.7%	0.94	D	2,428	-903	22,212	11.5%	**1.01**	**E**	**YES**	100' ARTERIAL / 4	33,000	22,212	0.67	A	
6	Main Street, SR60 EB to Spruce Street	City of Riverside	88' ARTERIAL / 4	22,000	12,921	11.7%	0.59	A	1,604	-244	14,281	8.9%	0.65	B		***100' ARTERIAL / 2***	***18,000***	14,281	0.79	B	
7	Main Street, Spruce Street to Poplar Street	City of Riverside	88' ARTERIAL / 4	22,000	10,528	2.6%	0.48	A	2,045	-70	12,503	1.7%	0.57	A		***100' ARTERIAL / 2***	***18,000***	12,503	0.69	A	
8	Orange Street, Center Street to Garner Road	City of Riverside	LOCAL / 2	3,100	1,930	12.6%	0.62	A	733	0	2,663	16.5%	0.86	C		66' COLLECTOR / 2	12,500	2,663	0.21	A	
9	Orange Street, Garner Road to Columbia Avenue	City of Riverside	LOCAL / 2	3,100	2,824	6.2%	0.91	D	1,687	0	4,511	13.8%	**1.46**	**E**	**YES**	66' COLLECTOR / 2	12,500	4,511	0.36	A	
10	Orange Street, Columbia Avenue to Strong Street	City of Riverside	LOCAL / 2	3,100	3,982	8.8%	**1.28**	**E**	601	0	4,583	11.1%	**1.48**	**E**	**YES**	66' COLLECTOR / 2	12,500	4,583	0.37	A	
11	Orange Street, Strong Street to Oakley Avenue	City of Riverside	LOCAL / 2	3,100	4,735	6.2%	**1.53**	**E**	500	0	5,235	8.2%	**1.69**	**E**	**YES**	66' COLLECTOR / 2	12,500	5,235	0.42	A	
12	West La Cadena Drive, Chase Road to I-215 SB Ramps	City of Riverside	LOCAL / 2	3,100	5,620	11.6%	**1.81**	**E**	900	0	6,520	13.7%	**2.10**	**E**	**YES**	66' COLLECTOR / 2	12,500	6,520	0.52	A	
13	Center Street, Main Street to Orange Street	City of Riverside	COLLECTOR / 2	12,500	3,875	18.8%	0.31	A	564	1,968	6,407	52.5%	0.51	A		88' ARTERIAL / 4	22,000	6,407	0.29	A	
14	Center Street, Orange Street to Stephens Avenue	City/County of Riverside	COLLECTOR / 2	12,500	6,117	21.7%	0.49	A	1,465	1,968	9,550	44.0%	0.76	B		88' ARTERIAL / 4	22,000	9,550	0.43	A	
15	Center Street, Stephens Avenue to Highgrove Place	County of Riverside	COLLECTOR / 2	12,500	8,650	17.7%	0.69	A	1,443	1,968	12,061	36.5%	0.96	D		88' ARTERIAL / 4	22,000	12,061	0.55	A	
16	Garner Road, Main Street to Orange Street	City of Riverside	LOCAL / 2	3,100	252	6.0%	0.08	A	0	0	252	6.0%	0.08	A		LOCAL / 2	3,100	252	0.08	A	
17	Columbia Avenue, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	9,955	20.7%	0.45	A	4,982	-1,116	13,821	16.4%	0.63	A		***110' ARTERIAL / 4***	***33,000***	13,821	0.42	A	
18	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	22,000	12,226	17.2%	0.56	A	6,270	-929	17,567	16.2%	0.80	C		88' ARTERIAL / 4	22,000	17,567	0.80	C	
19	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	22,000	18,492	17.3%	0.84	C	7,276	-465	25,303	18.5%	**1.15**	**E**	**YES**	88' ARTERIAL / 4	22,000	25,303	**1.15**	**E**	**YES**
20	Strong Street, Main Street to Orange Street	City of Riverside	LOCAL / 2	3,100	2,873	9.7%	0.93	D	825	0	3,698	13.5%	**1.19**	**E**	**YES**	66' COLLECTOR / 2	12,500	3,698	0.30	A	
21	Strong Street, Orange Street to W La Cadena Drive	City of Riverside	LOCAL / 2	3,100	1,900	5.9%	0.61	A	185	0	2,085	7.8%	0.67	A		66' COLLECTOR / 2	12,500	2,085	0.17	A	
22	Market Street, Rivera Street to SR60 WB Ramps	City of Riverside	100' ARTERIAL / 4	33,000	21,336	7.5%	0.65	A	5,307	0	26,643	11.3%	0.81	C		100' ARTERIAL / 4	33,000	26,643	0.81	C	
23	Pellisier Road, S. Riverside Avenue to Roquet Ranch	City of Colton	DOES NOT EXIST						11,253	0	11,253	26.7%	0.87	D		SECONDARY / 2	13,000	11,253	0.87	D	

Footnote:

Roadway classifications and capacity threesholds shown in bold italics indicate proposed change from General Plan classification.

V/C and LOS shown in **bold** indicate deficient LOS based on ADT and roadway capacity.

1) The City's Roadway Segment Capacity Thresholds does not provide LOS thresholds for LOS A or LOS B. The LOS A and B thresholds based on ADT as shown in Table 2 were interpolated based on the volume-to-capacity ratios of the LOS C and D thresholds.

HORIZON YEAR 2040 MODEL RUNS

The 2040 Riverside County Transportation Analysis Model (RivTAM) was used to derive the traffic volumes for all Horizon Year 2040 scenarios. The land uses that are currently included in the 2040 RivTAM regional traffic model were used to derive the Horizon Year 2040 Baseline (Without Project) traffic volumes, which reflect the build-out of the City's current General Plan.

The specific land uses and unit yields for the Northside Specific Plan Scenarios One and Two were input into the Travel Analysis Zones (TAZs) within the 2040 RivTAM model to derive the Scenario One and Scenario Two traffic volumes. A TAZ map of the Northside Specific Plan area and the land use inputs for each scenario are provided in **Appendix D**.

The two Specific Plan land use scenarios were also run without and with the future extension of Orange Street north of Center Street into Pellissier Ranch in the City of Colton. The "without Orange Street Extension" scenario assumes the existing condition in which Orange Street terminates 400 feet north of Center Street and transitions to Pellissier Road to provide local access to the existing industrial uses.

The "with Orange Street Extension" scenario assumes that Orange Street extends north as a two-lane Collector to provide a vehicular connection between Center Street and the future Pellissier Ranch and Roquet Ranch developments. The Orange Street Extension was initially input as a two-lane roadway in the RivTAM model, but the initial model outputs did not include any traffic volumes on the two-lane Orange Street Extension. Therefore, for the purpose of providing the two roadway network scenarios, the Orange Street Extension was re-coded as a four-lane roadway in the RivTAM model, which successfully diverted traffic volumes to Orange Street north of Center Street.

The raw daily traffic volumes that were generated by the 2040 RivTAM model for each scenario were post-processed into intersection turning movement volumes based on the growth in daily traffic from existing to 2040. The future 2040 daily traffic volumes were calibrated where necessary to ensure a minimum of 10% growth from existing to 2040. The post-processed turning movement volumes derived from the RivTAM model for each scenario are provided in **Appendix E**.

RivTAM Model Trip Generation

The trip generation for the three Northside Specific Plan land use scenarios (including "without project") was calculated by the RiVTAM model during the runs that were conducted for each scenario. The RivTAM model calculated the trip generation for each Trip Analysis Zone (TAZ) within the Northside Specific Plan area. The RivTAM model uses its own trip generation rates, which are lower than the Institute of Transportation Engineers (ITE) trip generation rates that are typically used for traffic impact studies. The RivTAM 2040 model calculated trip generation based on socioeconomic data, census household data, and trip attractors based on household and employment data.

Table 12, Table 13 and **Table 14** show the RivTAM model weekday trip generation calculations by TAZ for the Without Project, Specific Plan Scenario One and Specific Plan Scenario Two.

As shown in Table 12, the "Without Project" land uses, which are currently included in the RivTAM regional traffic model and are based on the City's current General Plan, are forecast to generate an increase of approximately 97,611 daily trips, with an increase of approximately 7,190 trips occurring during the AM peak hour, and an increase of approximately 9,141 trips occurring during the PM peak hour.

Table 13 shows that the Northside Specific Plan Scenario One land uses are forecast to generate an increase of approximately 126,942 daily trips, with an increase of approximately 9,354 trips occurring during the AM peak hour, and an increase of approximately 11,785 trips occurring during the PM peak hour.

Table 14 shows that the Northside Specific Plan Scenario Two land uses are forecast to generate an increase of approximately 107,205 daily trips, with an increase of approximately 8,283 trips occurring during the AM peak hour, and an increase of approximately 10,092 trips occurring during the PM peak hour.

The raw trip generation data from the RivTAM model for each scenario is provided in **Appendix F**.

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TABLE 12
2040 RIVTAM MODEL TRIP GENERATION BY TAZ: BASELINE (WITHOUT PROJECT)

RIVTAM TAZ	GENERAL PLAN LAND USE	QUANTITY	UNITS	ADT	AM PEAK HOUR			PM PEAK HOUR		
					IN	OUT	TOTAL	IN	OUT	TOTAL
3486	C - Commercial* HDR - High Density Residential MDR - Medium Density Residential*	848.969 292 215	TSF DU DU	5,794	236	151	387	233	319	552
3488	B/OP - Business/Office Park* C - Commercial* MDR - Medium Density Residential* MHDR - Medium High Density Residential* SRR - Semi Rural Residential*	9,065.340 98.050 2,091 189 7	TSF TSF DU DU DU	21,638	793	779	1,572	1,006	1,018	2,024
3498	C - Commercial* HDR - High Density Residential MDR - Medium Density Residential*	512.655 177 16	TSF DU DU	7,920	290	282	572	366	378	744
3508	B/OP - Business/Office Park* C - Commercial* MDR - Medium Density Residential* MHDR - Medium High Density Residential* O - Office* PF - Public Facilities/Institutions*	683.333 119.800 1,020 377 1,543.560 2,000.000	TSF TSF DU DU TSF TSF	8,297	310	306	616	383	387	770
3515	B/OP - Business/Office Park* C - Commercial* MDR - Medium Density Residential* OS - Open Space/Natural Resources PF - Public Facilities/Institutions*	8,839.433 43.500 213 214.10 447.174	TSF TSF DU AC TSF	7,770	288	246	534	342	393	735
3527	B/OP - Business/Office Park* I - Industrial* MDR - Medium Density Residential*	2,200.000 78.400 328	TSF TSF DU	4,380	120	207	327	235	176	411
3531	B/OP - Business/Office Park* C - Commercial* MDR - Medium Density Residential*	2,733.333 65.350 1,038	TSF TSF DU	6,361	194	281	475	328	271	599
5175	LI - Light Industrial (Colton) VLDR - Very Low Density Residential (Colton)	402.913 6	TSF DU	22,644	848	916	1,764	1,065	1,041	2,106
5182	LI - Light Industrial (Colton)	5,897.087	TSF	12,807	430	513	943	626	574	1,200
		TOTAL TRIPS		**97,611**	**3,509**	**3,681**	**7,190**	**4,584**	**4,557**	**9,141**

Source: Riverside Traffic Analysis Model (RivTAM)

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TABLE 13
2040 RIVTAM MODEL TRIP GENERATION BY TAZ: SPECIFIC PLAN SCENARIO ONE

RIVTAM TAZ	SPECIFIC PLAN LAND USE	QUANTITY	UNITS	ADT	AM PEAK HOUR			PM PEAK HOUR		
					IN	OUT	TOTAL	IN	OUT	TOTAL
3486	C - Commercial* MDR - Medium Density Residential* MHDR - Medium High Density Residential* O - Office*	98.010 303 426 98.010	TSF DU DU TSF	3,342	79	180	259	199	121	320
3488	B/OP - Business/Office Park* C - Commercial* MDR - Medium Density Residential* MHDR - Medium High Density Residential* PF - Public Facilities/Institutions*	9,000.000 54.450 2,035 189 479.160	TSF TSF DU DU TSF	21,720	821	762	1,583	993	1,036	2,029
3498	C - Commercial* MHDR - Medium High Density Residential* O - Office*	98.010 426 98.010	TSF DU TSF	7,012	208	334	542	377	281	658
3508	B/OP - Business/Office Park* C - Commercial* MDR - Medium Density Residential* MHDR - Medium High Density Residential* O - Office* PF - Public Facilities/Institutions*	62.617 438.320 1,028 1,229 196.020 2,000.000	TSF TSF DU DU TSF TSF	10,785	248	619	867	652	340	992
3515	B/OP - Business/Office Park* C - Commercial* HDR - High Density Residential MDR - Medium Density Residential* MHDR - Medium High Density Residential* OS - Open Space/Natural Resources	62.617 506.300 2,889 442 432 190.13	TSF TSF DU DU DU AC	21,583	347	1,290	1,637	1,375	610	1,985
3527	MDR - Medium Density Residential*	624	DU	5,358	114	310	424	326	174	500
3531	B/OP - Business/Office Park* C - Commercial* MDR - Medium Density Residential*	250.467 187.850 1,038	TSF TSF DU	4,783	108	267	375	286	165	451
5175	B/OP - Business/Office Park* C - Commercial*	115.118 555.400	TSF TSF	34,149	1,184	1,072	2,256	1,482	1,683	3,165
5182	B/OP - Business/Office Park* C - Commercial* LI - Light Industrial (Colton) MDR - Medium Density Residential* OS - Open Space/Natural Resources	1,684.882 196.020 1,480.000 1,620 42.00	TSF TSF TSF DU AC	18,210	374	1,037	1,411	1,110	575	1,685
TOTAL TRIPS				**126,942**	**3,483**	**5,871**	**9,354**	**6,800**	**4,985**	**11,785**

Source: Riverside Traffic Analysis Model (RivTAM)

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TABLE 14
2040 RIVTAM MODEL TRIP GENERATION BY TAZ: SPECIFIC PLAN SCENARIO TWO

RIVTAM TAZ	SPECIFIC PLAN LAND USE	QUANTITY	UNITS	ADT	AM PEAK HOUR			PM PEAK HOUR		
					IN	OUT	TOTAL	IN	OUT	TOTAL
3486	C - Commercial* MDR - Medium Density Residential* MHDR - Medium High Density Residential* O - Office*	98.010 303 426 98.010	TSF DU DU TSF	3,333	79	179	258	198	121	319
3488	B/OP - Business/Office Park* C - Commercial* MDR - Medium Density Residential* MHDR - Medium High Density Residential* PF - Public Facilities/Institutions*	9,000.000 54.450 2,035 189 479.160	TSF TSF DU DU TSF	21,458	815	756	1,571	982	1,024	2,006
3498	C - Commercial* MHDR - Medium High Density Residential* O - Office*	98.010 426 98.010	TSF DU TSF	6,995	208	333	541	376	281	657
3508	B/OP - Business/Office Park* C - Commercial* MDR - Medium Density Residential* MHDR - Medium High Density Residential* O - Office* PF - Public Facilities/Institutions*	62.617 438.320 1,028 1,229 196.020 2,000.000	TSF TSF DU DU TSF TSF	10,651	244	614	858	645	460	1,105
3515	B/OP - Business/Office Park* C - Commercial* HDR - High Density Residential MDR - Medium Density Residential* OS - Open Space/Natural Resources	5,261.317 549.800 1,200 442 190.13	TSF TSF DU DU AC	11,155	206	646	852	692	340	1,032
3527	MDR - Medium Density Residential*	624	DU	5,344	113	310	423	325	173	498
3531	B/OP - Business/Office Park* C - Commercial* MDR - Medium Density Residential*	250.467 187.850 1,038	TSF TSF DU	4,657	104	263	367	280	159	439
5175	LI - Light Industrial (Colton)	255.818	TSF	22,482	834	913	1,747	1,061	1,029	2,090
5182	HDR - High Density Residential LI - Light Industrial (Colton) VLDR - Very Low Density Residential (Colton)	2,430 3,744.182 6	TSF TSF DU	21,130	369	1,297	1,666	1,349	597	1,946
TOTAL TRIPS				**107,205**	**2,972**	**5,311**	**8,283**	**5,908**	**4,184**	**10,092**

Source: Riverside Traffic Analysis Model (RivTAM)

HORIZON YEAR 2040 CUMULATIVE PROJECTS AND BACKGROUND GROWTH

The land uses that were modeled within the study area TAZs in the RivTAM model were compared with the land uses for the following development projects in or near the project study area for consistency:

- The Exchange (mixed use commercial/residential)
- Empire Pharmacy (commercial retail)
- Center Street Warehouse (manufacturing)
- Roquet Ranch (City of Colton)

The Exchange project, which is located in Subarea 11 of the Specific Plan, was found to be consistent with the proposed uses (mixed residential/commercial) in the TAZ in which the project is located. The Empire Pharmacy project is not consistent with the proposed uses (residential) in the TAZ in which it is located; however, Empire Pharmacy is a small commercial project and it is expected that the difference in vehicular trips between commercial and residential would be negligible.

The Center Street Warehouse site is located within Subarea 4 of the Northside Specific Plan, in which a Medium-High Density Residential land use is proposed for Scenario One of the Specific Plan. Scenario Two proposes a Business/Office Park use for Subarea 4; therefore, the proposed Center Street Warehouse use is more consistent with Scenario Two of the Specific Plan.

It did not appear that the land uses associated with the Roquet Ranch development were included in the 2040 RivTAM model; therefore, trips from Roquet Ranch were manually added to the Horizon Year 2040 traffic volumes that were generated by the RivTAM model. The Roquet Ranch project trips were taken directly from the *Roquet Ranch Specific Plan Traffic Impact Analysis* (Urban Crossroads, November 2016).

The *Roquet Ranch Specific Plan Traffic Impact Analysis* did not include the City's requirement to prohibit northbound and southbound through traffic at the Center Street / Orange Street intersection; therefore, the northbound and southbound through trips were manually adjusted to Center Street east of Orange Street. However, the manual adjustment to the Roquet Ranch northbound and southbound through trips at the Center Street / Orange Street intersection was only made for the Specific Plan scenarios with the Orange Street Extension north of Center Street.

The Horizon Year 2040 Baseline (Without Project) and the Specific Plan scenarios without the Orange Street Extension do not include Roquet Ranch trips at the Center Street / Orange Street intersection, as no access to Center Street would be allowed under these scenarios. It is assumed that these trips would use the future Pellisier Road either to I-215 or to South Riverside Avenue.

The *Roquet Ranch Specific Plan Traffic Impact Analysis* included a comprehensive list of cumulative projects within the City of Riverside, City of Colton, City of Rialto, City of Grand Terrace, and County of Riverside that may generate traffic within the study area. The City of Colton also provided a list of cumulative projects within the southwest area of Colton that may generate trips within the project study area. The cumulative projects list and location map from the *Roquet Ranch Specific Plan Traffic Impact Analysis* and also the information provided by the City of Colton are provided in **Appendix G**.

The average annual growth rate associated with the cumulative projects is approximately 2.4% from 2016 to 2040 according to the *Roquet Ranch Specific Plan Traffic Impact Analysis.* The Horizon Year 2040 Baseline (Without Project) volumes from the RivTAM model showed annual growth rates ranging from 0.4% to 4.2%, with an average growth rate of 1.4% from existing to 2040.

To ensure that the regional growth associated with the cumulative projects is adequately reflected in the Horizon Year 2040 Baseline (Without Project) volumes, additional growth factors were applied to the forecast volumes where annual growth was forecast at less than 1.0%. The additional growth factors combined with the Roquet Ranch trips increased the average annual growth rate in the study area to approximately 2.0% from existing to Horizon Year 2040 Baseline (Without Project) conditions. The additional traffic associated with the regional cumulative projects was also added to the Horizon Year 2040 traffic volumes for the Specific Plan scenarios, which resulted in average annual growth rates of approximately 2.6% for Scenario One and approximately 2.2% for Scenario Two from existing to the year 2040.

HORIZON YEAR 2040 BASELINE (WITHOUT PROJECT) CONDITIONS

The Horizon Year 2040 Baseline (Without Project) scenario reflects the build-out of the current General Plan land uses. The Horizon Year 2040 Baseline (Without Project) traffic volumes are based on the land uses that are currently included in the 2040 RivTAM regional traffic model for the Northside Specific Plan area.

Exhibit 19 shows the Horizon Year 2040 Baseline (Without Project) traffic volumes, which also includes the additional growth from the cumulative projects as described in the previous chapter.

Horizon Year 2040 Baseline Roadway Improvements

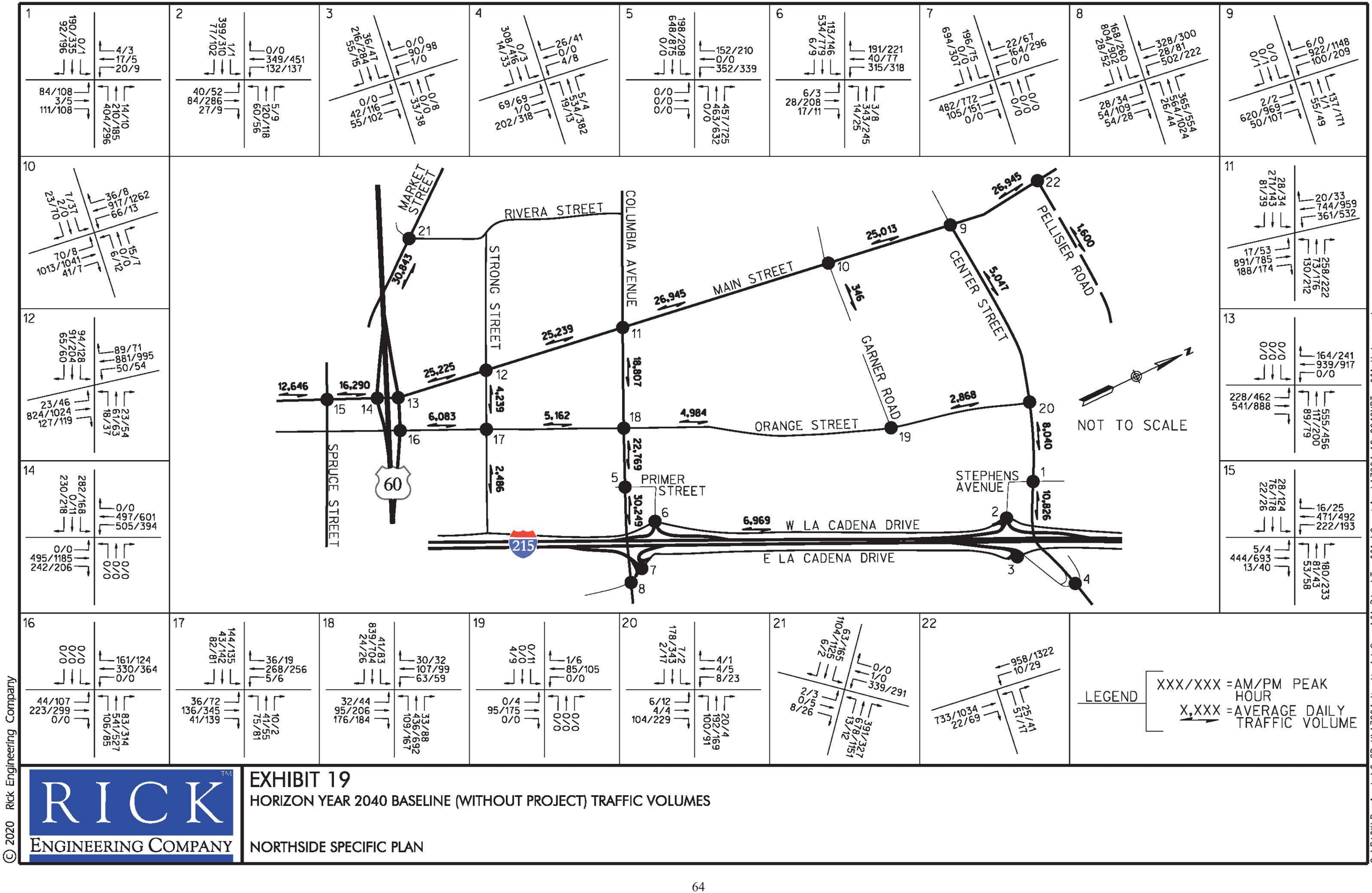
The Horizon Year 2040 Baseline (Without Project) scenario includes the build-out of the City's current General Plan Mobility Element roadways, which is also assumed under all scenarios in this study. In addition, the Horizon Year 2040 Baseline (Without Project) scenario and all other scenarios include intersection improvements that are required mitigation measures for future development projects. **Table 15** summarizes the future intersection improvements and the development projects (The Exchange and Roquet Ranch) that are required to construct them.

The Exchange project is also required to make fair-share contributions toward funding future intersection improvements, but these improvements are not assumed to be constructed under any of the Horizon Year 2040 study scenarios. However, the recommended improvements toward which the Exchange project is required to contribute a fair-share payment are recommended as mitigation measures for the two Specific Plan land use scenarios where applicable.

TABLE 15
HORIZON YEAR 2040 BASELINE INTERSECTION IMPROVEMENTS

INTERSECTION	REQUIRED OR PLANNED IMPROVEMENT	RESPONSIBLE PARTY
Main Street / Strong Street	Restripe to provide an EB left turn lane and a shared through/right turn lane	Roquet Ranch, The Exchange
	Restripe to provide an WB left turn lane and a shared through/right turn lane	The Exchange
Orange Street / Strong Street	Install a traffic signal	The Exchange
Orange Street / Oakley Avenue / SR-60 WB Off-Ramp	Install a traffic signal	The Exchange
	Construct a NB left turn lane	The Exchange
Orange Street / Center Street	Install a traffic signal [(1)]	Roquet Ranch
	Prohibit NB and SB through traffic on Orange Street [(1)]	Roquet Ranch

Source: The Exchange Traffic Impact Analysis (Urban Crossroads, November 30, 2018). Roquet Ranch Specific Plan Draft EIR Comments Letter, September 21, 2017.
[(1)] These improvements are only included under the two Specific Plan scenarios with the Orange Street Extension.



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EXHIBIT 19

HORIZON YEAR 2040 BASELINE (WITHOUT PROJECT) TRAFFIC VOLUMES

NORTHSIDE SPECIFIC PLAN

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As shown in Table 15, the Roquet Ranch development is responsible for installing a traffic signal at the Orange Street / Center Street intersection; however, the traffic signal is only needed if Orange Street is extended north of Center Street and is only included in the Horizon Year 2040 Specific Plan scenarios with the Orange Street Extension.

It should be noted that a roundabout could be considered as a potential alternative to a traffic signal at some of the intersections where installation of a traffic signal is recommended. The feasibility of a roundabout instead of a traffic signal would be determined by the total volume entering/exiting the intersection and the availability of right-of-way to construct the appropriately sized roundabout for the intersection.

Exhibit 20 illustrates the future intersection improvements under the Horizon Year 2040 Baseline (Without Project) scenario, which are also included in all other study scenarios. The exception is the Orange Street / Center Street improvements, which are only included under the Specific Plan scenarios with the Orange Street Extension north of Center Street.

Horizon Year 2040 Baseline (Without Project) Operations Analysis

The results of the intersection operations analysis for the Horizon Year 2040 Baseline (Without Project) scenario are provided in **Table 16**. The intersection operations worksheets are provided in **Appendix B**.

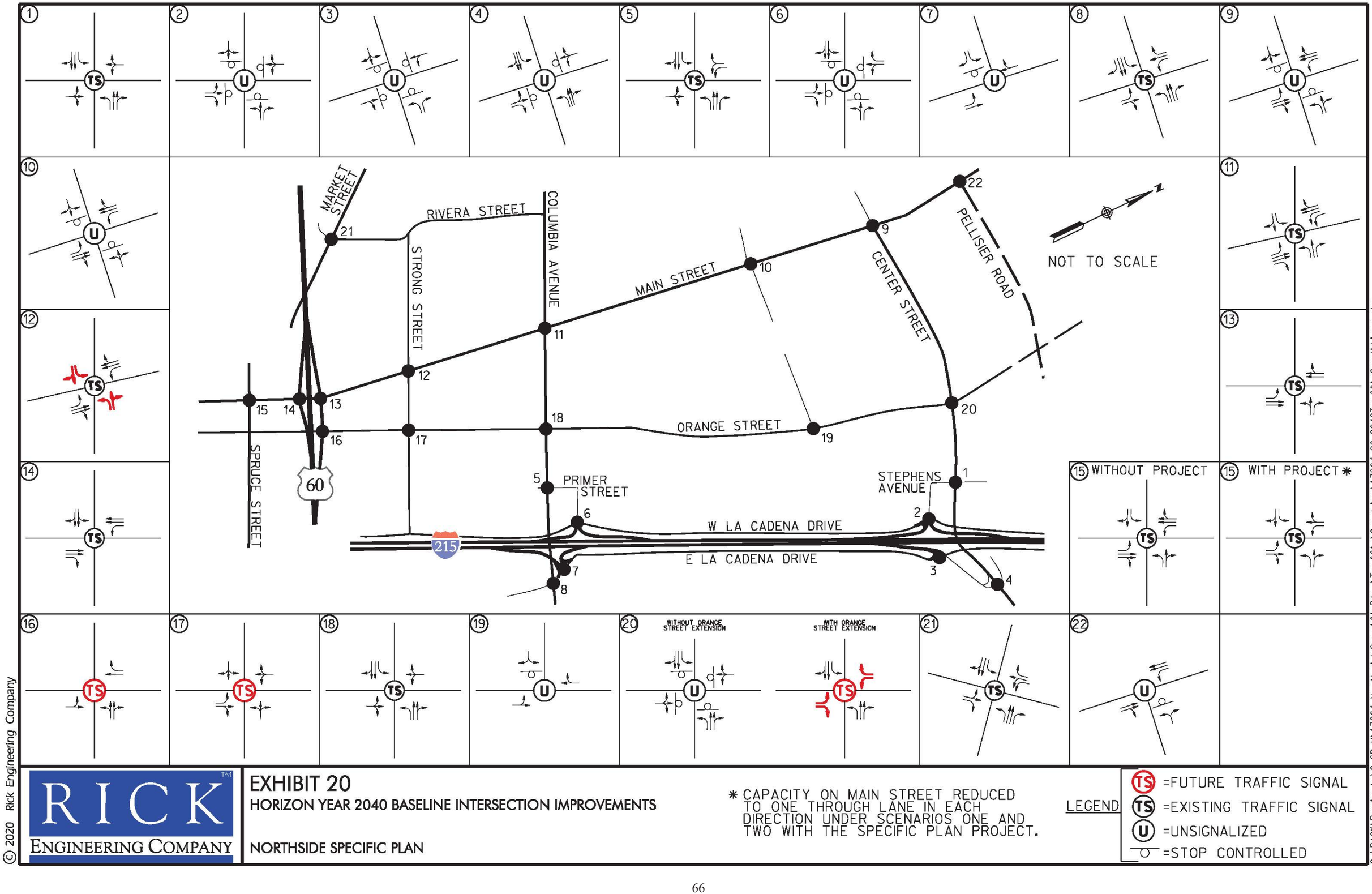
As shown in the table, the following intersections are forecast to operate at a deficient LOS (LOS E or F) under Horizon Year 2040 Baseline (Without Project) conditions:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM: LOS E; PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Oakley Avenue / SR-60 WB On-Ramp (AM/PM: LOS E)

The results of the roadway segment operations analysis for the Horizon Year 2040 Baseline (Without Project) scenario are provided in **Table 17**.

As shown in the table, the following roadway segments are forecast to operate at a deficient LOS (LOS E) under Horizon Year 2040 Baseline (Without Project) conditions:

- Columbia Avenue, from Orange Street to Primer Street
- Columbia Avenue, from Primer Street to E. La Cadena Drive



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EXHIBIT 20

HORIZON YEAR 2040 BASELINE INTERSECTION IMPROVEMENTS

NORTHSIDE SPECIFIC PLAN

* CAPACITY ON MAIN STREET REDUCED TO ONE THROUGH LANE IN EACH DIRECTION UNDER SCENARIOS ONE AND TWO WITH THE SPECIFIC PLAN PROJECT.

LEGEND
- (TS) =FUTURE TRAFFIC SIGNAL
- (TS) =EXISTING TRAFFIC SIGNAL
- (U) =UNSIGNALIZED
- =STOP CONTROLLED

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TABLE 16
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 BASELINE (WITHOUT PROJECT)
INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT	
			DELAY	LOS
1 Center Street / Stephens Avenue (S)	**County of Riverside**			
		AM peak	13.1	B
		PM Peak	15.1	B
2 W La Cadena Drive / I-215 SB Ramps / Stephens Avenue (U)	**County of Riverside**			
		AM peak	**79.1**	**F**
		PM Peak	**151.4**	**F**
3 E La Cadena Drive / I-215 NB Ramps / Highgrove Place (U)	**County of Riverside**			
		AM peak	9.9	A
		PM Peak	11.5	B
4 West Center Street / Highgrove Place (U)	**County of Riverside**			
		AM peak	20.5	C
		PM Peak	20.9	C
5 Columbia Avenue / Primer Street (S)	**City of Riverside**			
		AM peak	12.8	B
		PM Peak	13.7	B
6 W La Cadena Drive / I-215 SB Ramps / Interchange Drive (U)	**City of Riverside**			
		AM peak	**44.0**	**E**
		PM Peak	**106.5**	**F**
7 E La Cadena Drive / I-215 NB Ramps (U)	**City of Riverside**			
		AM peak	**>200**	**F**
		PM Peak	**>200**	**F**
8 Columbia Avenue / E La Cadena Drive (S)	**City of Riverside**			
		AM peak	38.3	D
		PM Peak	35.0	D
9 Main Street / Placentia Lane (U)	**City of Riverside / City of Colton**			
		AM peak	**153.7**	**F**
		PM Peak	**>200**	**F**

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TABLE 16
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 BASELINE (WITHOUT PROJECT)
INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT	
			DELAY	LOS
10 Main Street / Garner Road (U)	**City of Riverside**			
		AM peak	**>200**	**F**
		PM Peak	**>200**	**F**
11 Main Street / Columbia Avenue (S)	**City of Riverside**			
		AM peak	36.2	D
		PM Peak	33.1	C
12 Main Street / Strong Street (S)	**City of Riverside**			
		AM peak	12.3	B
		PM Peak	16.7	B
13 Main Street / Oakley Avenue / SR60 WB ON Ramp (S)	**City of Riverside**			
		AM peak	**64.3**	**E**
		PM Peak	**79.3**	**E**
14 Main Street / SR60 EB Ramps (S)	**City of Riverside**			
		AM peak	23.1	C
		PM Peak	30.3	C
15 Main Street / Spruce Street (S)	**City of Riverside**			
		AM peak	11.9	B
		PM Peak	15.9	B
16 Orange Street / Oakley Avenue / SR60 WB Off Ramp (U)	**City of Riverside**			
		AM peak	14.1	B
		PM Peak	18.2	B
17 Orange Street / Strong Street (U)	**City of Riverside**			
		AM peak	7.4	A
		PM Peak	10.0	B
18 Orange Street / Columbia Avenue (S)	**City of Riverside**			
		AM peak	16.7	B
		PM Peak	20.5	C

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TABLE 16
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 BASELINE (WITHOUT PROJECT)
INTERSECTION OPERATIONS

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT	
			DELAY	LOS
19 Orange Street / Garner Road (U)	**City of Riverside**			
		AM peak	8.8	A
		PM Peak	10.0	B
20 Orange Street / Center Street (U)	**City of Riverside**			
		AM peak	9.3	A
		PM Peak	11.6	B
21 Market Street / Rivera Street (S)	**City of Riverside**			
		AM peak	13.8	B
		PM Peak	18.6	B
22 S. Riverside Avenue / Pellisier Road (U)	**City of Colton**			
		AM peak	**42.8**	**E**
		PM Peak	**49.2**	**E**

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).
DELAY is measured in seconds
LOS = Level of Service
NB = Northbound, SB = Southbound, etc.
T=thru movement, R=right-turn movement, etc.
(S) = Signalized intersection
(U) = Unsignalized intersection

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TABLE 17
HORIZON YEAR 2040 BASELINE (WITHOUT PROJECT) ROADWAY SEGMENT OPERATIONS

	STREET SEGMENT	JURISDICTION	CLASSIFICATION / NO. LANES (2025 GENERAL PLAN)	HORIZON YEAR 2040 WITHOUT PROJECT				
				Capacity[1]	ADT	% Heavy Vehicles	V/C	LOS
1	S. Riverside Avenue, Pellisier Road to Center Street	City of Colton	MAJOR / 4	34,100	26,945	21.5%	0.79	C
2	Main Street, Center Street to Garner Road	City of Riverside	100' ARTERIAL / 4	33,000	25,013	18.7%	0.76	B
3	Main Street, Garner Road to Columbia Avenue	City of Riverside	100' ARTERIAL / 4	33,000	26,945	20.6%	0.82	C
4	Main Street, Columbia Avenue to Strong Street	City of Riverside	100' ARTERIAL / 4	33,000	25,239	14.5%	0.76	B
5	Main Street, Strong Street to Oakley Avenue	City of Riverside	100' ARTERIAL / 4	33,000	25,225	16.7%	0.76	B
6	Main Street, SR60 EB to Spruce Street	City of Riverside	100' ARTERIAL / 4	33,000	16,290	11.7%	0.49	A
7	Main Street, Spruce Street to Poplar Street	City of Riverside	100' ARTERIAL / 4	33,000	12,646	2.6%	0.38	A
8	Orange Street, Center Street to Garner Road	City of Riverside	66' COLLECTOR / 2	12,500	2,868	12.6%	0.23	A
9	Orange Street, Garner Road to Columbia Avenue	City of Riverside	66' COLLECTOR / 2	12,500	4,984	6.2%	0.40	A
10	Orange Street, Columbia Avenue to Strong Street	City of Riverside	66' COLLECTOR / 2	12,500	5,162	8.8%	0.41	A
11	Orange Street, Strong Street to Oakley Avenue	City of Riverside	66' COLLECTOR / 2	12,500	6,083	6.2%	0.49	A
12	West La Cadena Drive, Chase Road to I-215 SB Ramps	City of Riverside	66' COLLECTOR / 2	12,500	6,969	11.6%	0.56	A
13	Center Street, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	5,047	18.8%	0.23	A
14	Center Street, Orange Street to Stephens Avenue	City/County of Riverside	88' ARTERIAL / 4	22,000	8,040	21.7%	0.37	A
15	Center Street, Stephens Avenue to Highgrove Place	County of Riverside	88' ARTERIAL / 4	22,000	10,826	17.7%	0.49	A
16	Garner Road, Main Street to Orange Street	City of Riverside	LOCAL (UNCLASS.)	3,100	346	6.0%	0.11	A
17	Columbia Avenue, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	18,807	20.7%	0.85	C
18	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	22,000	22,769	17.2%	**1.03**	**E**
19	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	22,000	30,249	17.3%	**1.37**	**E**
20	Strong Street, Main Street to Orange Street	City of Riverside	66' COLLECTOR / 2	12,500	4,239	9.7%	0.34	A
21	Strong Street, Orange Street to W La Cadena Drive	City of Riverside	66' COLLECTOR / 2	12,500	2,486	5.9%	0.20	A
22	Market Street, Rivera Street to SR60 WB Ramps	City of Riverside	100' ARTERIAL / 4	33,000	30,843	7.5%	0.93	D
23	Pellisier Road, S. Riverside Avenue to Roquet Ranch	City of Colton	SECONDARY / 2	13,000	1,600	5.0%	0.12	A

Footnote:
LOS A and LOS B capacity thresholds were derived; City of Riverside deems anything better than LOS C as acceptable.
V/C and LOS shown in **bold** indicate deficient LOS based on ADT and roadway capacity.

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE CONDITIONS

The Specific Plan Scenario One land uses were input into the 2040 RivTAM model to derive the Horizon Year 2040 traffic volumes for Specific Plan Scenario One. The RivTAM model was run both without and with the future extension of Orange Street north of Center Street into Pellissier Ranch in the City of Colton. Trips from the Roquet Ranch development and additional growth from regional cumulative projects were also added to the Horizon Year 2040 Specific Plan Scenario One traffic volumes that were generated by the RivTAM model.

The methodology used to derive the heavy vehicle percentages for the Existing Plus Project Scenario One traffic volumes was also applied to the Horizon Year 2040 With Specific Plan Scenario One traffic volumes.

Exhibit 21 shows the daily and peak hour volumes for heavy vehicles with 3 or more axles for Horizon Year 2040 Specific Plan Scenario One.

The Horizon Year 2040 Specific Plan Scenario One traffic volumes without the Orange Street Extension are shown in **Exhibit 22**. **Exhibit 23** illustrates the The Horizon Year 2040 Specific Plan Scenario One traffic volumes with the Orange Street Extension.

Horizon Year 2040 Specific Plan Scenario One Roadway Improvements

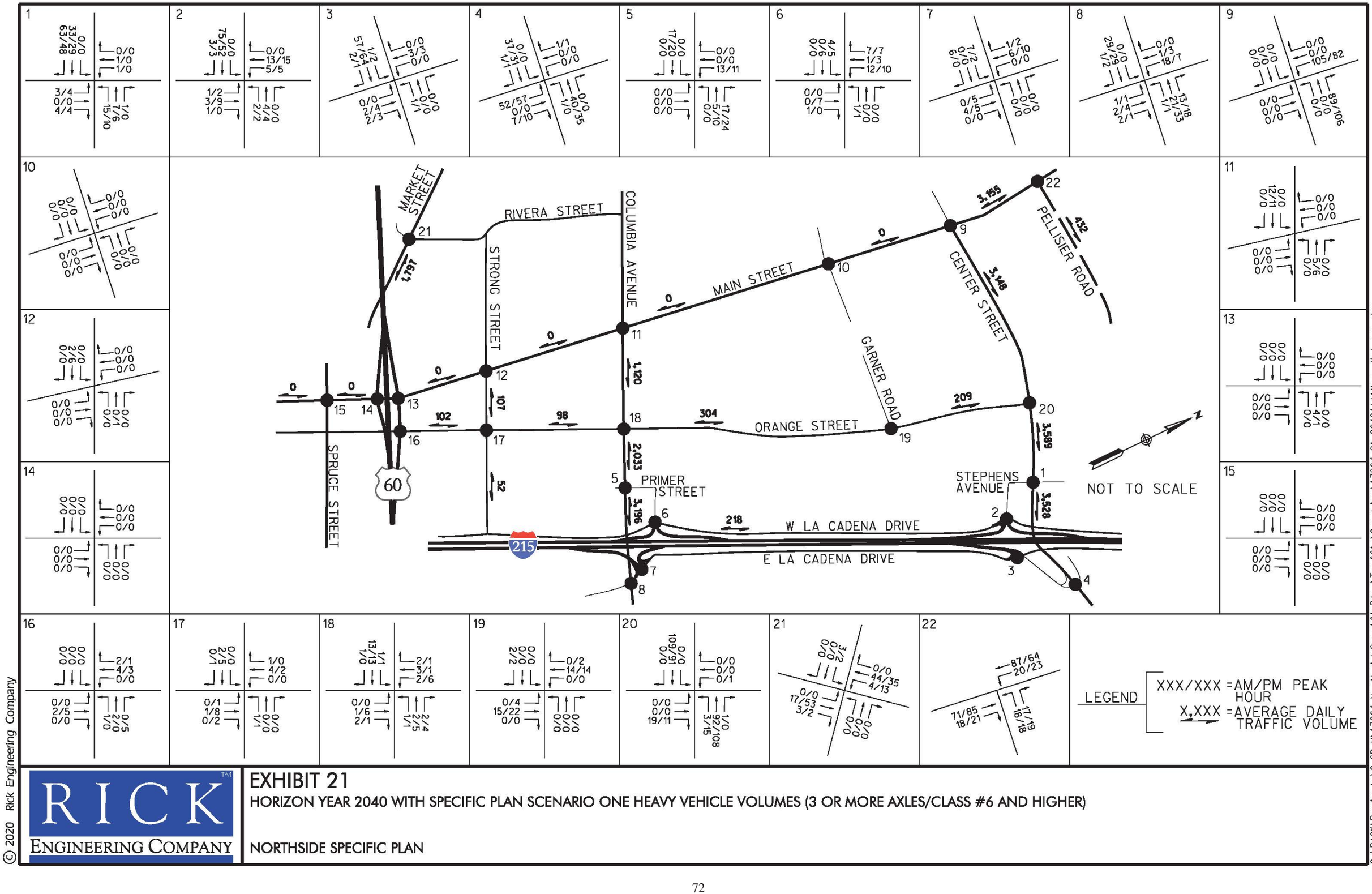
The Horizon Year 2040 roadway improvements for Specific Plan Scenario One without the Orange Street Extension are the same as the roadway improvements under the Horizon Year 2040 Baseline (Without Project) scenario, with the following exception:

- Main Street south of SR-60 is reduced to one through lane in each direction under all scenarios with the Specific Plan.

The Horizon Year 2040 roadway improvements for Specific Plan Scenario One with the Orange Street Extension are the same as without the extension, except for the following improvements at the Orange Street / Center Street intersection:

- Installation of a traffic signal; and
- Northbound and southbound through traffic prohibited (Orange Street movements restricted only to left turns or right turns)

The above-listed improvements are also listed in Table 15 and are illustrated in Exhibit 18 earlier in the report.



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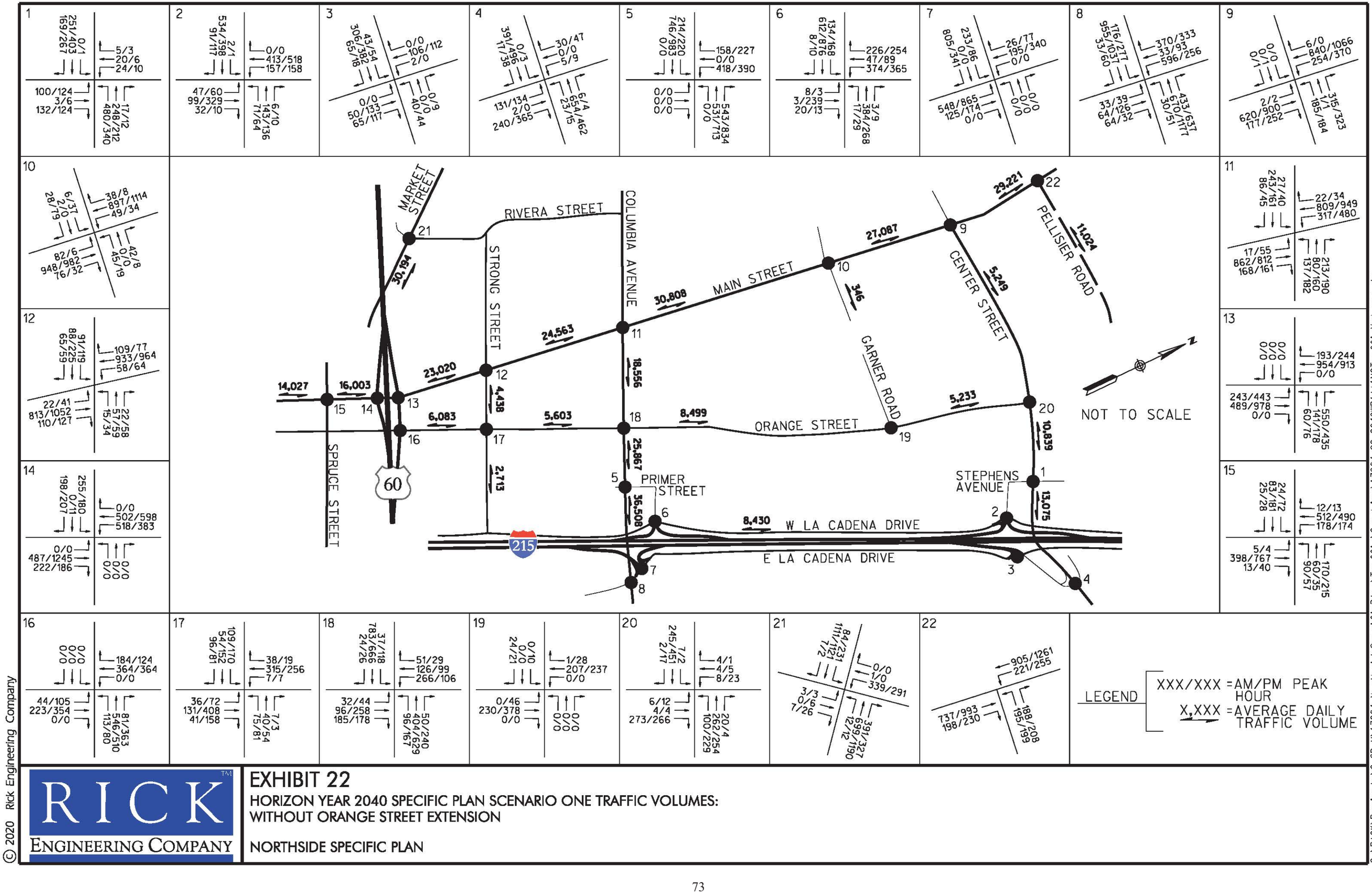
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EXHIBIT 21

HORIZON YEAR 2040 WITH SPECIFIC PLAN SCENARIO ONE HEAVY VEHICLE VOLUMES (3 OR MORE AXLES/CLASS #6 AND HIGHER)

NORTHSIDE SPECIFIC PLAN

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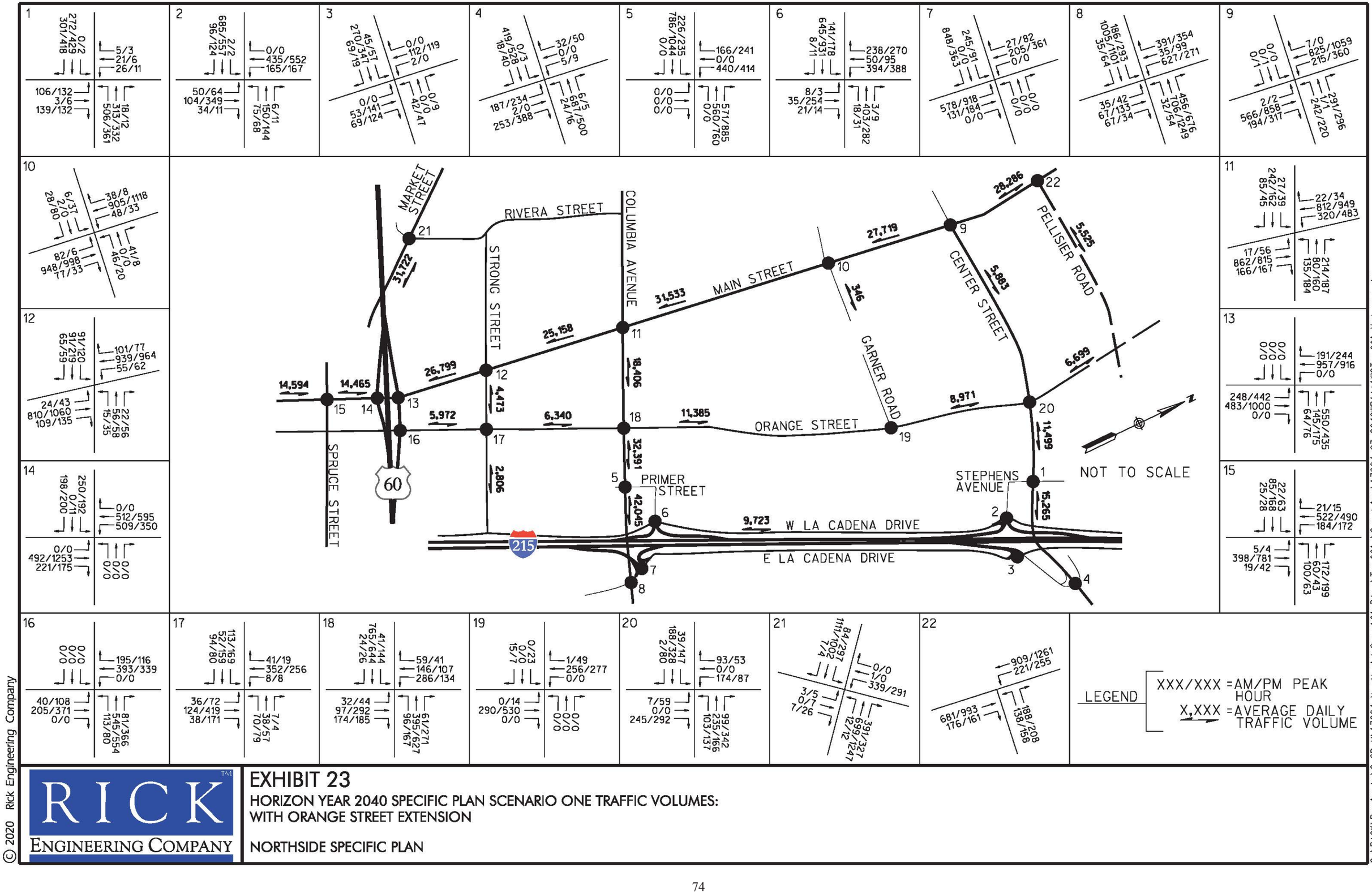
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EXHIBIT 22

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE TRAFFIC VOLUMES:
WITHOUT ORANGE STREET EXTENSION

NORTHSIDE SPECIFIC PLAN

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EXHIBIT 23

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE TRAFFIC VOLUMES:
WITH ORANGE STREET EXTENSION

NORTHSIDE SPECIFIC PLAN

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Horizon Year 2040 Specific Plan Scenario One Operations Analysis: Without Orange Street Extension

The results of the intersection operations analysis for Horizon Year 2040 Specific Plan Scenario One without the Orange Street Extension are provided in **Table 18**. The intersection operations worksheets are provided in **Appendix B**.

As shown in the table, the following intersections are forecast to operate at a deficient LOS (LOS E or F) under Horizon Year 2040 Specific Plan Scenario One conditions without the Orange Street Extension:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- Center Street / Highgrove Place (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM/PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Columbia Avenue / E. La Cadena Drive (AM/PM: LOS E)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Oakley Avenue / SR-60 WB On-Ramp (AM/PM: LOS E)
- S. Riverside Avenue / Pellisier Road (AM/PM: LOS F)

Table 18 also shows that project-related significant impacts were identified at the following intersections under Horizon Year 2040 Specific Plan Scenario One conditions without the Orange Street Extension:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- Center Street / Highgrove Place (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM/PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Columbia Avenue / E. La Cadena Drive (AM/PM: LOS E)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Oakley Avenue / SR-60 WB On-Ramp (AM: LOS E)
- Main Street / Spruce Street (PM: LOS C)
- Orange Street / Columbia Avenue (AM: LOS C)
- S. Riverside Avenue / Pellisier Road (AM/PM: LOS F)

The results of the roadway segment operations analysis for Horizon Year 2040 Specific Plan Scenario One without the Orange Street Extension are provided in **Table 19**.

As shown in the table, the following roadway segments are forecast to operate at a deficient LOS (LOS E) and would also be significantly impacted by the proposed project under Horizon Year 2040 Specific Plan Scenario One conditions without the Orange Street Extension:

- Columbia Avenue, from Orange Street to Primer Street
- Columbia Avenue, from Primer Street to E. La Cadena Drive

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TABLE 18
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE INTERSECTION OPERATIONS
WITHOUT ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO ONE		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
1 Center Street / Stephens Avenue (S)	**County of Riverside**							
		AM peak	13.1	B	17.8	B	4.7	NO
		PM Peak	15.1	B	19.2	B	4.1	NO
2 W La Cadena Drive / I-215 SB Ramps / Stephens Avenue (U)	**County of Riverside**							
		AM peak	**79.1**	**F**	**184.7**	**F**	105.6	**YES**
		PM Peak	**151.4**	**F**	**>200**	**F**	N/A	**YES**
3 E La Cadena Drive / I-215 NB Ramps / Highgrove Place (U)	**County of Riverside**							
		AM peak	9.9	A	12.3	B	2.4	NO
		PM Peak	11.5	B	16.0	C	4.5	NO
4 West Center Street / Highgrove Place (U)	**County of Riverside**							
		AM peak	20.5	C	**67.9**	**F**	47.4	**YES**
		PM Peak	20.9	C	**73.4**	**F**	52.5	**YES**
5 Columbia Avenue / Primer Street (S)	**City of Riverside**							
		AM peak	12.8	B	14.4	B	1.6	NO
		PM Peak	13.7	B	16.0	B	2.3	NO
6 W La Cadena Drive / I-215 SB Ramps / Interchange Drive (U)	**City of Riverside**							
		AM peak	**44.0**	**E**	**71.2**	**F**	27.2	**YES**
		PM Peak	**106.5**	**F**	**>200**	**F**	N/A	**YES**
7 E La Cadena Drive / I-215 NB Ramps (U)	**City of Riverside**							
		AM peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
8 Columbia Avenue / E La Cadena Drive (S)	**City of Riverside**							
		AM peak	38.3	D	53.7	D	15.4	**YES**
		PM Peak	35.0	D	47.0	D	12.0	**YES**

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TABLE 18
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE INTERSECTION OPERATIONS
WITHOUT ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO ONE		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
9 Main Street / Placentia Lane (U)	**City of Riverside / City of Colton**							
		AM peak	**153.7**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**111.4**	**F**	N/A	**YES**
10 Main Street / Garner Road (U)	**City of Riverside**							
		AM peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
11 Main Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	36.2	D	31.1	C	-5.1	NO
		PM Peak	33.1	C	30.7	C	-2.4	NO
12 Main Street / Strong Street (S)	**City of Riverside**							
		AM peak	12.3	B	12.2	B	-0.1	NO
		PM Peak	16.7	B	17.2	B	0.5	NO
13 Main Street / Oakley Avenue / SR60 WB On Ramp (S)	**City of Riverside**							
		AM peak	**64.3**	**E**	**73.1**	**E**	8.8	**YES**
		PM Peak	**79.3**	**E**	**68.5**	**E**	-10.8	NO
14 Main Street / SR60 EB Ramps (S)	**City of Riverside**							
		AM peak	23.1	C	20.4	C	-2.7	NO
		PM Peak	30.3	C	30.8	C	0.5	NO
15 Main Street / Spruce Street (S)	**City of Riverside**							
		AM peak	11.9	B	13.9	B	2.0	NO
		PM Peak	15.9	B	24.4	C	8.5	**YES**
16 Orange Street / Oakley Avenue / SR60 WB Off Ramp (S)	**City of Riverside**							
		AM peak	14.1	B	14.6	A	0.5	NO
		PM Peak	18.2	B	18.7	B	0.5	NO

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TABLE 18
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE INTERSECTION OPERATIONS
WITHOUT ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO ONE		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
17 Orange Street / Strong Street (S)	**City of Riverside**							
		AM peak	7.4	A	7.5	A	0.1	NO
		PM Peak	10.0	B	12.2	B	2.2	NO
18 Orange Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	16.7	B	28.5	C	11.8	**YES**
		PM Peak	20.5	C	23.4	C	2.9	NO
19 Orange Street / Garner Road (U)	**City of Riverside**							
		AM peak	8.8	A	9.6	A	0.8	NO
		PM Peak	10.0	B	12.3	B	2.3	NO
20 Orange Street / Center Street (U)	**City of Riverside**							
		AM peak	9.3	A	12.5	B	3.2	NO
		PM Peak	11.6	B	17.3	C	5.7	NO
21 Market Street / Rivera Street (S)	**City of Riverside**							
		AM peak	13.8	B	14.1	B	0.3	NO
		PM Peak	18.6	B	22.4	C	3.8	NO
22 S. Riverside Avenue / Pellisier Road (U)	**City of Colton**							
		AM peak	**42.8**	**E**	**>200**	**F**	N/A	**YES**
		PM Peak	**49.2**	**E**	**>200**	**F**	N/A	**YES**

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).

DELAY is measured in seconds

LOS = Level of Service

NB = Northbound, SB = Southbound, etc.

T=thru movement, R=right-turn movement, etc.

(S) = Signalized intersection

(U) = Unsignalized intersection

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TABLE 19
HORIZON YEAR 2040 WITH SPECIFIC PLAN SCENARIO ONE ROADWAY SEGMENT OPERATIONS
WITHOUT ORANGE STREET EXTENSION

	STREET SEGMENT	JURISDICTION	HORIZON YEAR 2040 WITHOUT PROJECT						HORIZON YEAR 2040 SP SCENARIO ONE: WITHOUT ORANGE							
			CLASSIFICATION / NO. LANES (2025 GENERAL PLAN)	Capacity[1]	ADT	% Heavy Vehicles	V/C	LOS	CLASSIFICATION / NO. LANES (PROPOSED)	Capacity[1]	Diverted Truck Trips	ADT	% Heavy Vehicles	V/C	LOS	Signi-ficant?
1	S. Riverside Avenue, Pellisier Road to Center Street	City of Colton	MAJOR / 4	34,100	26,945	21.5%	0.79	C	MAJOR / 4	34,100	0	29,221	21.2%	0.86	D	
2	Main Street, Center Street to Garner Road	City of Riverside	100' ARTERIAL / 4	33,000	25,013	18.7%	0.76	B	100' ARTERIAL / 4	33,000	-2,301	27,087	8.8%	0.82	C	
3	Main Street, Garner Road to Columbia Avenue	City of Riverside	100' ARTERIAL / 4	33,000	26,945	20.6%	0.82	C	100' ARTERIAL / 4	33,000	-2,440	30,808	10.1%	0.93	D	
4	Main Street, Columbia Avenue to Strong Street	City of Riverside	100' ARTERIAL / 4	33,000	25,239	14.5%	0.76	B	100' ARTERIAL / 4	33,000	-879	24,563	11.3%	0.74	B	
5	Main Street, Strong Street to Oakley Avenue	City of Riverside	100' ARTERIAL / 4	33,000	25,225	16.7%	0.76	B	100' ARTERIAL / 4	33,000	-1,101	26,100	11.9%	0.79	B	
6	Main Street, SR60 EB to Spruce Street	City of Riverside	100' ARTERIAL / 4	33,000	16,290	11.7%	0.49	A	***100' ARTERIAL / 2***	***18,000***	-308	16,311	9.8%	0.91	D	
7	Main Street, Spruce Street to Poplar Street	City of Riverside	100' ARTERIAL / 4	33,000	12,646	2.6%	0.38	A	***100' ARTERIAL / 2***	***18,000***	-84	15,366	1.6%	0.85	C	
8	Orange Street, Center Street to Garner Road	City of Riverside	66' COLLECTOR / 2	12,500	2,868	12.6%	0.23	A	66' COLLECTOR / 2	12,500	0	5,233	6.9%	0.42	A	
9	Orange Street, Garner Road to Columbia Avenue	City of Riverside	66' COLLECTOR / 2	12,500	4,984	6.2%	0.40	A	66' COLLECTOR / 2	12,500	0	8,499	3.6%	0.68	A	
10	Orange Street, Columbia Avenue to Strong Street	City of Riverside	66' COLLECTOR / 2	12,500	5,162	8.8%	0.41	A	66' COLLECTOR / 2	12,500	0	5,603	8.1%	0.45	A	
11	Orange Street, Strong Street to Oakley Avenue	City of Riverside	66' COLLECTOR / 2	12,500	6,083	6.2%	0.49	A	66' COLLECTOR / 2	12,500	0	6,083	6.2%	0.49	A	
12	West La Cadena Drive, Chase Road to I-215 SB Ramps	City of Riverside	66' COLLECTOR / 2	12,500	6,969	11.6%	0.56	A	66' COLLECTOR / 2	12,500	0	8,430	9.6%	0.67	A	
13	Center Street, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	5,047	18.8%	0.23	A	88' ARTERIAL / 4	22,000	2,302	5,249	63.4%	0.24	A	
14	Center Street, Orange Street to Stephens Avenue	City/County of Riverside	88' ARTERIAL / 4	22,000	8,040	21.7%	0.37	A	88' ARTERIAL / 4	22,000	2,302	10,839	39.8%	0.49	A	
15	Center Street, Stephens Avenue to Highgrove Place	County of Riverside	88' ARTERIAL / 4	22,000	10,826	17.7%	0.49	A	88' ARTERIAL / 4	22,000	2,302	13,075	34.2%	0.59	A	
16	Garner Road, Main Street to Orange Street	City of Riverside	LOCAL / 2	3,100	346	6.0%	0.11	A	LOCAL / 2	3,100	0	346	6.0%	0.11	A	
17	Columbia Avenue, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	18,807	20.7%	0.85	C	***110' ARTERIAL / 4***	***33,000***	-1,383	18,556	13.5%	0.56	A	
18	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	22,000	22,769	17.2%	**1.03**	**E**	88' ARTERIAL / 4	22,000	-1,151	25,867	10.7%	**1.18**	**E**	**YES**
19	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	22,000	30,249	17.3%	**1.37**	**E**	88' ARTERIAL / 4	22,000	-576	36,508	12.7%	**1.66**	**E**	**YES**
20	Strong Street, Main Street to Orange Street	City of Riverside	66' COLLECTOR / 2	12,500	4,239	9.7%	0.34	A	66' COLLECTOR / 2	12,500	0	4,438	9.3%	0.36	A	
21	Strong Street, Orange Street to W La Cadena Drive	City of Riverside	66' COLLECTOR / 2	12,500	2,486	5.9%	0.20	A	66' COLLECTOR / 2	12,500	0	2,713	5.4%	0.22	A	
22	Market Street, Rivera Street to SR60 WB Ramps	City of Riverside	100' ARTERIAL / 4	33,000	30,843	7.5%	0.93	D	100' ARTERIAL / 4	33,000	0	30,194	7.6%	0.91	D	
23	Pellisier Road, S. Riverside Avenue to Roquet Ranch	City of Colton	SECONDARY / 2	13,000	1,600	5.0%	0.12	A	SECONDARY / 2	13,000	0	11,024	9.0%	0.85	D	

Footnote:

Roadway classifications and capacity threesholds shown in bold italics indicate proposed change from General Plan classification.

V/C and LOS shown in bold indicate deficient LOS based on ADT and roadway capacity.

1) The City's Roadway Segment Capacity Thresholds does not provide LOS thresholds for LOS A or LOS B. The LOS A and B thresholds based on ADT as shown in Table 2 were interpolated based on the volume-to-capacity ratios of the LOS C and D thresholds.

Horizon Year 2040 Specific Plan Scenario One Operations Analysis: With Orange Street Extension

The results of the intersection operations analysis for Horizon Year 2040 Specific Plan Scenario One with the Orange Street Extension are provided in **Table 20**. The intersection operations worksheets are provided in **Appendix B**.

As shown in the table, the following intersections are forecast to operate at a deficient LOS (LOS E or F) under Horizon Year 2040 Specific Plan Scenario One conditions with the Orange Street Extension:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- W. Center Street / Highgrove Place (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM/PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Columbia Avenue / E. La Cadena Drive (AM/PM: LOS E)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Oakley Avenue / SR-60 WB On-Ramp (AM/PM: LOS E)
- S. Riverside Avenue / Pellisier Road (AM/PM: LOS F)

Table 20 also shows that project-related significant impacts were identified at the following intersections under Horizon Year 2040 Specific Plan Scenario One conditions with the Orange Street Extension:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- W. Center Street / Highgrove Place (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM/PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Columbia Avenue / E. La Cadena Drive (AM/PM: LOS E)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Oakley Avenue / SR-60 WB On-Ramp (AM: LOS E)
- Main Street / Spruce Street (PM: LOS C)
- Orange Street / Columbia Avenue (AM/PM: LOS C)
- S. Riverside Avenue / Pellisier Road (AM/PM: LOS F)

The results of the roadway segment operations analysis for Horizon Year 2040 Specific Plan Scenario One with the Orange Street Extension are provided in **Table 21**.

As shown in the table, the following roadway segments are forecast to operate at a deficient LOS (LOS E) and would also be significantly impacted by the proposed project under Horizon Year 2040 Specific Plan Scenario One conditions with the Orange Street Extension:

- Columbia Avenue, from Orange Street to Primer Street
- Columbia Avenue, from Primer Street to E. La Cadena Drive

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TABLE 20
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE INTERSECTION OPERATIONS
WITH ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO ONE		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
1 Center Street / Stephens Avenue (S)	**County of Riverside**							
		AM peak	13.1	B	25.0	C	11.9	NO
		PM Peak	15.1	B	26.1	C	11.0	NO
2 W La Cadena Drive / I-215 SB Ramps / Stephens Avenue (U)	**County of Riverside**							
		AM peak	**79.1**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**151.4**	**F**	**>200**	**F**	N/A	**YES**
3 E La Cadena Drive / I-215 NB Ramps / Highgrove Place (U)	**County of Riverside**							
		AM peak	9.9	A	15.0	B	5.1	NO
		PM Peak	11.5	B	29.8	D	18.3	NO
4 West Center Street / Highgrove Place (U)	**County of Riverside**							
		AM peak	20.5	C	**187.3**	**F**	166.8	**YES**
		PM Peak	20.9	C	**>200**	**F**	N/A	**YES**
5 Columbia Avenue / Primer Street (S)	**City of Riverside**							
		AM peak	12.8	B	15.4	B	2.6	NO
		PM Peak	13.7	B	18.2	B	4.5	NO
6 W La Cadena Drive / I-215 SB Ramps / Interchange Drive (U)	**City of Riverside**							
		AM peak	**44.0**	**E**	**92.5**	**F**	48.5	**YES**
		PM Peak	**106.5**	**F**	**199.2**	**F**	92.7	**YES**
7 E La Cadena Drive / I-215 NB Ramps (U)	**City of Riverside**							
		AM peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
8 Columbia Avenue / E La Cadena Drive (S)	**City of Riverside**							
		AM peak	38.3	D	**63.6**	**E**	25.3	**YES**
		PM Peak	35.0	D	**57.6**	**E**	22.6	**YES**

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TABLE 20
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE INTERSECTION OPERATIONS
WITH ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO ONE		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
9 Main Street / Placentia Lane (U)	**City of Riverside / City of Colton**							
		AM peak	**153.7**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**112.7**	**F**	N/A	**YES**
10 Main Street / Garner Road (U)	**City of Riverside**							
		AM peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
11 Main Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	36.2	D	31.1	C	-5.1	NO
		PM Peak	33.1	C	31.1	C	-2.0	NO
12 Main Street / Strong Street (S)	**City of Riverside**							
		AM peak	12.3	B	12.2	B	-0.1	NO
		PM Peak	16.7	B	17.2	C	0.5	NO
13 Main Street / Oakley Avenue / SR60 WB ON Ramp (S)	**City of Riverside**							
		AM peak	**64.3**	**E**	**77.1**	**E**	12.8	**YES**
		PM Peak	**79.3**	**E**	**67.3**	**E**	-12.0	NO
14 Main Street / SR60 EB Ramps (S)	**City of Riverside**							
		AM peak	23.1	C	19.8	B	-3.3	NO
		PM Peak	30.3	C	27.7	C	-2.6	NO
15 Main Street / Spruce Street (S)	**City of Riverside**							
		AM peak	11.9	B	14.3	B	2.4	NO
		PM Peak	15.9	B	24.7	C	8.8	**YES**
16 Orange Street / Oakley Avenue / SR60 WB Off Ramp (S)	**City of Riverside**							
		AM peak	14.1	B	14.7	B	0.6	NO
		PM Peak	18.2	B	18.9	B	0.7	NO

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TABLE 20
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE INTERSECTION OPERATIONS
WITH ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO ONE		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
17 Orange Street / Strong Street (S)	**City of Riverside**							
		AM peak	7.4	A	7.7	A	0.3	NO
		PM Peak	10.0	B	12.9	B	2.9	NO
18 Orange Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	16.7	B	32.2	C	15.5	**YES**
		PM Peak	20.5	C	32.8	C	12.3	**YES**
19 Orange Street / Garner Road (U)	**City of Riverside**							
		AM peak	8.8	A	9.9	A	1.1	NO
		PM Peak	10.0	B	17.4	C	7.4	NO
20 Orange Street / Center Street (S)	**City of Riverside**							
		AM peak	9.3	A	8.0	A	-1.3	NO
		PM Peak	11.6	B	10.2	B	-1.4	NO
21 Market Street / Rivera Street (S)	**City of Riverside**							
		AM peak	13.8	B	14.1	B	0.3	NO
		PM Peak	18.6	B	26.3	C	7.7	NO
22 S. Riverside Avenue / Pellisier Road (U)	**City of Colton**							
		AM peak	**42.8**	**E**	**>200**	**F**	N/A	**YES**
		PM Peak	**49.2**	**E**	**>200**	**F**	N/A	**YES**

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).
DELAY is measured in seconds
LOS = Level of Service
NB = Northbound, SB = Southbound, etc.
T=thru movement, R=right-turn movement, etc.
(S) = Signalized intersection
(U) = Unsignalized intersection

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TABLE 21
HORIZON YEAR 2040 WITH SPECIFIC PLAN SCENARIO ONE ROADWAY SEGMENT OPERATIONS WITH ORANGE STREET EXTENSION

	STREET SEGMENT	JURISDICTION	HORIZON YEAR 2040 WITHOUT PROJECT						HORIZON YEAR 2040 SP SCENARIO ONE: WITH ORANGE							
			CLASSIFICATION / NO. LANES (2025 GENERAL PLAN)	Capacity[1]	ADT	% Heavy Vehicles	V/C	LOS	CLASSIFICATION / NO. LANES (PROPOSED)	Capacity[1]	Diverted Truck Trips	ADT	% Heavy Vehicles	V/C	LOS	Signi-ficant?
1	S. Riverside Avenue, Pellisier Road to Center Street	City of Colton	MAJOR / 4	34,100	26,945	21.5%	0.79	C	100' ARTERIAL / 4	34,100	0	28,286	21.9%	0.83	D	
2	Main Street, Center Street to Garner Road	City of Riverside	100' ARTERIAL / 4	33,000	25,013	18.7%	0.76	B	100' ARTERIAL / 4	33,000	-2,137	27,719	9.2%	0.84	C	
3	Main Street, Garner Road to Columbia Avenue	City of Riverside	100' ARTERIAL / 4	33,000	26,945	20.6%	0.82	C	100' ARTERIAL / 4	33,000	-2,302	31,533	10.3%	0.96	D	
4	Main Street, Columbia Avenue to Strong Street	City of Riverside	100' ARTERIAL / 4	33,000	25,239	14.5%	0.76	B	100' ARTERIAL / 4	33,000	-808	25,158	11.3%	0.76	B	
5	Main Street, Strong Street to Oakley Avenue	City of Riverside	100' ARTERIAL / 4	33,000	25,225	16.7%	0.76	B	100' ARTERIAL / 4	33,000	-1,011	26,799	12.0%	0.81	C	
6	Main Street, SR60 EB to Spruce Street	City of Riverside	100' ARTERIAL / 4	33,000	16,290	11.7%	0.49	A	***100' ARTERIAL / 2***	***18,000***	-308	14,465	11.0%	0.80	C	
7	Main Street, Spruce Street to Poplar Street	City of Riverside	100' ARTERIAL / 4	33,000	12,646	2.6%	0.38	A	***100' ARTERIAL / 2***	***18,000***	-76	14,594	1.8%	0.81	C	
8	Orange Street, Center Street to Garner Road	City of Riverside	66' COLLECTOR / 2	12,500	2,868	12.6%	0.23	A	66' COLLECTOR / 2	12,500	0	8,971	4.0%	0.72	B	
9	Orange Street, Garner Road to Columbia Avenue	City of Riverside	66' COLLECTOR / 2	12,500	4,984	6.2%	0.40	A	66' COLLECTOR / 2	12,500	0	11,385	2.7%	0.91	D	
10	Orange Street, Columbia Avenue to Strong Street	City of Riverside	66' COLLECTOR / 2	12,500	5,162	8.8%	0.41	A	66' COLLECTOR / 2	12,500	0	6,340	7.2%	0.51	A	
11	Orange Street, Strong Street to Oakley Avenue	City of Riverside	66' COLLECTOR / 2	12,500	6,083	6.2%	0.49	A	66' COLLECTOR / 2	12,500	0	5,972	6.3%	0.48	A	
12	West La Cadena Drive, Chase Road to I-215 SB Ramps	City of Riverside	66' COLLECTOR / 2	12,500	6,969	11.6%	0.56	A	66' COLLECTOR / 2	12,500	0	9,723	8.3%	0.78	B	
13	Center Street, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	5,047	18.8%	0.23	A	88' ARTERIAL / 4	22,000	2,302	5,883	56.6%	0.27	A	
14	Center Street, Orange Street to Stephens Avenue	City/County of Riverside	88' ARTERIAL / 4	22,000	8,040	21.7%	0.37	A	88' ARTERIAL / 4	22,000	2,302	11,499	37.5%	0.52	A	
15	Center Street, Stephens Avenue to Highgrove Place	County of Riverside	88' ARTERIAL / 4	22,000	10,826	17.7%	0.49	A	88' ARTERIAL / 4	22,000	2,302	15,265	29.3%	0.69	B	
16	Garner Road, Main Street to Orange Street	City of Riverside	LOCAL / 2	3,100	346	6.0%	0.11	A	LOCAL / 2	3,100	0	346	6.0%	0.11	A	
17	Columbia Avenue, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	18,807	20.7%	0.85	C	***110' ARTERIAL / 4***	***33,000***	-1,303	18,406	14.0%	0.56	A	
18	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	22,000	22,769	17.2%	**1.03**	**E**	88' ARTERIAL / 4	22,000	-1,085	32,391	8.7%	**1.47**	**E**	**YES**
19	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	22,000	30,249	17.3%	**1.37**	**E**	88' ARTERIAL / 4	22,000	-542	42,045	11.1%	**1.91**	**E**	**YES**
20	Strong Street, Main Street to Orange Street	City of Riverside	66' COLLECTOR / 2	12,500	4,239	9.7%	0.34	A	66' COLLECTOR / 2	12,500	0	4,473	9.2%	0.36	A	
21	Strong Street, Orange Street to W La Cadena Drive	City of Riverside	66' COLLECTOR / 2	12,500	2,486	5.9%	0.20	A	66' COLLECTOR / 2	12,500	0	2,806	5.3%	0.22	A	
22	Market Street, Rivera Street to SR60 WB Ramps	City of Riverside	100' ARTERIAL / 4	33,000	30,843	7.5%	0.93	D	100' ARTERIAL / 4	33,000	0	31,722	7.3%	0.96	D	
23	Pellisier Road, S. Riverside Avenue to Roquet Ranch	City of Colton	SECONDARY / 2	13,000	1,600	5.0%	0.12	A	SECONDARY / 2	13,000	0	5,525	9.0%	0.42	A	
24	Orange Street, Pellisier Road to Center Street	City of Colton	DOES NOT EXIST						COLLECTOR / 2	13,000	0	6,699	9.0%	0.52	A	

Footnote:

Roadway classifications and capacity threesholds shown in bold italics indicate proposed change from General Plan classification.

V/C and LOS shown in bold indicate deficient LOS based on ADT and roadway capacity.

1) The City's Roadway Segment Capacity Thresholds does not provide LOS thresholds for LOS A or LOS B. The LOS A and B thresholds based on ADT as shown in Table 2 were interpolated based on the volume-to-capacity ratios of the LOS C and D thresholds.

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO CONDITIONS

The Specific Plan Scenario Two land uses were input into the 2040 RivTAM model to derive the Horizon Year 2040 traffic volumes for Specific Plan Scenario Two. The RivTAM model was run both without and with the future extension of Orange Street north of Center Street into Pellissier Ranch in the City of Colton. Trips from the Roquet Ranch development and additional growth from regional cumulative projects were also added to the Horizon Year 2040 Specific Plan Scenario One traffic volumes that were generated by the RivTAM model.

The methodology used to derive the heavy vehicle percentages for the Existing Plus Project Scenario Two traffic volumes was also applied to the Horizon Year 2040 With Specific Plan Scenario Two traffic volumes.

Exhibit 24 shows the daily and peak hour volumes for heavy vehicles with 3 or more axles for Horizon Year 2040 Specific Plan Scenario Two.

The Horizon Year 2040 Specific Plan Scenario Two traffic volumes without the Orange Street Extension are shown in **Exhibit 25**. **Exhibit 26** illustrates the The Horizon Year 2040 Specific Plan Scenario Two traffic volumes with the Orange Street Extension.

Horizon Year 2040 Specific Plan Scenario Two Roadway Improvements

The Horizon Year 2040 roadway improvements for Specific Plan Scenario Two without the Orange Street Extension are the same as the roadway improvements under the Horizon Year 2040 Baseline (Without Project) scenario, with the following exception:

- Main Street south of SR-60 is reduced to one through lane in each direction under all scenarios with the Specific Plan.

The Horizon Year 2040 roadway improvements for Specific Plan Scenario Two with the Orange Street Extension are the same as without the extension, except for the following improvements at the Orange Street / Center Street intersection:

- Installation of a traffic signal; and
- Northbound and southbound through traffic prohibited (Orange Street movements restricted only to left turns or right turns)

The above-listed improvements are also listed in Table 8 and are illustrated in Exhibit 15 earlier in the report.

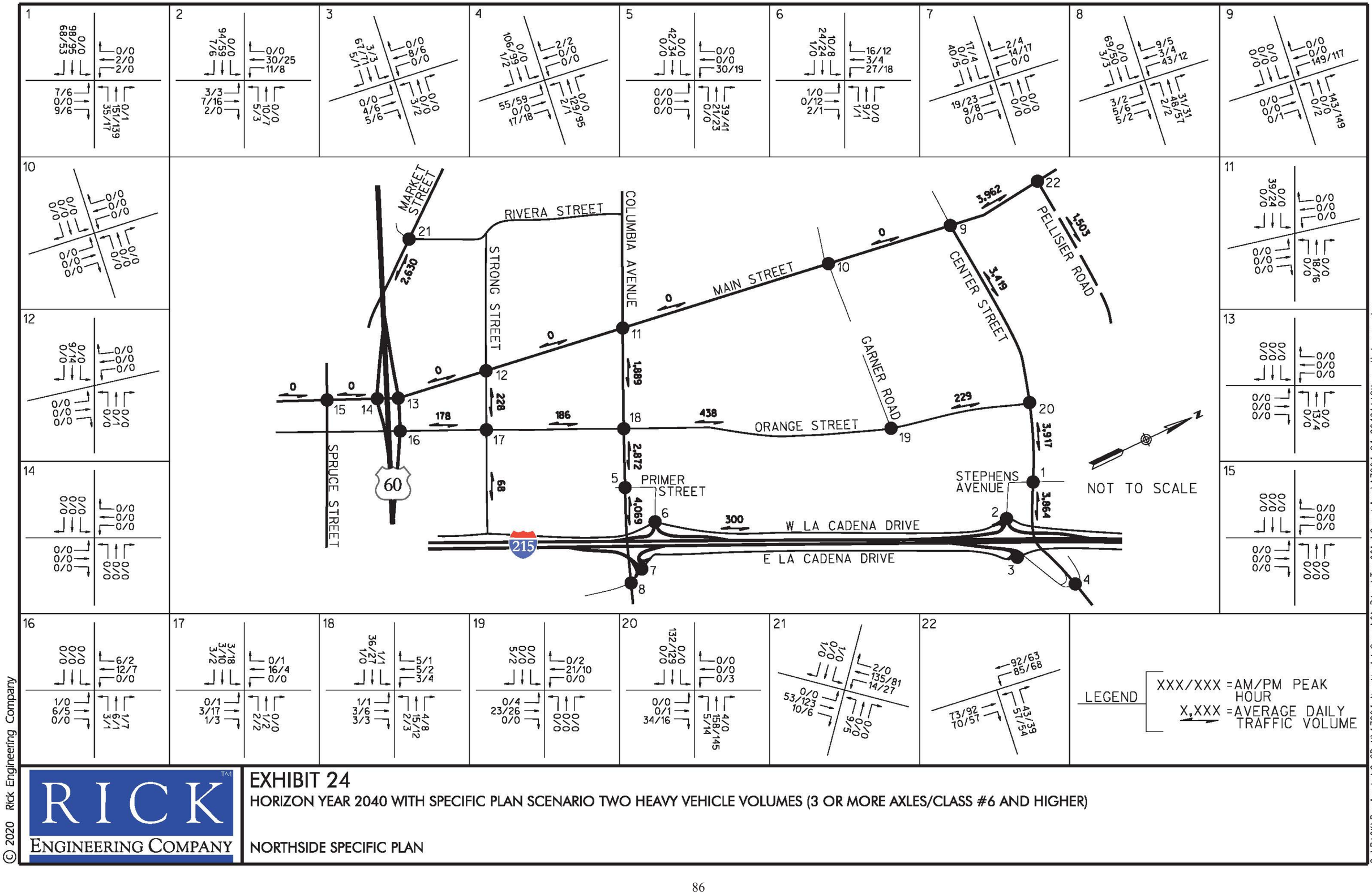


EXHIBIT 24

HORIZON YEAR 2040 WITH SPECIFIC PLAN SCENARIO TWO HEAVY VEHICLE VOLUMES (3 OR MORE AXLES/CLASS #6 AND HIGHER)

NORTHSIDE SPECIFIC PLAN

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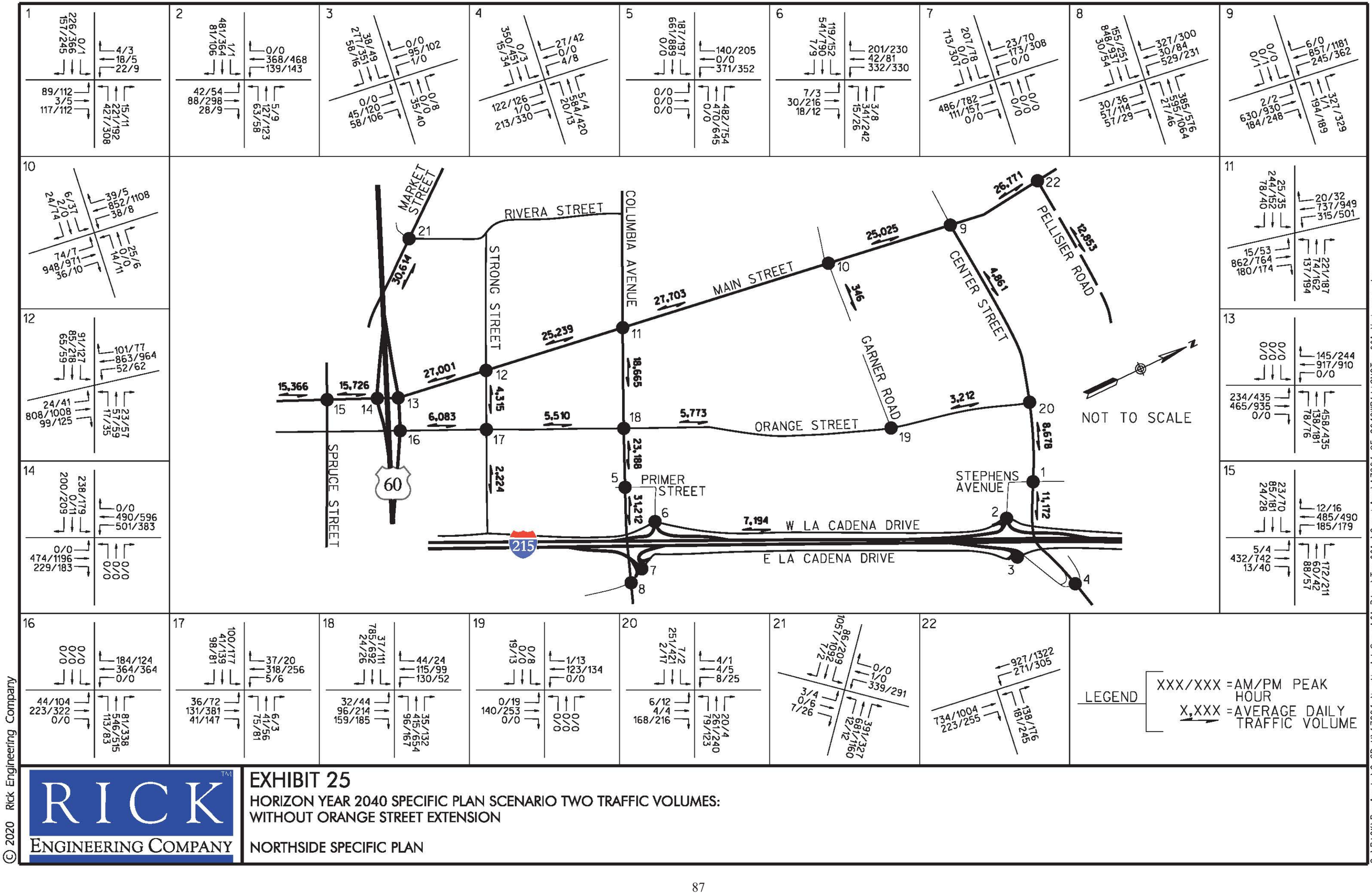


EXHIBIT 25

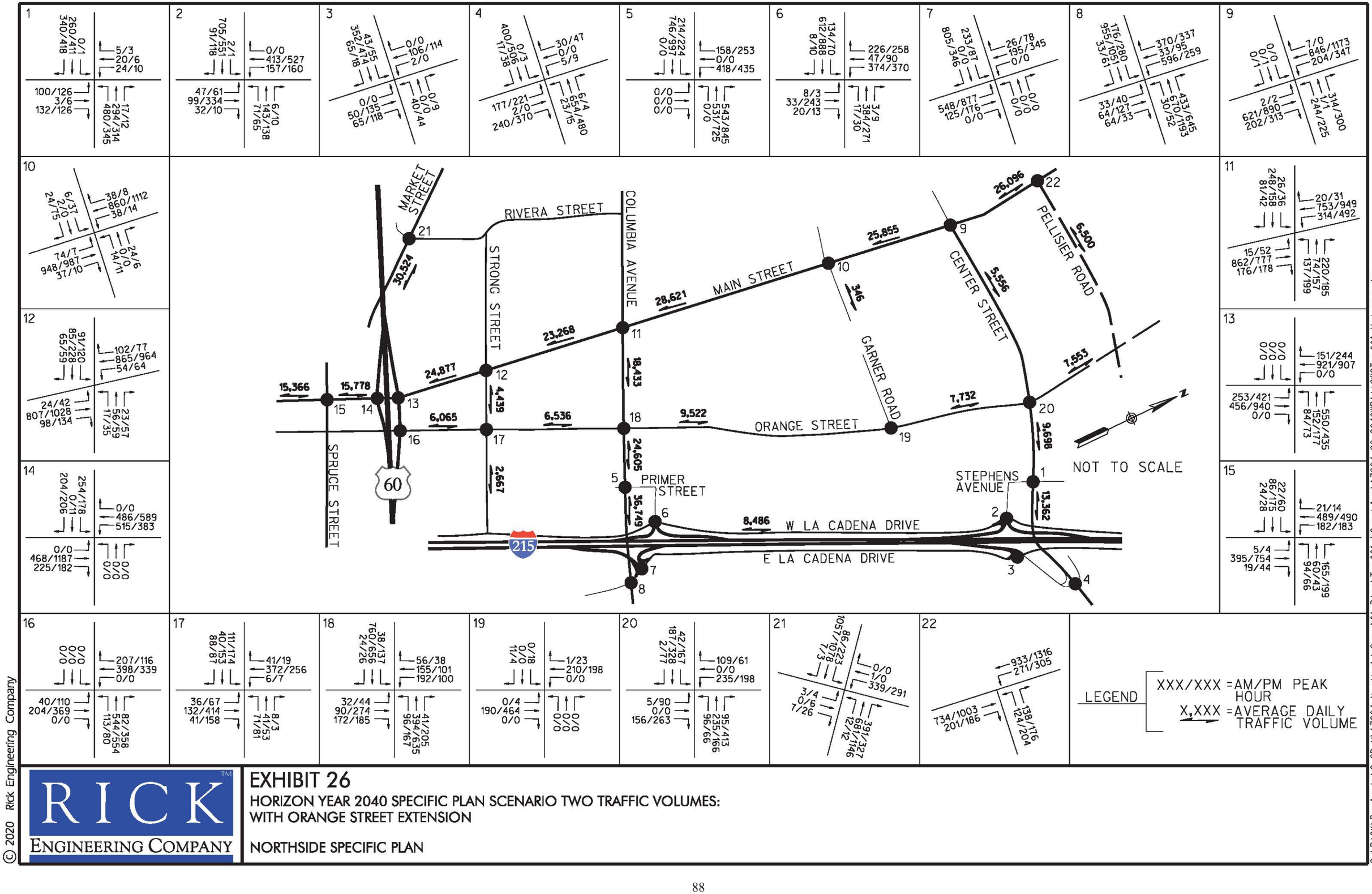
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO TRAFFIC VOLUMES: WITHOUT ORANGE STREET EXTENSION

NORTHSIDE SPECIFIC PLAN

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EXHIBIT 26

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO TRAFFIC VOLUMES:
WITH ORANGE STREET EXTENSION

NORTHSIDE SPECIFIC PLAN

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Horizon Year 2040 Specific Plan Scenario Two Operations Analysis: Without Orange Street Extension

The results of the intersection operations analysis for Horizon Year 2040 Specific Plan Scenario Two without the Orange Street Extension are provided in **Table 22**. The intersection operations worksheets are provided in **Appendix B**.

As shown in the table, the following intersections are forecast to operate at a deficient LOS (LOS E or F) under Horizon Year 2040 Specific Plan Scenario Two conditions without the Orange Street Extension:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- W. Center Street / Highgrove Place (AM: LOS E)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM/PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- S. Riverside Avenue / Pellisier Road (AM/PM: LOS F)

Table 22 also shows that project-related significant impacts were identified at the following intersections under Horizon Year 2040 Specific Plan Scenario Two conditions without the Orange Street Extension:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- W. Center Street / Highgrove Place (AM: LOS E)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM/PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- S. Riverside Avenue / Pellisier Road (AM/PM: LOS F)

The results of the roadway segment operations analysis for Horizon Year 2040 Specific Plan Scenario Two without the Orange Street Extension are provided in **Table 23**.

As shown in the table, the following roadway segments are forecast to operate at a deficient LOS (LOS E) and would also be significantly impacted by the proposed project under Horizon Year 2040 Specific Plan Scenario Two conditions without the Orange Street Extension:

- Pellisier Road, from S. Riverside Avenue to Roquet Ranch
- Columbia Avenue, from Orange Street to Primer Street
- Columbia Avenue, from Primer Street to E. La Cadena Drive

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TABLE 22
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO INTERSECTION OPERATIONS
WITHOUT ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO TWO		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
1 Center Street / Stephens Avenue (S)	**County of Riverside**							
		AM peak	13.1	B	15.4	B	2.3	NO
		PM Peak	15.1	B	14.7	B	-0.4	NO
2 W La Cadena Drive / I-215 SB Ramps / Stephens Avenue (U)	**County of Riverside**							
		AM peak	**79.1**	**F**	**124.1**	**F**	45.0	**YES**
		PM Peak	**151.4**	**F**	**126.5**	**F**	-24.9	**YES**
3 E La Cadena Drive / I-215 NB Ramps / Highgrove Place (U)	**County of Riverside**							
		AM peak	9.9	A	11.1	B	1.2	NO
		PM Peak	11.5	B	11.9	B	0.4	NO
4 West Center Street / Highgrove Place (U)	**County of Riverside**							
		AM peak	20.5	C	**43.8**	**E**	23.3	**YES**
		PM Peak	20.9	C	34.6	D	13.7	NO
5 Columbia Avenue / Primer Street (S)	**City of Riverside**							
		AM peak	12.8	B	12.6	B	-0.2	NO
		PM Peak	13.7	B	12.0	B	-1.7	NO
6 W La Cadena Drive / I-215 SB Ramps / Interchange Drive (U)	**City of Riverside**							
		AM peak	**44.0**	**E**	**50.3**	**F**	6.3	**YES**
		PM Peak	**106.5**	**F**	**76.1**	**F**	-30.4	**YES**
7 E La Cadena Drive / I-215 NB Ramps (U)	**City of Riverside**							
		AM peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
8 Columbia Avenue / E La Cadena Drive (S)	**City of Riverside**							
		AM peak	38.3	D	36.4	D	-1.9	NO
		PM Peak	35.0	D	24.6	C	-10.4	NO

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TABLE 22
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO INTERSECTION OPERATIONS
WITHOUT ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO TWO		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
9 Main Street / Placentia Lane (U)	**City of Riverside / City of Colton**							
		AM peak	**153.7**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
10 Main Street / Garner Road (U)	**City of Riverside**							
		AM peak	**>200**	**F**	**194.4**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**71.1**	**F**	N/A	**YES**
11 Main Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	36.2	D	30.6	C	-5.6	NO
		PM Peak	33.1	C	23.2	C	-9.9	NO
12 Main Street / Strong Street (S)	**City of Riverside**							
		AM peak	12.3	B	12.0	B	-0.3	NO
		PM Peak	16.7	B	14.5	B	-2.2	NO
13 Main Street / Oakley Avenue / SR60 WB ON Ramp (S)	**City of Riverside**							
		AM peak	**64.3**	**E**	46.2	D	-18.1	NO
		PM Peak	**79.3**	**E**	35.3	D	-44.0	NO
14 Main Street / SR60 EB Ramps (S)	**City of Riverside**							
		AM peak	23.1	C	19.3	B	-3.8	NO
		PM Peak	30.3	C	20.0	B	-10.3	NO
15 Main Street / Spruce Street (S)	**City of Riverside**							
		AM peak	11.9	B	14.4	B	2.5	NO
		PM Peak	15.9	B	18.8	B	2.9	NO
16 Orange Street / Oakley Avenue / SR60 WB Off Ramp (S)	**City of Riverside**							
		AM peak	14.1	B	14.6	B	0.5	NO
		PM Peak	18.2	B	15.3	B	-2.9	NO

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TABLE 22
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO INTERSECTION OPERATIONS
WITHOUT ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO TWO		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
17 Orange Street / Strong Street (S)	**City of Riverside**							
		AM peak	7.4	A	7.3	A	-0.1	NO
		PM Peak	10.0	B	8.9	A	-1.1	NO
18 Orange Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	16.7	B	16.2	B	-0.5	NO
		PM Peak	20.5	C	16.9	B	-3.6	NO
19 Orange Street / Garner Road (U)	**City of Riverside**							
		AM peak	8.8	A	9.1	A	0.3	NO
		PM Peak	10.0	B	10.0	B	0.0	NO
20 Orange Street / Center Street (S)	**City of Riverside**							
		AM peak	9.3	A	11.0	B	1.7	NO
		PM Peak	11.6	B	12.1	B	0.5	NO
21 Market Street / Rivera Street (S)	**City of Riverside**							
		AM peak	13.8	B	14.0	B	0.2	NO
		PM Peak	18.6	B	15.4	B	-3.2	NO
22 S. Riverside Avenue / Pellisier Road (U)	**City of Colton**							
		AM peak	**42.8**	**E**	**>200**	**F**	N/A	**YES**
		PM Peak	**49.2**	**E**	**>200**	**F**	N/A	**YES**

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).
DELAY is measured in seconds
LOS = Level of Service
NB = Northbound, SB = Southbound, etc.
T=thru movement, R=right-turn movement, etc.
(S) = Signalized intersection
(U) = Unsignalized intersection

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TABLE 23
HORIZON YEAR 2040 WITH SPECIFIC PLAN SCENARIO TWO ROADWAY SEGMENT OPERATIONS
WITHOUT ORANGE STREET EXTENSION

	STREET SEGMENT	JURISDICTION	HORIZON YEAR 2040 WITHOUT PROJECT						HORIZON YEAR 2040 SP SCENARIO TWO: WITHOUT ORANGE							
			CLASSIFICATION / NO. LANES (2025 GENERAL PLAN)	Capacity[1]	ADT	% Heavy Vehicles	V/C	LOS	CLASSIFICATION / NO. LANES (PROPOSED)	Capacity[1]	Diverted Truck Trips	ADT	% Heavy Vehicles	V/C	LOS	Signi-ficant?
1	S. Riverside Avenue, Pellisier Road to Center Street	City of Colton	MAJOR / 4	34,100	26,945	21.5%	0.79	C	MAJOR / 4	34,100	0	26,771	24.2%	0.79	C	
2	Main Street, Center Street to Garner Road	City of Riverside	100' ARTERIAL / 4	33,000	25,013	18.7%	0.76	B	100' ARTERIAL / 4	33,000	-2,137	25,025	10.2%	0.76	B	
3	Main Street, Garner Road to Columbia Avenue	City of Riverside	100' ARTERIAL / 4	33,000	26,945	20.6%	0.82	C	100' ARTERIAL / 4	33,000	-2,302	27,703	11.7%	0.84	C	
4	Main Street, Columbia Avenue to Strong Street	City of Riverside	100' ARTERIAL / 4	33,000	25,239	14.5%	0.76	B	100' ARTERIAL / 4	33,000	-808	25,239	11.3%	0.76	B	
5	Main Street, Strong Street to Oakley Avenue	City of Riverside	100' ARTERIAL / 4	33,000	25,225	16.7%	0.76	B	100' ARTERIAL / 4	33,000	-1,011	27,001	11.9%	0.82	C	
6	Main Street, SR60 EB to Spruce Street	City of Riverside	100' ARTERIAL / 4	33,000	16,290	11.7%	0.49	A	***100' ARTERIAL / 2***	***18,000***	-308	15,726	10.1%	0.87	C	
7	Main Street, Spruce Street to Poplar Street	City of Riverside	100' ARTERIAL / 4	33,000	12,646	2.6%	0.38	A	***100' ARTERIAL / 2***	***18,000***	-76	15,366	1.7%	0.85	C	
8	Orange Street, Center Street to Garner Road	City of Riverside	66' COLLECTOR / 2	12,500	2,868	12.6%	0.23	A	66' COLLECTOR / 2	12,500	0	3,212	11.3%	0.26	A	
9	Orange Street, Garner Road to Columbia Avenue	City of Riverside	66' COLLECTOR / 2	12,500	4,984	6.2%	0.40	A	66' COLLECTOR / 2	12,500	0	5,773	5.3%	0.46	A	
10	Orange Street, Columbia Avenue to Strong Street	City of Riverside	66' COLLECTOR / 2	12,500	5,162	8.8%	0.41	A	66' COLLECTOR / 2	12,500	0	5,510	8.2%	0.44	A	
11	Orange Street, Strong Street to Oakley Avenue	City of Riverside	66' COLLECTOR / 2	12,500	6,083	6.2%	0.49	A	66' COLLECTOR / 2	12,500	0	6,083	6.2%	0.49	A	
12	West La Cadena Drive, Chase Road to I-215 SB Ramps	City of Riverside	66' COLLECTOR / 2	12,500	6,969	11.6%	0.56	A	66' COLLECTOR / 2	12,500	0	7,194	11.2%	0.58	A	
13	Center Street, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	5,047	18.8%	0.23	A	88' ARTERIAL / 4	22,000	2,302	4,861	70.0%	0.22	A	
14	Center Street, Orange Street to Stephens Avenue	City/County of Riverside	88' ARTERIAL / 4	22,000	8,040	21.7%	0.37	A	88' ARTERIAL / 4	22,000	2,302	8,678	51.2%	0.39	A	
15	Center Street, Stephens Avenue to Highgrove Place	County of Riverside	88' ARTERIAL / 4	22,000	10,826	17.7%	0.49	A	88' ARTERIAL / 4	22,000	2,302	11,172	41.2%	0.51	A	
16	Garner Road, Main Street to Orange Street	City of Riverside	LOCAL / 2	3,100	346	6.0%	0.11	A	LOCAL / 2	3,100	0	346	6.0%	0.11	A	
17	Columbia Avenue, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	18,807	20.7%	0.85	C	***110' ARTERIAL / 4***	***33,000***	-1,303	18,665	13.8%	0.57	A	
18	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	22,000	22,769	17.2%	**1.03**	**E**	88' ARTERIAL / 4	22,000	-1,085	23,188	12.2%	**1.05**	**E**	**YES**
19	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	22,000	30,249	17.3%	**1.37**	**E**	88' ARTERIAL / 4	22,000	-542	31,212	15.0%	**1.42**	**E**	**YES**
20	Strong Street, Main Street to Orange Street	City of Riverside	66' COLLECTOR / 2	12,500	4,239	9.7%	0.34	A	66' COLLECTOR / 2	12,500	0	4,315	9.5%	0.35	A	
21	Strong Street, Orange Street to W La Cadena Drive	City of Riverside	66' COLLECTOR / 2	12,500	2,486	5.9%	0.20	A	66' COLLECTOR / 2	12,500	0	2,452	6.0%	0.20	A	
22	Market Street, Rivera Street to SR60 WB Ramps	City of Riverside	100' ARTERIAL / 4	33,000	30,843	7.5%	0.93	D	100' ARTERIAL / 4	33,000	0	30,614	7.5%	0.93	D	
23	Pellisier Road, S. Riverside Avenue to Roquet Ranch	City of Colton	SECONDARY / 2	13,000	1,600	5.0%	0.12	A	SECONDARY / 2	13,000	0	12,853	27.0%	**0.99**	**E**	**YES**

Footnote:

Roadway classifications and capacity threesholds shown in bold italics indicate proposed change from General Plan classification.

V/C and LOS shown in bold indicate deficient LOS based on ADT and roadway capacity.

1) The City's Roadway Segment Capacity Thresholds does not provide LOS thresholds for LOS A or LOS B. The LOS A and B thresholds based on ADT as shown in Table 2 were interpolated based on the volume-to-capacity ratios of the LOS C and D thresholds.

Horizon Year 2040 Specific Plan Scenario Two Operations Analysis: With Orange Street Extension

The results of the intersection operations analysis for Horizon Year 2040 Specific Plan Scenario Two with the Orange Street Extension are provided in **Table 24**. The intersection operations worksheets are provided in **Appendix B**.

As shown in the table, the following intersections are forecast to operate at a deficient LOS (LOS E or F) under Horizon Year 2040 Specific Plan Scenario Two conditions with the Orange Street Extension:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- W. Center Street / Highgrove Place (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM/PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Columbia Avenue / E. La Cadena Drive (AM/PM: LOS E)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Oakley Avenue / SR-60 WB On-Ramp (AM/PM: LOS E)
- S. Riverside Avenue / Pellisier Road (AM/PM: LOS F)

Table 24 also shows that project-related significant impacts were identified at the following intersections under Horizon Year 2040 Specific Plan Scenario Two conditions with the Orange Street Extension:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue (AM/PM: LOS F)
- W. Center Street / Highgrove Place (AM/PM: LOS F)
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive (AM/PM: LOS F)
- E. La Cadena Drive / I-215 Northbound Ramps (AM/PM: LOS F)
- Columbia Avenue / E. La Cadena Drive (AM/PM: LOS E)
- Main Street / Placentia Lane-Center Street (AM/PM: LOS F)
- Main Street / Garner Road (AM/PM: LOS F)
- Main Street / Oakley Avenue / SR-60 WB On-Ramp (AM: LOS E)
- Main Street / Spruce Street (PM: LOS C)
- Orange Street / Center Street (PM: LOS C)
- S. Riverside Avenue / Pellisier Road (AM/PM: LOS F)

The results of the roadway segment operations analysis for Horizon Year 2040 Specific Plan Scenario Two with the Orange Street Extension are provided in **Table 25**.

As shown in the table, the following roadway segments are forecast to operate at a deficient LOS (LOS E) and would also be significantly impacted by the proposed project under Horizon Year 2040 Specific Plan Scenario Two conditions with the Orange Street Extension:

- Columbia Avenue, from Orange Street to Primer Street
- Columbia Avenue, from Primer Street to E. La Cadena Drive

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TABLE 24
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO INTERSECTION OPERATIONS
WITH ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO TWO		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
1 Center Street / Stephens Avenue (S)	**County of Riverside**							
		AM peak	13.1	B	26.7	C	13.6	NO
		PM Peak	15.1	B	24.3	C	9.2	NO
2 W La Cadena Drive / I-215 SB Ramps / Stephens Avenue (U)	**County of Riverside**							
		AM peak	**79.1**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**151.4**	**F**	**>200**	**F**	N/A	**YES**
3 E La Cadena Drive / I-215 NB Ramps / Highgrove Place (U)	**County of Riverside**							
		AM peak	9.9	A	13.8	B	3.9	NO
		PM Peak	11.5	B	24.3	C	12.8	NO
4 West Center Street / Highgrove Place (U)	**County of Riverside**							
		AM peak	20.5	C	**141.3**	**F**	120.8	**YES**
		PM Peak	20.9	C	**>200**	**F**	N/A	**YES**
5 Columbia Avenue / Primer Street (S)	**City of Riverside**							
		AM peak	12.8	B	14.4	B	1.6	NO
		PM Peak	13.7	B	18.0	B	4.3	NO
6 W La Cadena Drive / I-215 SB Ramps / Interchange Drive (U)	**City of Riverside**							
		AM peak	**44.0**	**E**	**75.9**	**F**	31.9	**YES**
		PM Peak	**106.5**	**F**	**171.2**	**F**	64.7	**YES**
7 E La Cadena Drive / I-215 NB Ramps (U)	**City of Riverside**							
		AM peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**>200**	**F**	N/A	**YES**
8 Columbia Avenue / E La Cadena Drive (S)	**City of Riverside**							
		AM peak	38.3	D	53.7	D	15.4	**YES**
		PM Peak	35.0	D	51.9	D	16.9	**YES**

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TABLE 24
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO INTERSECTION OPERATIONS
WITH ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO TWO		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
9 Main Street / Placentia Lane (U)	**City of Riverside / City of Colton**							
		AM peak	**153.7**	**F**	**>200**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**112.2**	**F**	N/A	**YES**
10 Main Street / Garner Road (U)	**City of Riverside**							
		AM peak	**>200**	**F**	**194.4**	**F**	N/A	**YES**
		PM Peak	**>200**	**F**	**160.0**	**F**	N/A	**YES**
11 Main Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	36.2	D	31.1	C	-5.1	NO
		PM Peak	33.1	C	30.9	C	-2.2	NO
12 Main Street / Strong Street (S)	**City of Riverside**							
		AM peak	12.3	B	12.0	B	-0.3	NO
		PM Peak	16.7	B	17.1	B	0.4	NO
13 Main Street / Oakley Avenue / SR60 WB ON Ramp (S)	**City of Riverside**							
		AM peak	**64.3**	**E**	**69.4**	**E**	5.1	**YES**
		PM Peak	**79.3**	**E**	**65.2**	**E**	-14.1	NO
14 Main Street / SR60 EB Ramps (S)	**City of Riverside**							
		AM peak	23.1	C	20.4	C	-2.7	NO
		PM Peak	30.3	C	28.5	C	-1.8	NO
15 Main Street / Spruce Street (S)	**City of Riverside**							
		AM peak	11.9	B	13.8	B	1.9	NO
		PM Peak	15.9	B	25.7	C	9.8	**YES**
16 Orange Street / Oakley Avenue / SR60 WB Off Ramp (S)	**City of Riverside**							
		AM peak	14.1	B	14.8	B	0.7	NO
		PM Peak	18.2	B	18.8	B	0.6	NO

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TABLE 24
NORTHSIDE SPECIFIC PLAN
HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO INTERSECTION OPERATIONS
WITH ORANGE STREET EXTENSION

INTERSECTION	JURISDICTION	PEAK HOUR	2040 WITHOUT PROJECT		2040 SP SCENARIO TWO		CHANGE IN DELAY	SIGNIFICANT?
			DELAY	LOS	DELAY	LOS		
17 Orange Street / Strong Street (S)	**City of Riverside**							
		AM peak	7.4	A	7.6	A	0.2	NO
		PM Peak	10.0	B	12.5	B	2.5	NO
18 Orange Street / Columbia Avenue (S)	**City of Riverside**							
		AM peak	16.7	B	20.4	C	3.7	NO
		PM Peak	20.5	C	24.9	C	4.4	NO
19 Orange Street / Garner Road (U)	**City of Riverside**							
		AM peak	8.8	A	9.6	A	0.8	NO
		PM Peak	10.0	B	14.4	B	4.4	NO
20 Orange Street / Center Street (S)	**City of Riverside**							
		AM peak	9.3	A	8.6	A	-0.7	NO
		PM Peak	11.6	B	23.7	C	12.1	**YES**
21 Market Street / Rivera Street (S)	**City of Riverside**							
		AM peak	13.8	B	14.0	B	0.2	NO
		PM Peak	18.6	B	21.2	C	2.6	NO
22 S. Riverside Avenue / Pellisier Road (U)	**City of Colton**							
		AM peak	**42.8**	**E**	**>200**	**F**	N/A	**YES**
		PM Peak	**49.2**	**E**	**>200**	**F**	N/A	**YES**

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).

DELAY is measured in seconds

LOS = Level of Service

NB = Northbound, SB = Southbound, etc.

T=thru movement, R=right-turn movement, etc.

(S) = Signalized intersection

(U) = Unsignalized intersection

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TABLE 25
HORIZON YEAR 2040 WITH SPECIFIC PLAN SCENARIO TWO ROADWAY SEGMENT OPERATIONS WITH ORANGE STREET EXTENSION

	STREET SEGMENT	JURISDICTION	HORIZON YEAR 2040 WITHOUT PROJECT						HORIZON YEAR 2040 SP SCENARIO TWO: WITH ORANGE							
			CLASSIFICATION / NO. LANES (2025 GENERAL PLAN)	Capacity[1]	ADT	% Heavy Vehicles	V/C	LOS	CLASSIFICATION / NO. LANES (PROPOSED)	Capacity[1]	Diverted Truck Trips	ADT	% Heavy Vehicles	V/C	LOS	Signi-ficant?
1	S. Riverside Avenue, Pellisier Road to Center Street	City of Colton	MAJOR / 4	34,100	26,945	21.5%	0.79	C	MAJOR / 4	34,100	0	26,096	24.8%	0.77	C	
2	Main Street, Center Street to Garner Road	City of Riverside	100' ARTERIAL / 4	33,000	25,013	18.7%	0.76	B	100' ARTERIAL / 4	33,000	-2,137	25,855	9.9%	0.78	B	
3	Main Street, Garner Road to Columbia Avenue	City of Riverside	100' ARTERIAL / 4	33,000	26,945	20.6%	0.82	C	100' ARTERIAL / 4	33,000	-2,302	28,621	11.4%	0.87	C	
4	Main Street, Columbia Avenue to Strong Street	City of Riverside	100' ARTERIAL / 4	33,000	25,239	14.5%	0.76	B	100' ARTERIAL / 4	33,000	-808	23,268	12.2%	0.71	B	
5	Main Street, Strong Street to Oakley Avenue	City of Riverside	100' ARTERIAL / 4	33,000	25,225	16.7%	0.76	B	100' ARTERIAL / 4	33,000	-1,011	24,877	12.9%	0.75	B	
6	Main Street, SR60 EB to Spruce Street	City of Riverside	100' ARTERIAL / 4	33,000	16,290	11.7%	0.49	A	***100' ARTERIAL / 2***	***18,000***	-308	15,778	10.1%	0.88	C	
7	Main Street, Spruce Street to Poplar Street	City of Riverside	100' ARTERIAL / 4	33,000	12,646	2.6%	0.38	A	***100' ARTERIAL / 2***	***18,000***	-76	15,366	1.7%	0.85	C	
8	Orange Street, Center Street to Garner Road	City of Riverside	66' COLLECTOR / 2	12,500	2,868	12.6%	0.23	A	66' COLLECTOR / 2	12,500	0	7,732	4.7%	0.62	A	
9	Orange Street, Garner Road to Columbia Avenue	City of Riverside	66' COLLECTOR / 2	12,500	4,984	6.2%	0.40	A	66' COLLECTOR / 2	12,500	0	9,522	3.2%	0.76	B	
10	Orange Street, Columbia Avenue to Strong Street	City of Riverside	66' COLLECTOR / 2	12,500	5,162	8.8%	0.41	A	66' COLLECTOR / 2	12,500	0	6,536	6.9%	0.52	A	
11	Orange Street, Strong Street to Oakley Avenue	City of Riverside	66' COLLECTOR / 2	12,500	6,083	6.2%	0.49	A	66' COLLECTOR / 2	12,500	0	6,065	6.2%	0.49	A	
12	West La Cadena Drive, Chase Road to I-215 SB Ramps	City of Riverside	66' COLLECTOR / 2	12,500	6,969	11.6%	0.56	A	66' COLLECTOR / 2	12,500	0	8,486	9.5%	0.68	A	
13	Center Street, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	5,047	18.8%	0.23	A	88' ARTERIAL / 4	22,000	2,302	5,556	61.2%	0.25	A	
14	Center Street, Orange Street to Stephens Avenue	City/County of Riverside	88' ARTERIAL / 4	22,000	8,040	21.7%	0.37	A	88' ARTERIAL / 4	22,000	2,302	9,698	45.8%	0.44	A	
15	Center Street, Stephens Avenue to Highgrove Place	County of Riverside	88' ARTERIAL / 4	22,000	10,826	17.7%	0.49	A	88' ARTERIAL / 4	22,000	2,302	13,362	34.5%	0.61	A	
16	Garner Road, Main Street to Orange Street	City of Riverside	LOCAL / 2	3,100	346	6.0%	0.11	A	LOCAL / 2	3,100	0	346	6.0%	0.11	A	
17	Columbia Avenue, Main Street to Orange Street	City of Riverside	88' ARTERIAL / 4	22,000	18,807	20.7%	0.85	C	***110' ARTERIAL / 4***	***33,000***	-1,303	18,433	14.0%	0.56	A	
18	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	22,000	22,769	17.2%	**1.03**	**E**	88' ARTERIAL / 4	22,000	-1,085	24,605	11.5%	**1.12**	**E**	**YES**
19	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	22,000	30,249	17.3%	**1.37**	**E**	88' ARTERIAL / 4	22,000	-542	36,749	12.7%	**1.67**	**E**	**YES**
20	Strong Street, Main Street to Orange Street	City of Riverside	66' COLLECTOR / 2	12,500	4,239	9.7%	0.34	A	66' COLLECTOR / 2	12,500	0	4,439	9.3%	0.36	A	
21	Strong Street, Orange Street to W La Cadena Drive	City of Riverside	66' COLLECTOR / 2	12,500	2,486	5.9%	0.20	A	66' COLLECTOR / 2	12,500	0	2,667	5.5%	0.21	A	
22	Market Street, Rivera Street to SR60 WB Ramps	City of Riverside	100' ARTERIAL / 4	33,000	30,843	7.5%	0.93	D	100' ARTERIAL / 4	33,000	0	30,524	7.5%	0.92	D	
23	Pellisier Road, S. Riverside Avenue to Roquet Ranch	City of Colton	SECONDARY / 2	13,000	1,600	5.0%	0.12	A	SECONDARY / 2	13,000	0	6,500	27.0%	0.50	A	
24	Orange Street, Pellisier Road to Center Street	City of Colton	DOES NOT EXIST						COLLECTOR / 2	13,000	0	7,553	27.0%	0.58	A	

Footnote:

Roadway classifications and capacity threesholds shown in bold italics indicate proposed change from General Plan classification.

V/C and LOS shown in bold indicate deficient LOS based on ADT and roadway capacity.

1) The City's Roadway Segment Capacity Thresholds does not provide LOS thresholds for LOS A or LOS B. The LOS A and B thresholds based on ADT as shown in Table 2 were interpolated based on the volume-to-capacity ratios of the LOS C and D thresholds.

SUMMARY OF SIGNIFICANT IMPACTS

As presented earlier in this report, the following significance criteria were used for the study intersections and roadway segments located within the City of Riverside, City of Colton, and County of Riverside:

City of Riverside Significance Criteria

Intersections

- The addition of project traffic causes LOS to degrade from acceptable (LOS D or better) to unacceptable (LOS E or F); OR
- For projects that propose uses or intensities above that contained in the General Plan addition of project traffic causes peak hour delay to increase as follows:

LOS A/B	=	By 10.0 seconds
LOS C	=	By 8.0 seconds
LOS D	=	By 5.0 seconds
LOS E	=	By 2.0 seconds
LOS F	=	By 1.0 second

A significant impact is also identified on any study intersection forecast to operate at LOS F during the peak hours in order to achieve the goal of Policy CCM-2.4 in the City's General Plan Mobility Element.

Roadway Segments

- The addition of project traffic causes LOS to degrade from acceptable (LOS D or better) to unacceptable (LOS E or F); OR
- The project adds traffic to a roadway segment that operates at an unacceptable LOS (LOS E or F) without the project.

City of Colton Significance Criteria

Signalized Intersections

- Any signalized study intersection that is operating at an acceptable LOS D or better without project traffic in which the addition of project traffic causes the intersection to degrade to an LOS E or F shall identify improvements to improve operations to LOS D or better; OR
- Any signalized study intersection that is operating at LOS 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.

Unsignalized Intersections

- The addition of project related traffic causes the intersection to degrade from an LOS D or better to a LOS E or worse; OR
- 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 E or F; AND
- One or both of the following conditions are met:
  1) The project adds ten (10) or more trips to any minor street approach; OR
  2) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

County of Riverside Significance Criteria

Intersections and Roadway Segments

- The addition of project traffic causes LOS to degrade from acceptable (LOS D or better) to unacceptable (LOS E or F); OR
- The project adds traffic to a roadway segment that operates at an unacceptable LOS (LOS E or F) without the project.

For the purposes of this study, intersection and roadway segment operations for each Horizon Year 2040 Specific Plan scenario were compared to the Horizon Year 2040 Baseline (Without Project) scenario operations using the above-listed criteria to determine significant impacts associated with the Specific Plan scenarios.

In addition, the Existing Plus Project intersection and roadway segment operations for each Specific Plan scenario were compared to the Existing conditions operations using the above criteria to determine significant impacts under Existing Plus Project conditions.

The Specific Plan's significant impacts at the study intersections and roadway segments for each scenario are shown below in **Table 26** and **Table 27**, respectively.

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TABLE 26
SUMMARY OF SIGNIFICANT IMPACTS AT STUDY INTERSECTIONS

INTERSECTION	Jurisdiction	SCENARIO IMPACTED					
		EXISTING + PROJECT		HY40 SP SCENARIO 1		HY40 SP SCENARIO 2	
		SCENARIO ONE	SCENARIO TWO	WITHOUT ORANGE	WITH ORANGE	WITHOUT ORANGE	WITH ORANGE
1. Center St / Stephens Ave	County of Riverside	√	√				
2. W La Cadena Dr / I-215 SB Ramps / Stephens Ave	County of Riverside	√	√	√	√	√	√
4. W Center St / Highgrove Pl	County of Riverside	√	√	√	√	√	√
6. W La Cadena Dr / I-215 SB Ramps / Interchange Dr	City of Riverside	√	√	√	√	√	√
7. E La Cadena Dr / I-215 NB Ramps	City of Riverside	√	√	√	√	√	√
8. Columbia Ave / E La Cadena Dr	City of Riverside	√	√	√	√		√
9. Main St / Placentia Ln (Center Street)	City of Riverside	√	√	√	√	√	√
10. Main St / Garner Rd	City of Riverside	√	√	√	√	√	√
12. Main St / Strong St	City of Riverside	√	√				
13. Main St / Oakley Ave / SR60 WB On Ramp	City of Riverside	√		√	√		√
15. Main St / Spruce St	City of Riverside			√	√		√
16. Orange St / Oakley Ave / SR60 WB Off Ramp	City of Riverside	√ *	√ *				
17. Orange St / Strong St	City of Riverside	√ *	√ *				
18. Orange St / Columbia Ave	City of Riverside			√	√		
20. Orange St / Center St	City of Riverside	√					√
22. S. Riverside Ave / Pellisier Rd	City of Colton	√	√	√	√	√	√

Notes: HY 40 = Horizon Year 2040. SP = Specific Plan
*The approved Exchange development is conditioned to install traffic signals at the Orange Street / Oakley Avenue / SR-60 WB Off-Ramp and Orange Street / Strong Street intersection.

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TABLE 27
SUMMARY OF SIGNIFICANT IMPACTS AT STUDY ROADWAY SEGMENTS

ROADWAY SEGMENT	Jurisdiction	SCENARIO IMPACTED					
		EXISTING + PROJECT		HY40 SP SCENARIO 1		HY40 SP SCENARIO 2	
		SCENARIO ONE	SCENARIO TWO	WITHOUT ORANGE	WITH ORANGE	WITHOUT ORANGE	WITH ORANGE
5. Main St, Strong St to Oakley Ave	City of Riverside		√				
8. Orange St, Center St to Garner Rd	City of Riverside	√					
9. Orange St, Garner Rd to Columbia Ave	City of Riverside	√	√				
10. Orange St, Columbia Ave to Strong St	City of Riverside	√	√				
11. Orange St, Strong St to Oakley Ave	City of Riverside	√	√				
12. W. La Cadena Dr, Chase Rd to I-215 SB Ramps	City of Riverside	√	√				
18. Columbia Ave, Orange St to Primer St	City of Riverside			√	√	√	√
19. Columbia Ave, Primer St to E La Cadena Dr	City of Riverside	√	√	√	√	√	√
20. Strong St, Main St to Orange St	City of Riverside	√	√				
23. Pellisier Rd, S. Riverside Ave to Roquet Ranch	City of Colton					√	

Notes: HY 40 = Horizon Year 2040. SP = Specific Plan

RECOMMENDED MITIGATION MEASURES

Recommended Existing Plus Project Mitigation Measures: Study Intersections

The following improvements are recommended to mitigate the identified significant impacts at the study intersections under Existing Plus Project conditions, which apply to both Specific Plan scenarios except where noted:

MITIGATION MEASURE 1: Center Street / Stephens Avenue

- Widen east leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the westbound approach.
- Widen west leg of intersection to construct one left-turn lane, one through lane, and one right-turn lane on the eastbound approach.
- Provide protected left-turn phasing on the eastbound and westbound approaches.

MITIGATION MEASURE 2: W La Cadena Drive / I-215 SB Ramps / Stephens Avenue

- Install a traffic signal at the intersection.
- Restripe south leg of intersection to provide one left-turn lane and one shared through/ right-turn lane on the northbound approach.
- Restripe north leg of intersection to provide one left-turn lane and one shared through/ right-turn lane on the southbound approach.
- Widen west leg of intersection to construct one shared left-turn/through lane and one right-turn lane on the eastbound approach.
- Provide protected left-turn phasing on the northbound and southbound approaches.
- Provide split phasing on the eastbound and westbound approaches.

MITIGATION MEASURE 3: Center Street / Highgrove Place

- Install a traffic signal at the intersection.
- Widen east leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the westbound approach.
- Widen west leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the eastbound approach.
- Provide permitted left-turn phasing on all four approaches.

MITIGATION MEASURE 4: W La Cadena Drive / I-215 SB Ramps / Interchange Drive

- Install a traffic signal at the intersection.
- Widen north leg of intersection to construct one left-turn lane, one shared left-turn/ through lane, and one right-turn lane on the southbound approach.
- Widen westbound approach (Southbound I-215 Off-Ramp) to construct one shared left-turn/through lane and one shared through/right-turn lane.
- Provide split phasing for all four intersection approaches.
- Provide a right-turn overlap phase on the southbound approach.

MITIGATION MEASURE 5: E La Cadena Drive / I-215 NB Ramps

- Install a traffic signal at the intersection.
- Restripe northbound approach to provide one left-turn lane and one shared left-turn/through lane.
- Restripe the Northbound I-215 On-Ramp to eliminate the existing southbound channelized right-turn movement and provide a second receiving lane for the recommended second northbound left-turn lane.
- Provide split phasing on the northbound and southbound approaches.

MITIGATION MEASURE 6: Columbia Avenue / E La Cadena Drive

- Modify signal phasing to provide a right-turn overlap phase on the westbound approach.

MITIGATION MEASURE 7: Main Street / Placentia Lane-Center Street

- Install a traffic signal at the intersection.
- Widen east leg of intersection to construct one shared left-turn/through lane and one right-turn lane on the westbound approach.
- Provide protected left-turn phasing on the northbound and southbound approaches.
- Provide permitted left-turn phasing on the eastbound and westbound approaches.
- Provide a right-turn overlap phase on the westbound approach.

MITIGATION MEASURE 8: Main Street / Garner Road

- Install a traffic signal at the intersection.
- Provide protected left-turn phasing on the northbound and southbound approaches.
- Provide split phasing on the eastbound and westbound approaches.

MITIGATION MEASURE 9: Main Street / Strong Street

- Restripe the eastbound approach to provide one left-turn lane and one shared through/ right-turn lane.
- Restripe the westbound approach to provide one left-turn lane and one shared through/ right-turn lane.

Note: The Roquet Ranch Specific Plan and The Exchange projects are both required to implement the recommended improvements described above at the intersection of Main Street / Strong Street. Therefore, project responsibility would be shared between the Northside Specific Plan and these two projects.

MITIGATION MEASURE 10: Main Street / Oakley Avenue / SR60 WB On Ramp
(Existing Plus Project Scenario One Only)

- Restripe westbound approach to provide one shared left-turn/through/right-turn lane and one right-turn lane.

MITIGATION MEASURE 11: Orange Street / Center Street
(Existing Plus Project Scenario One only)

- Widen east leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the westbound approach, and construct two eastbound receiving lanes.
- Widen and restripe west leg of intersection to provide one shared left-turn/through lane and one shared through/right-turn lane on the eastbound approach.

MITIGATION MEASURE 12: South Riverside Avenue / Future Pellisier Road

- Install a traffic signal at the intersection.
- Construct one left-turn lane and one right-turn lane on the westbound approach.
- Provide protected left-turn phasing on the southbound approach.

Note: It is recommended that the City of Riverside enter into a Memorandum of Understanding (MOU) with the City of Colton to allow for the transfer of fair share fees and promote completion of the identified improvements at the South Riverside Avenue / Pellisier Road intersection.

Recommended Existing Plus Project Mitigation Measures: Study Roadway Segments

The following improvements are recommended to mitigate the identified significant impacts at the study roadway segments under Existing Plus Project conditions, which apply to both Specific Plan scenarios except where noted:

MITIGATION MEASURE 13: Main Street from Strong Street to Oakley Avenue
(Existing Plus Project Scenario Two only)

- Widen roadway segment to proposed four-lane Arterial standards (78’ pavement width, 100’ right-of-way width).

MITIGATION MEASURE 14: Orange Street from Center Street to Garner Road
(Existing Plus Project Scenario One only)

- Widen roadway segment to proposed two-lane Collector standards (42’ pavement width, 66’ right-of-way width).

MITIGATION MEASURE 15: Orange Street from Garner Road to Columbia Avenue

- Widen roadway segment to proposed two-lane Collector standards (42’ pavement width, 66’ right-of-way width).

MITIGATION MEASURE 16: Orange Street from Columbia Avenue to Strong Street

- Widen roadway segment to proposed two-lane Collector standards (42’ pavement width, 66’ right-of-way width).

MITIGATION MEASURE 17: Orange Street from Strong Street to Oakley Avenue

- Widen roadway segment to proposed two-lane Collector standards (42' pavement width, 66' right-of-way width).

MITIGATION MEASURE 18: W La Cadena Drive from Chase Road to I-215 Southbound Ramps

- Widen roadway segment to two-lane Collector standards (40' pavement width, 66' right-of-way width).

MITIGATION MEASURE 19: Columbia Avenue from Primer Street to E La Cadena Drive

- Widen roadway segment to four-lane Arterial standards (80' pavement width, 100' right-of-way width).

MITIGATION MEASURE 20: Strong Street from Main Street to Orange Street

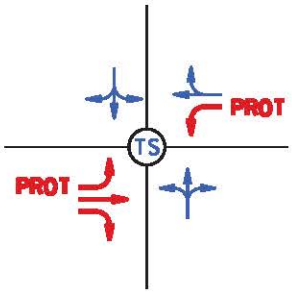
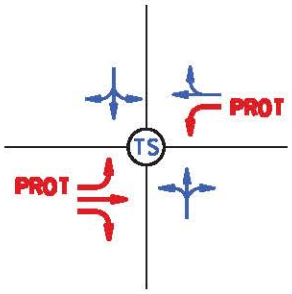
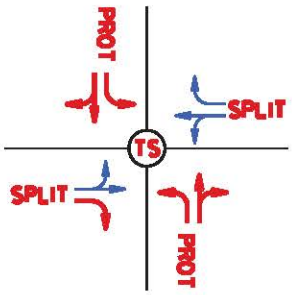
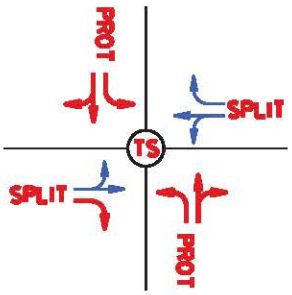
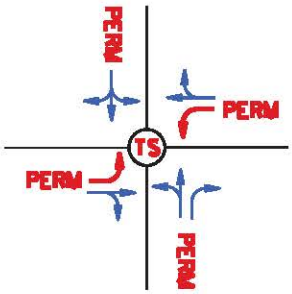
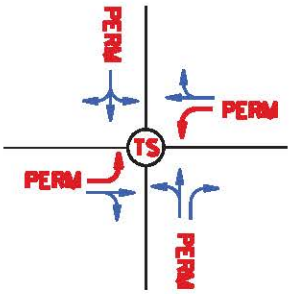
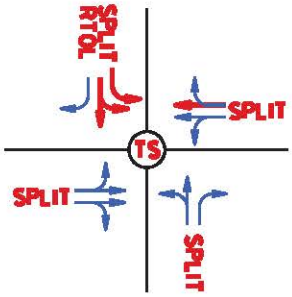
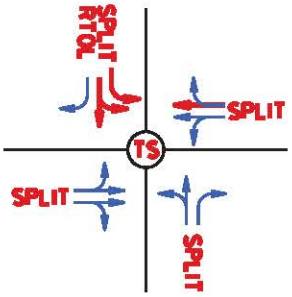
- Widen roadway segment to two-lane Collector standards (42' pavement width, 66' right-of-way width).

The above-listed improvements will mitigate the Specific Plan's impacts for each scenario under Existing Plus Project conditions. The recommended Existing Plus Project intersection and roadway segment mitigation measures as described above are also illustrated graphically in **Exhibit 27** and **Exhibit 28**, respectively. Conceptual exhibits showing the feasibility of the recommended intersection mitigation measures are provided in **Appendix H**.

It should be noted that a roundabout could be considered as a potential alternative to a traffic signal at some of the intersections where installation of a traffic signal is recommended. The feasibility of a roundabout instead of a traffic signal would be determined by the total volume entering/exiting the intersection and the availability of right-of-way to construct the appropriately sized roundabout for the intersection.

Table 28 summarizes the Existing Plus Project Scenario One and Scenario Two intersection operations during the peak hours with the recommended improvements as described above. The Existing Plus Project intersection operations worksheets with the recommended improvements are provided in **Appendix B**. As shown, the recommended improvements would mitigate the impacts to levels that are less than significant.

Table 29 summarizes the daily roadway segment operations with the recommended improvements under Existing Plus Project Scenario One and Scenario Two conditions as described above. As shown, the recommended improvements would mitigate the impacts to levels that are less than significant.

INTERSECTIONS	SCENARIO 1	SCENARIO 2
1 CENTER STREET / STEPHENS AVENUE		
2 W LA CADENA DRIVE/ I-215 SB RAMPS/ STEPHENS AVENUE		
4 WEST CENTER STREET/ HIGHGROVE PLACE		
6 W LA CADENA DRIVE/ I-215 SB RAMPS/ INTERCHANGE DRIVE		

LEGEND

= NEW INTERSECTION FEATURE

= PREVAILING INTERSECTION FEATURE

PERM = PERMITTED LEFT-TURN PHASING

PROT = PROTECTED LEFT-TURN PHASING

PROT/PERM = PROTECTED+PERMITTED LEFT-TURN PHASING

RTOL = RIGHT TURN OVERLAP PHASING

SPLIT = SPLIT PHASING

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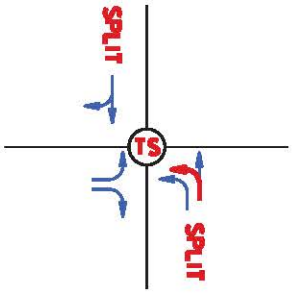
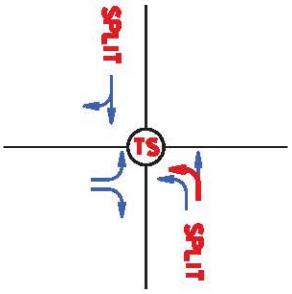
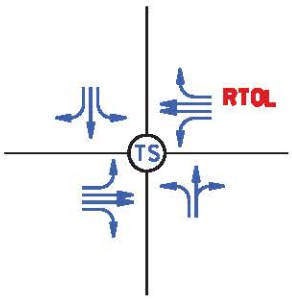
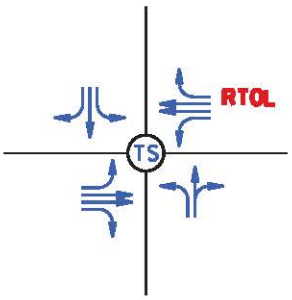
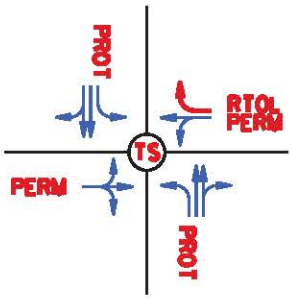
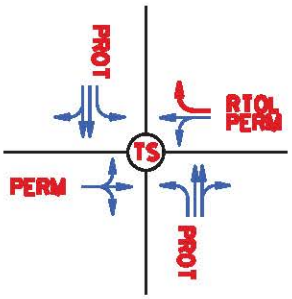
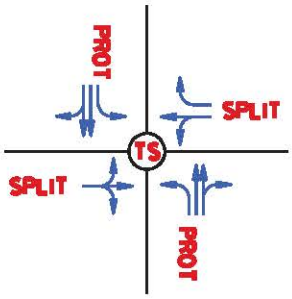
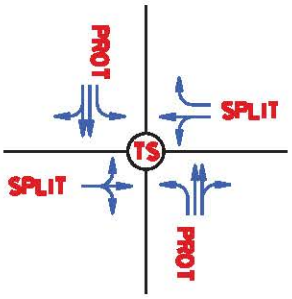
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EXHIBIT 27A

EXISTING + PROJECT STUDY INTERSECTION RECOMMENDED MITIGATION MEASURES NORTHSIDE SPECIFIC PLAN

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INTERSECTIONS	SCENARIO 1	SCENARIO 2
7 E LA CADENA DIRVE/ I-215 NB RAMPS		
8 COLUMBIA AVENUE/ E LA CADENA DRIVE		
9 MAIN STREET/ PLACENTIA LANE- CENTER STREET		
10 MAIN STREET/ GARNER ROAD		

LEGEND

= NEW INTERSECTION FEATURE

= PREVAILING INTERSECTION FEATURE

PERM = PERMITTED LEFT-TURN PHASING

PROT = PROTECTED LEFT-TURN PHASING

PROT/PERM = PROTECTED+PERMITTED LEFT-TURN PHASING

RTOL = RIGHT TURN OVERLAP PHASING

SPLIT = SPLIT PHASING

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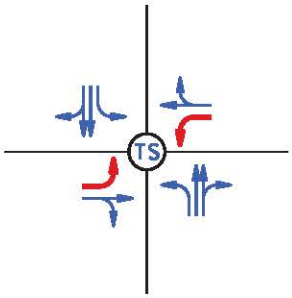
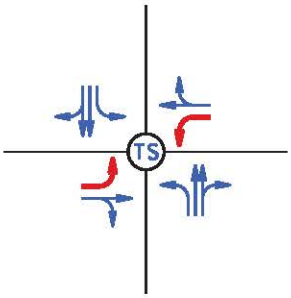
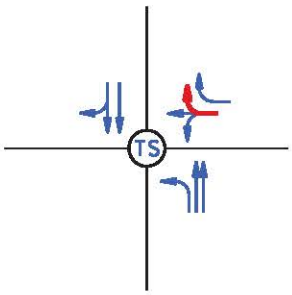
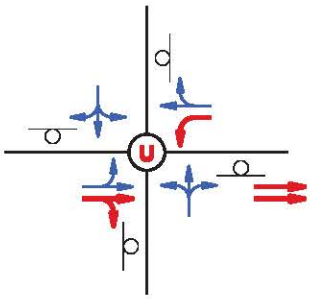
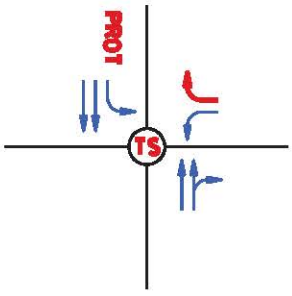
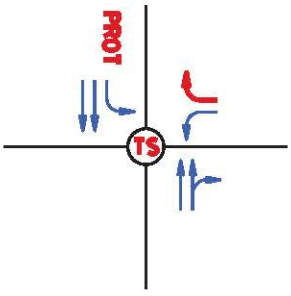
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EXHIBIT 27B

EXISTING + PROJECT STUDY INTERSECTION RECOMMENDED MITIGATION MEASURES NORTHSIDE SPECIFIC PLAN

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INTERSECTIONS	SCENARIO 1	SCENARIO 2
12 MAIN STREET/ STRONG STREET		
13 MAIN STREET/ OAKLEY AVENUE/ SR60 WB ON-RAMP		N/A
20 ORANGE STREET/ CENTER STREET		N/A
22 S RIVERSIDE AVENUE/ PELLISIER ROAD		

LEGEND

= NEW INTERSECTION FEATURE

= PREVAILING INTERSECTION FEATURE

PERM = PERMITTED LEFT-TURN PHASING

PROT = PROTECTED LEFT-TURN PHASING

PROT/PERM = PROTECTED+PERMITTED LEFT-TURN PHASING

RTOL = RIGHT TURN OVERLAP PHASING

SPLIT = SPLIT PHASING

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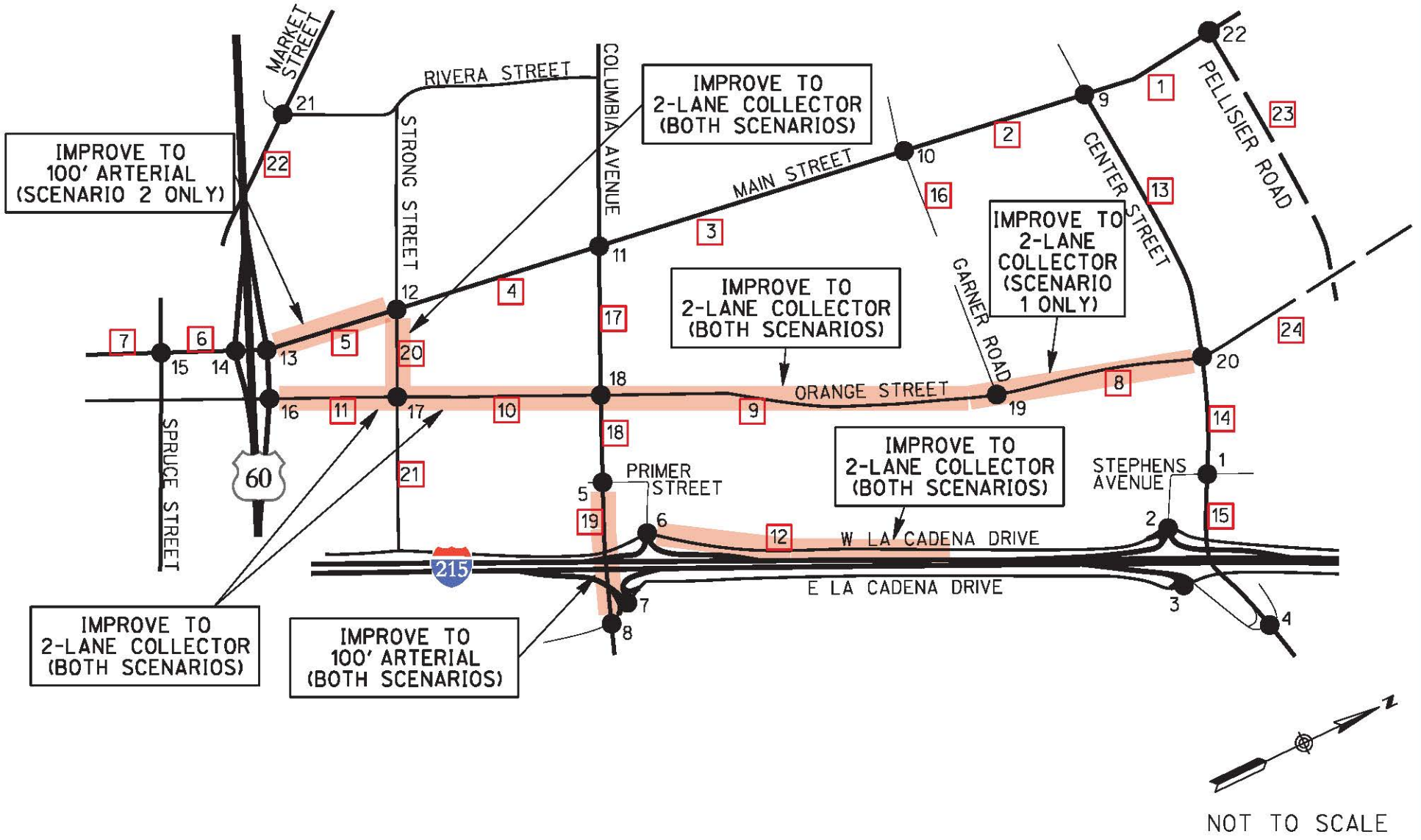
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EXHIBIT 27C

EXISTING + PROJECT STUDY INTERSECTION RECOMMENDED MITIGATION MEASURES NORTHSIDE SPECIFIC PLAN

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EXHIBIT 28

EXISTING + PROJECT ROADWAY SEGMENTS
RECOMMENDED MITIGATION MEASURES
NORTHSIDE SPECIFIC PLAN

LEGEND: = LOCATION OF RECOMMENDED ROADWAY IMPROVEMENT

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TABLE 28
NORTHSIDE SPECIFIC PLAN EXISTING + PROJECT
INTERSECTION OPERATIONS WITH RECOMMENDED MITIGATION

INTERSECTION	JURISDICTION	PEAK	EXISTING		SCENARIO 1				SCENARIO 2			
					EXISTING + PROJECT		EXISTING + PROJECT W/ MITIGATION		EXISTING + PROJECT		EXISTING + PROJECT W/ MITIGATION	
			DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1 Center Street / Stephens Avenue (S)	**County of Riverside**											
		AM peak	39.8	D	**125.6**	**F**	17.2	B	**93.5**	**F**	15.4	B
		PM peak	23.6	C	47.4	D	17.4	B	36.0	D	15.7	B
2 W La Cadena Drive / I-215 SB Ramps / Stephens Avenue	**County of Riverside**											
		AM peak	**37.1**	**E**	**157.0**	**F**	47.5	D	**109.0**	**F**	38.5	D
		PM peak	**52.0**	**F**	**179.3**	**F**	36.4	D	**130.4**	**F**	40.2	D
4 West Center Street / Highgrove Place	**County of Riverside**											
		AM peak	22.2	C	**139.8**	**F**	8.7	A	**81.9**	**F**	8.1	A
		PM peak	19.2	C	**82.4**	**F**	9.6	A	**55.3**	**F**	8.9	A
6 W La Cadena Drive / I-215 SB Ramps / Interchange Drive	**City of Riverside**											
		AM peak	23.5	C	**60.0**	**F**	24.6	C	**39.7**	**E**	21.5	C
		PM peak	**50.2**	**F**	**125.3**	**F**	40.6	D	**87.4**	**F**	40.4	D
7 E La Cadena Drive / I-215 NB Ramps	**City of Riverside**											
		AM peak	**>200**	**F**	**>200**	**F**	15.8	B	**>200**	**F**	14.4	B
		PM peak	**>200**	**F**	**>200**	**F**	15.0	B	**>200**	**F**	14.0	B
8 Columbia Avenue / E La Cadena Drive	**City of Riverside**											
		AM peak	26.0	C	**58.0**	**E**	33.8	C	43.2	D	25.4	C
		PM peak	38.9	D	**77.9**	**E**	29.5	C	**63.8**	**E**	24.7	C
9 Main Street / Placentia Lane	**City of Riverside**											
		AM peak	**57.8**	**F**	**>200**	**F**	30.5	C	**>200**	**F**	33.5	C
		PM peak	**>200**	**F**	**>200**	**F**	50.6	D	**>200**	**F**	40.7	D
10 Main Street / Garner Road	**City of Riverside**											
		AM peak	**74.2**	**F**	**>200**	**F**	17.7	B	**85.6**	**F**	15.1	B
		PM peak	**83.5**	**F**	**114.7**	**F**	13.9	B	**58.7**	**F**	12.3	B

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TABLE 28
NORTHSIDE SPECIFIC PLAN EXISTING + PROJECT
INTERSECTION OPERATIONS WITH RECOMMENDED MITIGATION

INTERSECTION	JURISDICTION	PEAK	EXISTING		SCENARIO 1				SCENARIO 2			
					EXISTING + PROJECT		EXISTING + PROJECT W/ MITIGATION		EXISTING + PROJECT		EXISTING + PROJECT W/ MITIGATION	
			DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
12 Main Street / Strong Street (S)	**City of Riverside**											
		AM peak	26.1	C	30.6	C	11.7	B	29.4	C	11.3	B
		PM peak	39.9	D	**55.8**	**E**	16.4	B	**57.0**	**E**	15.6	B
13 Main Street / Oakley Avenue / SR60 WB ON Ramp	**City of Riverside**											
		AM peak	37.7	D	46.0	D	26.8	C	-	-	-	-
		PM peak	37.3	D	42.5	D	30.4	C	-	-	-	-
20 Orange Street / Center Street (U)	**City of Riverside**											
		AM peak	9.1	A	15.0	B	13.3	B	-	-	-	-
		PM peak	9.9	A	23.9	C	14.6	B	-	-	-	-
22 S. Riverside Avenue / Pellisier Road (U)	**City of Colton**											
		AM peak	-	-	16.6	B	17.8	B	**>200**	**F**	20.4	C
		PM peak	-	-	**>200**	**F**	18.1	B	**>200**	**F**	23.0	C

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).

DELAY is measured in seconds

LOS = Level of Service

NB = Northbound, SB = Southbound, etc.

T=thru movement, R=right-turn movement, etc.

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TABLE 29
EXISTING PLUS PROJECT ROADWAY SEGMENT OPERATIONS
WITH RECOMMENDED MITIGATION

	STREET SEGMENT	JURISDICTION	EXISTING PLUS PROJECT CONDITIONS							
			WITHOUT MITIGATION				WITH MITIGATION			
			CLASSIFICATION / NO. LANES	Capacity[1]	ADT	LOS	CLASSIFICATION / NO. LANES	Capacity[1]	ADT	LOS
SPECIFIC PLAN SCENARIO ONE										
8	Orange Street, Center Street to Garner Road	City of Riverside	LOCAL / 2	3,100	4,027	**E**	66' COLLECTOR / 2	12,500	4,027	A
9	Orange Street, Garner Road to Columbia Avenue	City of Riverside	LOCAL / 2	3,100	6,428	**E**	66' COLLECTOR / 2	12,500	6,428	A
10	Orange Street, Columbia Avenue to Strong Street	City of Riverside	LOCAL / 2	3,100	4,708	**E**	66' COLLECTOR / 2	12,500	4,708	A
11	Orange Street, Strong Street to Oakley Avenue	City of Riverside	LOCAL / 2	3,100	5,290	**E**	66' COLLECTOR / 2	12,500	5,290	A
12	W. La Cadena Drive, Chase Road to I-215 SB Ramps	City of Riverside	LOCAL / 2	3,100	7,404	**E**	66' COLLECTOR / 2	12,500	7,404	A
19	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	*18,000*	19,959	**E**	88' ARTERIAL / 4	22,000	19,959	D
20	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	*18,000*	29,468	**E**	100' ARTERIAL / 4	33,000	29,468	C
21	Strong Street, Main Street to Orange Street	City of Riverside	LOCAL / 2	3,100	3,867	**E**	66' COLLECTOR / 2	12,500	3,867	A
SPECIFIC PLAN SCENARIO TWO										
5	Main Street, Strong Street to Oakley Avenue	City of Riverside	88' ARTERIAL / 4	22,000	22,212	**E**	100' ARTERIAL / 4	33,000	22,212	A
9	Orange Street, Garner Road to Columbia Avenue	City of Riverside	LOCAL / 2	3,100	4,511	**E**	66' COLLECTOR / 2	12,500	4,511	A
10	Orange Street, Columbia Avenue to Strong Street	City of Riverside	LOCAL / 2	3,100	4,583	**E**	66' COLLECTOR / 2	12,500	4,583	A
11	Orange Street, Strong Street to Oakley Avenue	City of Riverside	LOCAL / 2	3,100	5,235	**E**	66' COLLECTOR / 2	12,500	5,235	A
12	West La Cadena Drive, Chase Road to I-215 SB Ramps	City of Riverside	LOCAL / 2	3,100	6,520	**E**	66' COLLECTOR / 2	12,500	6,520	A
20	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	*18,000*	25,303	**E**	100' ARTERIAL / 4	33,000	25,303	B
21	Strong Street, Main Street to Orange Street	City of Riverside	LOCAL / 2	3,100	3,698	**E**	66' COLLECTOR / 2	12,500	3,698	A

Footnote:
V/C and LOS shown in **bold** indicate deficient LOS based on ADT and roadway capacity.
Roadway classification shown in *italics* indicates a change proposed by the Specific Plan from the existing classification.

Recommended Horizon Year 2040 Mitigation Measures: Study Intersections

The following improvements are recommended to mitigate the identified significant impacts at the study intersections, which apply to all Specific Plan scenarios except where noted:

MITIGATION MEASURE 21: W La Cadena Drive / I-215 SB Ramps / Stephens Avenue
(Same as Existing Plus Project Mitigation Measure 2)

- Install a traffic signal at the intersection.
- Restripe south leg of intersection to provide one left-turn lane and one shared through/ right-turn lane on the northbound approach.
- Restripe north leg of intersection to provide one left-turn lane and one shared through/ right-turn lane on the southbound approach.
- Widen west leg of intersection to construct one shared left-turn/through lane and one right-turn lane on the eastbound approach.
- Provide protected left-turn phasing on the northbound and southbound approaches.
- Provide split phasing on the eastbound and westbound approaches.

MITIGATION MEASURE 22: Center Street / Highgrove Place
(Same as Existing Plus Project Mitigation Measure 3 except for roadway improvements)

- Install a traffic signal at the intersection.
- Provide permitted left-turn phasing on all four approaches.

MITIGATION MEASURE 23: W La Cadena Drive / I-215 SB Ramps / Interchange Drive
(Same as Existing Plus Project Mitigation Measure 4)

- Install a traffic signal at the intersection.
- Widen north leg of intersection to construct one left-turn lane, one shared left-turn/ through lane, and one right-turn lane on the southbound approach.
- Widen westbound approach (Southbound I-215 Off-Ramp) to construct one shared left-turn/through lane and one shared through/right-turn lane.
- Provide split phasing for all four intersection approaches.
- Provide a right-turn overlap phase on the southbound approach.

MITIGATION MEASURE 24: E La Cadena Drive / I-215 NB Ramps
(Same as Existing Plus Project Mitigation Measure 5)

- Install a traffic signal at the intersection.
- Restripe northbound approach to provide one left-turn lane and one shared left-turn/through lane.
- Restripe the Northbound I-215 On-Ramp to eliminate the existing southbound channelized right-turn movement and provide a second receiving lane for the recommended second northbound left-turn lane.
- Provide split phasing on the northbound and southbound approaches.

MITIGATION MEASURE 25: Columbia Avenue / E La Cadena Drive
(Applies to all scenarios except Scenario Two Without Orange Street Extension)

- Modify signal phasing to provide a right-turn overlap phase on the westbound approach.
- Restripe eastbound approach to convert the existing right-turn lane to a shared through/right-turn lane, which will provide three through lanes on the eastbound approach.

MITIGATION MEASURE 26: Main Street / Placentia Lane-Center Street
(Same as Existing Plus Project Mitigation Measure 7 except for roadway improvements)

- Install a traffic signal at the intersection.
- Provide protected left-turn phasing on the northbound and southbound approaches.
- Provide permitted left-turn phasing on the eastbound and westbound approaches.
- Provide a right-turn overlap phase on the westbound approach.

MITIGATION MEASURE 27: Main Street / Garner Road
(Same as Existing Plus Project Mitigation Measure 8)

- Install a traffic signal at the intersection.
- Provide protected left-turn phasing on the northbound and southbound approaches.
- Provide split phasing on the eastbound and westbound approaches.

MITIGATION MEASURE 28: Main Street / Oakley Avenue / SR60 WB On Ramp
(Same as Existing Plus Project Mitigation Measure 10; applies to all scenarios except Scenario Two Without Orange Street Extension)

- Restripe westbound approach to provide one shared left-turn/through/right-turn lane and one right-turn lane.

MITIGATION MEASURE 29: Main Street / Spruce Street
(Applies to all scenarios except Scenario Two Without Orange Street Extension)

- Transition the existing shared through/right-turn lane to a dedicated right-turn lane. The other Specific Plan scenarios assume a single shared through/right-turn lane per proposed road diet on Main Street.

MITIGATION MEASURE 30: Orange Street / Columbia Avenue
(Applies to Scenario One Without and With Orange Street Extension only)

- Restripe the north leg of intersection to provide one left-turn lane and one shared through/right-turn lane on the southbound approach.
- Restripe the south leg of intersection to provide one left-turn lane and one shared through/right-turn lane on the northbound approach.

MITIGATION MEASURE 31: Orange Street / Columbia Avenue
(Applies to Scenario One With Orange Street Extension only)

- Widen westbound approach to construct a dedicated right-turn lane.

MITIGATION MEASURE 32: Orange Street / Center Street
(Applies to Scenario One With Orange Street Extension only)

- Restripe westbound approach to provide one left-turn lane, one through lane and one right-turn lane.

MITIGATION MEASURE 33: South Riverside Avenue / Future Pellisier Road
(Same as Existing Plus Project Mitigation Measure 14)

- Install a traffic signal at the intersection.
- Construct one left-turn lane and one right-turn lane on the westbound approach.
- Provide protected left-turn phasing on the southbound approach.

Note: It is recommended that the City of Riverside enter into a MOU with the City of Colton to allow for the transfer of fair share fees and promote completion of the identified improvements at the South Riverside Avenue / Pellisier Road intersection.

Recommended Horizon Year 2040 Mitigation Measures: Study Roadway Segments

The following improvements are recommended to mitigate the identified significant impacts at the study roadway segments under Horizon Year 2040 conditions, which apply to all Specific Plan scenarios except where noted:

MITIGATION MEASURE 34: Columbia Avenue from Orange Street to Primer Street

- Widen roadway segment to four-lane Arterial standards (80’ pavement width, 100’ right-of-way width).

MITIGATION MEASURE 35: Columbia Avenue from Primer Street to E La Cadena Drive *(Applies to Scenario Two Without Orange Street Extension only)*

- Widen roadway segment to four-lane Arterial standards (80’ pavement width, 100’ right-of-way width).

MITIGATION MEASURE 36: Columbia Avenue from Primer Street to E La Cadena Drive *(Applies to all scenarios except Scenario Two Without Orange Street Extension)*

- Widen roadway segment to six-lane Arterial standards (100’ pavement width, 120’ right-of-way width).

MITIGATION MEASURE 37: Pellisier Road from S Riverside Avenue to Roquet Ranch
(Applies to Scenario Two Without Orange Street Extension only)

- Improve roadway segment to four-lane Secondary standards per City of Colton General Plan.

Note: It is recommended that the City of Riverside enter into a MOU with the City of Colton to allow for the transfer of fair share fees and promote completion of the identified improvements to Pellisier Road.

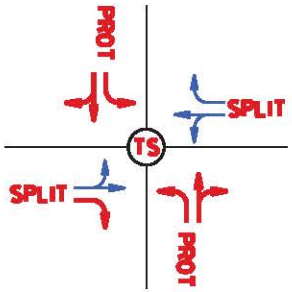
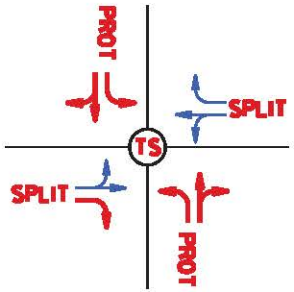
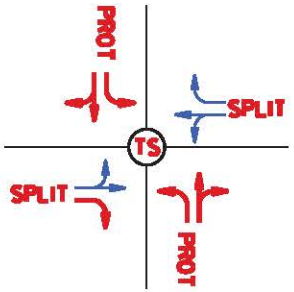
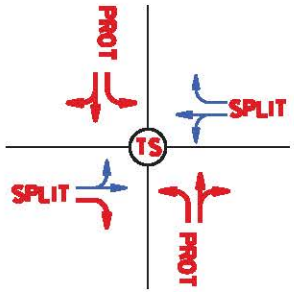
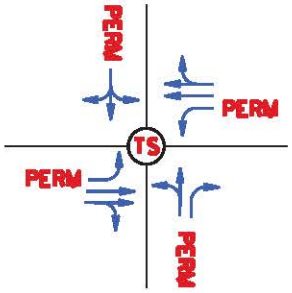
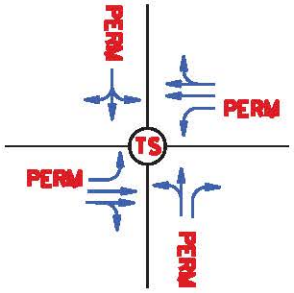
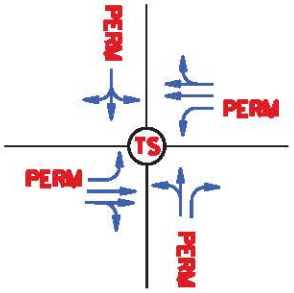
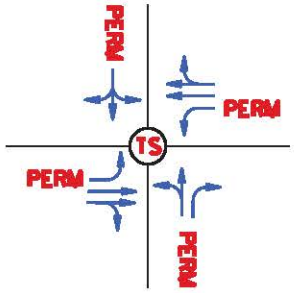
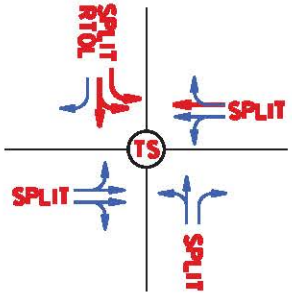
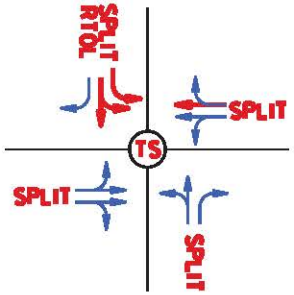
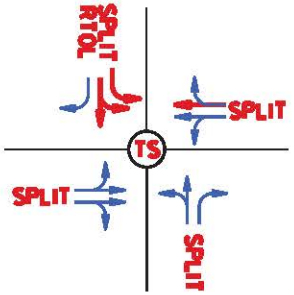
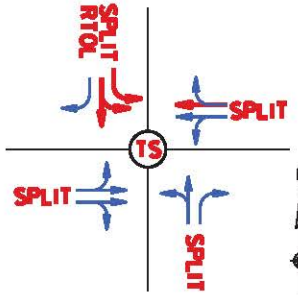
The above-listed improvements will mitigate the Specific Plan's impacts for each scenario under Horizon Year 2040 conditions. The recommended Horizon Year 2040 intersection and roadway segment mitigation measures for each scenario as described above are also illustrated graphically in **Exhibit 29** and **Exhibit 30**, respectively. Conceptual exhibits showing the feasibility of the recommended intersection mitigation measures are provided in **Appendix H**.

It should be noted that a roundabout could be considered as a potential alternative to a traffic signal at some of the intersections where installation of a traffic signal is recommended. The feasibility of a roundabout instead of a traffic signal would be determined by the total volume entering/exiting the intersection and the availability of right-of-way to construct the appropriately sized roundabout for the intersection.

Table 30 and **Table 31** summarize the Horizon Year 2040 intersection operations during the peak hours with the recommended improvements as described above for Specific Plan Scenario One and Scenario Two, respectively. The intersection operations worksheets with the recommended improvements are provided in **Appendix B**.

As shown, the recommended improvements would mitigate the impacts at the study intersections to levels that are less than significant. LOS E operations would still occur at two intersections adjacent to I-215, but as stated in Policy CCM-2.3 of the City's General Plan Mobility Element, LOS E is allowed on a case-by-case basis at key locations such as freeway interchanges.

Table 32 and **Table 33** summarize the Horizon Year 2040 daily roadway segment operations with the recommended improvements as described above for Specific Plan Scenario One and Scenario Two, respectively. As shown, the recommended improvements would mitigate the impacts to levels that are less than significant.

INTERSECTIONS	ALT 1 W/OUT ORANGE	ALT 2 W/OUT ORANGE	ALT 1 W/ ORANGE	ALT 2 W/ ORANGE
2 W LA CADENA DRIVE/ I-215 SB RAMPS/ STEPHENS AVENUE				
4 WEST CENTER STREET/ HIGHGROVE PLACE				
6 W LA CADENA DRIVE/ I-215 SB RAMPS/ INTERCHANGE DRIVE				

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EXHIBIT 29A

HORIZON YEAR 2040 STUDY INTERSECTION RECOMMENDED MITIGATION MEASURES NORTHSIDE SPECIFIC PLAN

LEGEND

= NEW INTERSECTION FEATURE

= PREVAILING INTERSECTION FEATURE

PERM = PERMITTED LEFT-TURN PHASING

PROT = PROTECTED LEFT-TURN PHASING

PROT/PERM = PROTECTED+PERMITTED LEFT-TURN PHASING

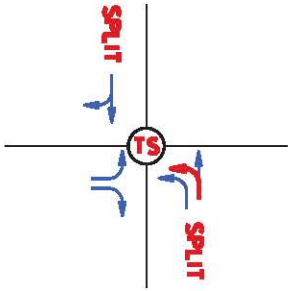
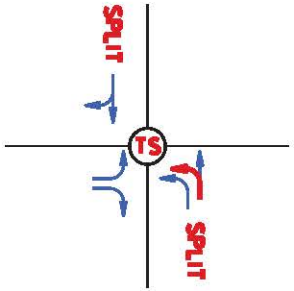
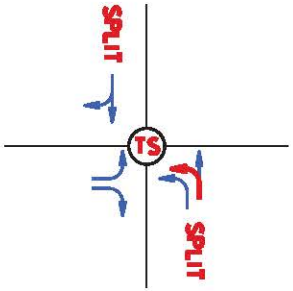
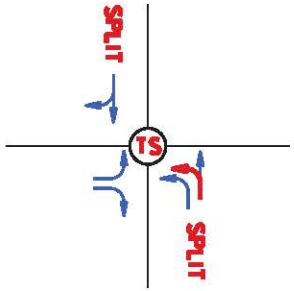
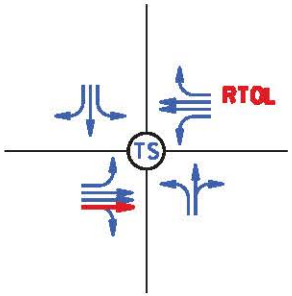
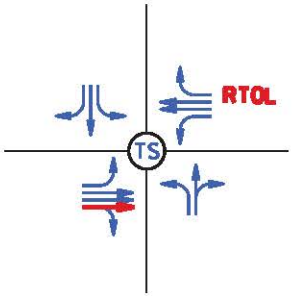
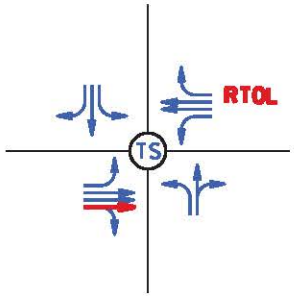
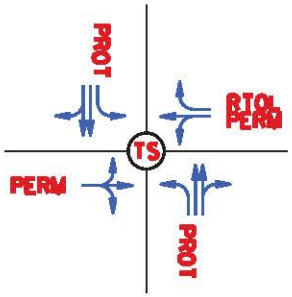
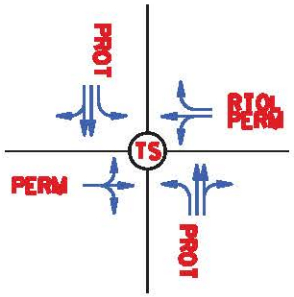
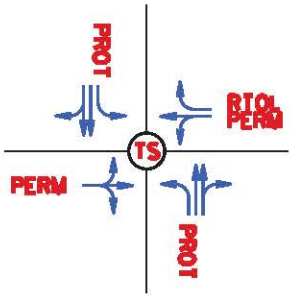
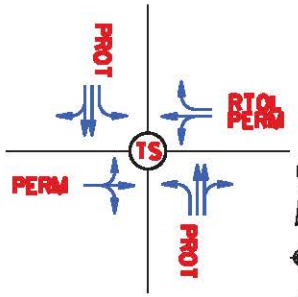
RTOL = RIGHT TURN OVERLAP PHASING

SPLIT = SPLIT PHASING

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INTERSECTIONS	ALT 1 W/OUT ORANGE	ALT 2 W/OUT ORANGE	ALT 1 W/ ORANGE	ALT 2 W/ ORANGE
7 E LA CADENA DIRVE/ I-215 NB RAMPS				
8 COLUMBIA AVENUE/ E LA CADENA DRIVE		N/A		
9 MAIN STREET/ PLACENTIA LANE- CENTER STREET				

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EXHIBIT 29B

HORIZON YEAR 2040 STUDY INTERSECTION RECOMMENDED MITIGATION MEASURES NORTHSIDE SPECIFIC PLAN

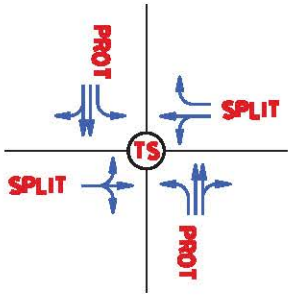
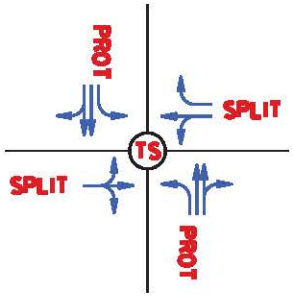
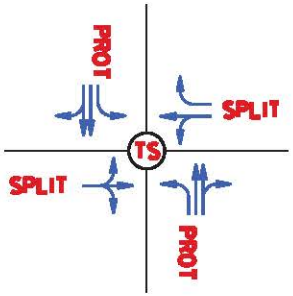
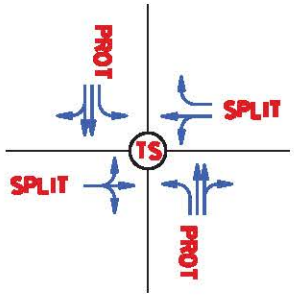
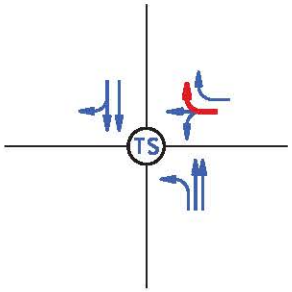
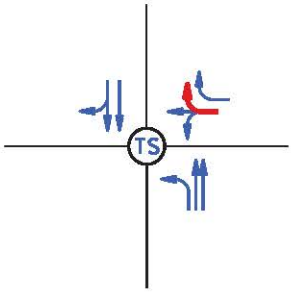
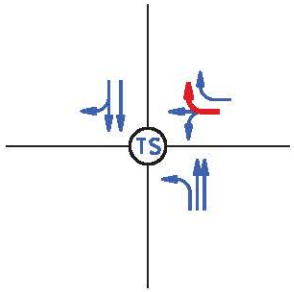
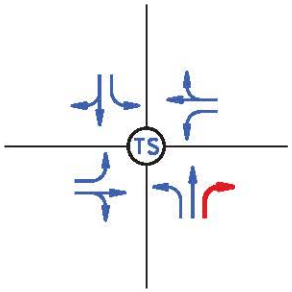
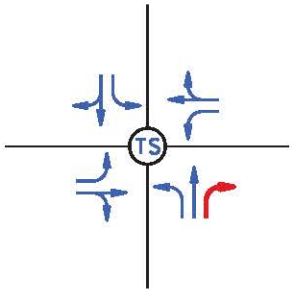
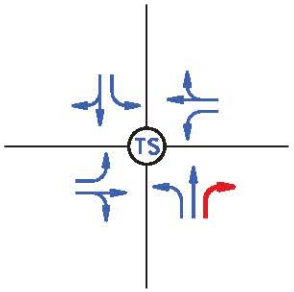
LEGEND

= NEW INTERSECTION FEATURE
= PREVAILING INTERSECTION FEATURE
PERM = PERMITTED LEFT-TURN PHASING
PROT = PROTECTED LEFT-TURN PHASING
PROT/PERM = PROTECTED+PERMITTED LEFT-TURN PHASING
RTOL = RIGHT TURN OVERLAP PHASING
SPLIT = SPLIT PHASING

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INTERSECTIONS	ALT 1 W/OUT ORANGE	ALT 2 W/OUT ORANGE	ALT 1 W/ ORANGE	ALT 2 W/ ORANGE
10 MAIN STREET/ GARNER ROAD				
13 MAIN STREET/ OAKLEY AVENUE/ SR60 WB ON-RAMP		N/A		
15 MAIN STREET/ SPRUCE STREET				



NTS

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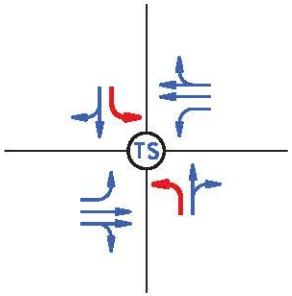
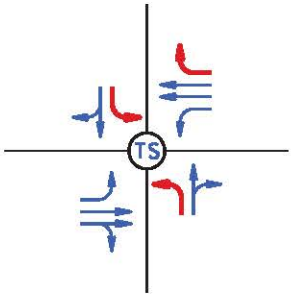
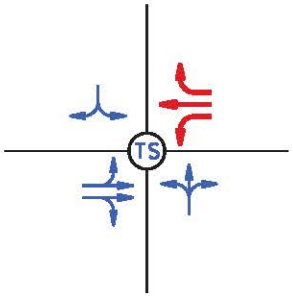
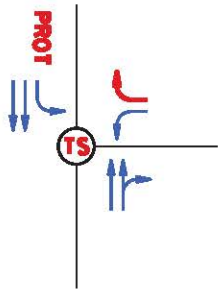
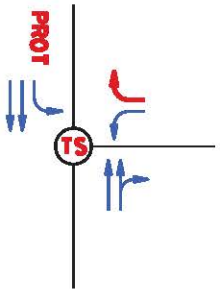
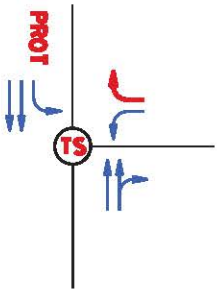
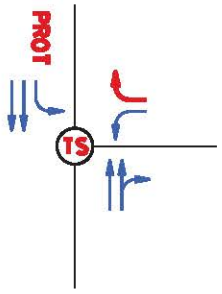
EXHIBIT 29C

HORIZON YEAR 2040 STUDY INTERSECTION RECOMMENDED MITIGATION MEASURES NORTHSIDE SPECIFIC PLAN

LEGEND

= NEW INTERSECTION FEATURE
= PREVAILING INTERSECTION FEATURE
PERM = PERMITTED LEFT-TURN PHASING
PROT = PROTECTED LEFT-TURN PHASING
PROT/PERM = PROTECTED+PERMITTED LEFT-TURN PHASING
RTOL = RIGHT TURN OVERLAP PHASING
SPLIT = SPLIT PHASING

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INTERSECTIONS	ALT 1 W/OUT ORANGE	ALT 2 W/OUT ORANGE	ALT 1 W/ ORANGE	ALT 2 W/ ORANGE
18 ORANGE STREET/ COLUMBIA AVENUE		N/A		N/A
20 ORANGE STREET/ CENTER STREET	N/A	N/A		N/A
22 S RIVERSIDE AVENUE/ PELLISIER ROAD				

NTS

EXHIBIT 29D

HORIZON YEAR 2040 STUDY INTERSECTION RECOMMENDED MITIGATION MEASURES NORTHSIDE SPECIFIC PLAN

LEGEND

= NEW INTERSECTION FEATURE
= PREVAILING INTERSECTION FEATURE
PERM = PERMITTED LEFT-TURN PHASING
PROT = PROTECTED LEFT-TURN PHASING
PROT/PERM = PROTECTED+PERMITTED LEFT-TURN PHASING
RTOL = RIGHT TURN OVERLAP PHASING
SPLIT = SPLIT PHASING

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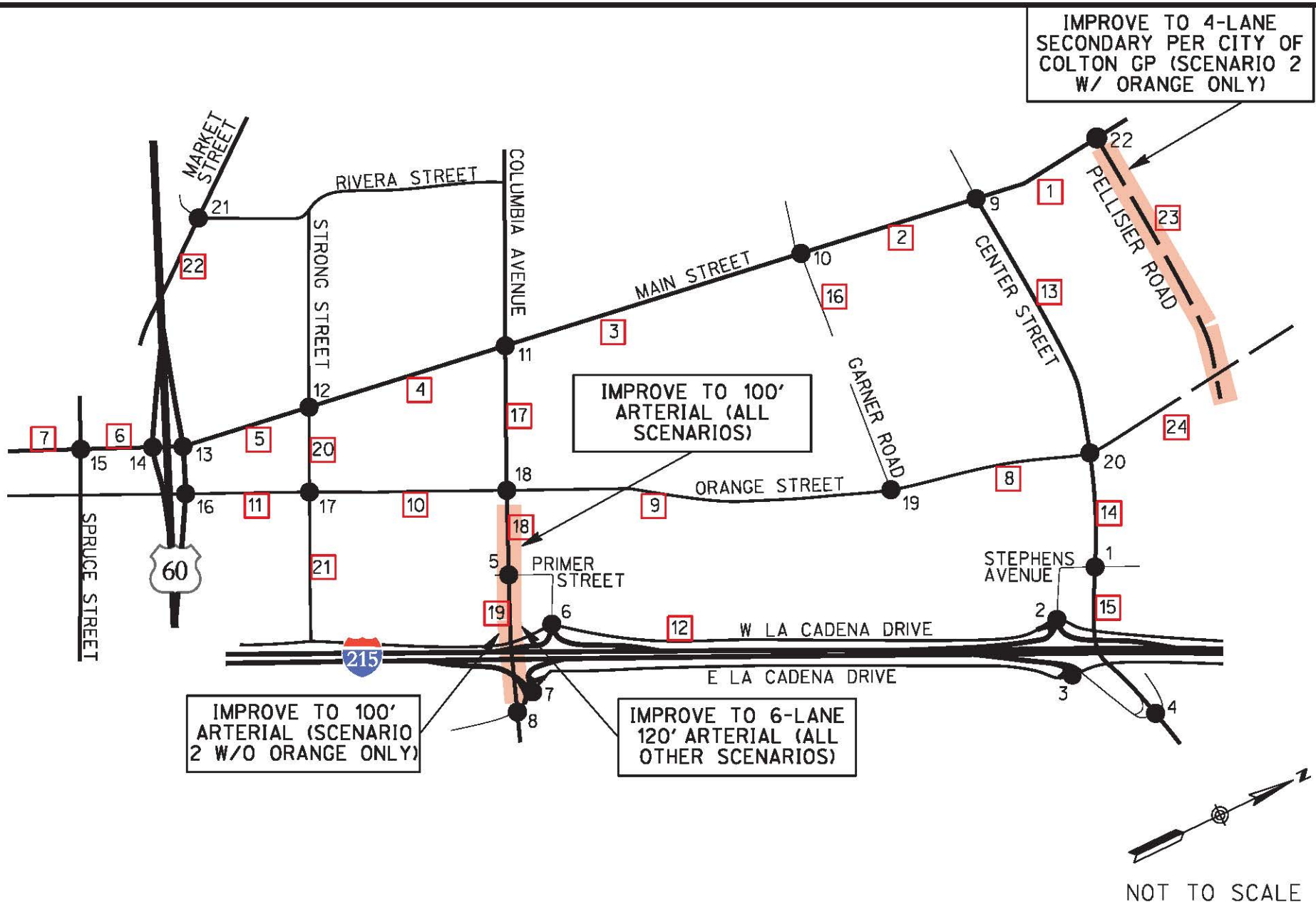


EXHIBIT 30

HORIZON YEAR 2040 ROADWAY SEGMENTS RECOMMENDED MITIGATION MEASURES NORTHSIDE SPECIFIC PLAN

LEGEND: = LOCATION OF RECOMMENDED ROADWAY IMPROVEMENT

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TABLE 30
NORTHSIDE SPECIFIC PLAN SCENARIO ONE
INTERSECTION OPERATIONS WITH RECOMMENDED MITIGATION

	INTERSECTION	JURISDICTION	PEAK	2040 WITHOUT PROJECT		WITHOUT ORANGE STREET EXTENSION				WITH ORANGE STREET EXTENSION			
						2040 + PROJECT		2040+ PROJECT W/ MITIGATION		2040 + PROJECT		2040+ PROJECT W/ MITIGATION	
				DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
2	**W La Cadena Drive / I-215 SB Ramps / Stephens Avenue**	**County of Riverside**	AM peak	**79.1**	**F**	**184.7**	**F**	46.7	D	**>200**	**F**	**74.3**	**E**
			PM peak	**151.4**	**F**	**153.8**	**F**	42.0	D	**>200**	**F**	**71.5**	**E**
4	**West Center Street / Highgrove Place**	**County of Riverside**	AM peak	20.5	C	**67.9**	**F**	7.4	A	**187.3**	**F**	7.8	A
			PM peak	20.9	C	**73.4**	**F**	8.4	A	**>200**	**F**	9.0	A
6	**W La Cadena Drive / I-215 SB Ramps / Interchange Drive**	**City of Riverside**	AM peak	**44.0**	**E**	**71.2**	**F**	23.8	C	**92.5**	**F**	28.3	C
			PM peak	**106.5**	**F**	**163.6**	**F**	45.5	D	**199.2**	**F**	54.1	D
7	**E La Cadena Drive / I-215 NB Ramps**	**City of Riverside**	AM peak	**>200**	**F**	**>200**	**F**	15.2	B	**>200**	**F**	16.0	B
			PM peak	**>200**	**F**	**>200**	**F**	16.7	B	**>200**	**F**	18.1	B
8	**Columbia Avenue / E La Cadena Drive**	**City of Riverside**	AM peak	38.3	D	53.7	D	36.9	D	**63.6**	**E**	41.4	D
			PM peak	35.0	D	47.0	D	37.2	D	**57.6**	**E**	38.8	D
9	**Main Street / Placentia Lane**	**City of Riverside**	AM peak	**153.7**	**F**	**>200**	**F**	29.0	C	**>200**	**F**	23.0	C
			PM peak	**>200**	**F**	**111.4**	**F**	51.1	D	**112.7**	**F**	52.5	D
10	**Main Street / Garner Road**	**City of Riverside**	AM peak	**>200**	**F**	**>200**	**F**	17.6	B	**>200**	**F**	17.6	B
			PM peak	**>200**	**F**	**>200**	**F**	13.6	B	**>200**	**F**	13.7	B

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TABLE 30
NORTHSIDE SPECIFIC PLAN SCENARIO ONE
INTERSECTION OPERATIONS WITH RECOMMENDED MITIGATION

INTERSECTION	JURISDICTION	PEAK	2040 WITHOUT PROJECT		WITHOUT ORANGE STREET EXTENSION				WITH ORANGE STREET EXTENSION			
					2040 + PROJECT		2040+ PROJECT W/ MITIGATION		2040 + PROJECT		2040+ PROJECT W/ MITIGATION	
			DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
13 Main Street / Oakley Avenue / SR60 WB ON Ramp	**City of Riverside**											
		AM peak	**64.3**	**E**	**73.1**	**E**	41.0	D	**77.1**	**E**	44.2	D
		PM peak	**79.3**	**E**	**68.5**	**E**	**55.4**	**E**	**67.3**	**E**	**62.1**	**E**
15 Main Street / Spruce Street (S)	**City of Riverside**											
		AM peak	11.9	B	13.9	B	13.7	B	14.3	B	14.0	B
		PM peak	15.9	B	24.4	C	22.2	C	24.7	C	22.2	C
18 Orange Street / Columbia Avenue (S)	**City of Riverside**											
		AM peak	16.7	B	28.5	C	24.2	C	32.2	C	24.1	C
		PM peak	20.5	C	23.4	C	26.9	C	32.8	C	25.3	C
22 S. Riverside Avenue / Pellisier Road (U)	**City of Colton**											
		AM peak	**42.8**	**E**	**>200**	**F**	18.2	B	**>200**	**F**	14.9	B
		PM peak	**49.2**	**E**	**>200**	**F**	23.5	C	**>200**	**F**	21.7	C

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).

DELAY is measured in seconds

LOS = Level of Service

NB = Northbound, SB = Southbound, etc.

T=thru movement, R=right-turn movement, etc.

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TABLE 31
NORTHSIDE SPECIFIC PLAN SCENARIO TWO
INTERSECTION OPERATIONS WITH RECOMMENDED MITIGATION

	INTERSECTION	JURISDICTION	PEAK	2040 WITHOUT PROJECT		WITHOUT ORANGE STREET EXTENSION				WITH ORANGE STREET EXTENSION			
						2040 + PROJECT		2040+ PROJECT W/ MITIGATION		2040 + PROJECT		2040+ PROJECT W/ MITIGATION	
				DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
2	W La Cadena Drive / I-215 SB Ramps / Stephens Avenue	County of Riverside	AM peak	**79.1**	**F**	**124.1**	**F**	42.0	D	**>200**	**F**	**76.8**	**E**
			PM peak	**151.4**	**F**	**126.5**	**F**	28.4	C	**>200**	**F**	**65.2**	**E**
4	West Center Street / Highgrove Place	County of Riverside	AM peak	20.5	C	**43.8**	**E**	7.0	A	**141.3**	**F**	7.7	A
			PM peak	20.9	C	34.6	D	7.4	A	**>200**	**F**	8.8	A
6	W La Cadena Drive / I-215 SB Ramps / Interchange Drive	City of Riverside	AM peak	**44.0**	**E**	**50.3**	**F**	24.2	C	**75.9**	**F**	30.8	C
			PM peak	**106.5**	**F**	**76.1**	**F**	28.7	C	**171.2**	**F**	48.0	D
7	E La Cadena Drive / I-215 NB Ramps	City of Riverside	AM peak	**>200**	**F**	**>200**	**F**	13.9	B	**>200**	**F**	15.2	B
			PM peak	**>200**	**F**	**>200**	**F**	13..6	B	**>200**	**F**	17.0	B
8	Columbia Avenue / E La Cadena Drive	City of Riverside	AM peak	38.3	D	-	-	-	-	53.7	D	36.9	D
			PM peak	35.0	D	-	-	-	-	51.9	D	39.4	D
9	Main Street / Placentia Lane	City of Riverside	AM peak	**153.7**	**F**	**>200**	**F**	32.2	C	**>200**	**F**	27.1	C
			PM peak	**>200**	**F**	**>200**	**F**	37.2	D	**112.2**	**F**	53.6	D
10	Main Street / Garner Road	City of Riverside	AM peak	**>200**	**F**	**194.4**	**F**	15.2	B	**194.4**	**F**	15.1	B
			PM peak	**>200**	**F**	**71.1**	**F**	11.3	B	**160.0**	**F**	12.3	B

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TABLE 31
NORTHSIDE SPECIFIC PLAN SCENARIO TWO
INTERSECTION OPERATIONS WITH RECOMMENDED MITIGATION

INTERSECTION	JURISDICTION	PEAK	2040 WITHOUT PROJECT		WITHOUT ORANGE STREET EXTENSION				WITH ORANGE STREET EXTENSION			
					2040 + PROJECT		2040+ PROJECT W/ MITIGATION		2040 + PROJECT		2040+ PROJECT W/ MITIGATION	
			DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
13 Main Street / Oakley Avenue / SR60 WB ON Ramp	**City of Riverside**											
		AM peak	**64.3**	**E**	**-**	**-**	-	-	**69.4**	**E**	40.9	D
		PM peak	**79.3**	**E**	**-**	**-**	-	-	**65.2**	**E**	52.4	D
15 Main Street / Spruce Street (S)	**City of Riverside**											
		AM peak	11.9	B	**-**	**-**	-	-	13.8	B	13.5	B
		PM peak	15.9	B	**-**	**-**	-	-	25.7	C	21.1	C
22 S. Riverside Avenue / Pellisier Road (U)	**City of Colton**											
		AM peak	**42.8**	**E**	**>200**	**F**	23.1	C	**>200**	**F**	19.9	B
		PM peak	**49.2**	**E**	**>200**	**F**	22.4	C	**>200**	**F**	27.4	C

- Delays and Level of Service calculated utilizing the methodologies described in Chapters 18, 19, & 20 of the 6th Edition Highway Capacity Manual (HCM 6).

DELAY is measured in seconds

LOS = Level of Service

NB = Northbound, SB = Southbound, etc.

T=thru movement, R=right-turn movement, etc.

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TABLE 32
HORIZON YEAR 2040 WITH SPECIFIC PLAN SCENARIO ONE ROADWAY SEGMENT OPERATIONS WITH RECOMMENDED MITIGATION

	STREET SEGMENT	JURISDICTION	HORIZON YEAR 2040 WITH SPECIFIC PLAN SCENARIO ONE							
			WITHOUT MITIGATION				WITH MITIGATION			
			CLASSIFICATION / NO. LANES	Capacity[1]	ADT	LOS	CLASSIFICATION / NO. LANES	Capacity[1]	ADT	LOS
WITHOUT ORANGE STREET EXTENSION										
19	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	*18,000*	25,867	**E**	100' ARTERIAL / 4	33,000	25,867	B
20	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	*18,000*	36,508	**E**	120' ARTERIAL / 6	49,500	36,508	B
WITH ORANGE STREET EXTENSION										
19	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	*18,000*	32,391	**E**	100' ARTERIAL / 4	33,000	32,391	D
20	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	*18,000*	42,045	**E**	120' ARTERIAL / 6	49,500	42,045	C

Footnote:
V/C and LOS shown in **bold** indicate deficient LOS based on ADT and roadway capacity.
Roadway classification shown in *italics* indicates a change proposed by the Specific Plan from the existing classification.

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TABLE 33
HORIZON YEAR 2040 WITH SPECIFIC PLAN SCENARIO ONE ROADWAY SEGMENT OPERATIONS WITH RECOMMENDED MITIGATION

	STREET SEGMENT	JURISDICTION	HORIZON YEAR 2040 WITH SPECIFIC PLAN SCENARIO TWO							
			WITHOUT MITIGATION				WITH MITIGATION			
			CLASSIFICATION / NO. LANES	Capacity[1]	ADT	LOS	CLASSIFICATION / NO. LANES	Capacity[1]	ADT	LOS
WITHOUT ORANGE STREET EXTENSION										
19	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	*18,000*	23,188	**E**	100' ARTERIAL / 4	33,000	23,188	B
20	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	*18,000*	31,212	**E**	100' ARTERIAL / 4	33,000	31,212	D
WITH ORANGE STREET EXTENSION										
19	Columbia Avenue, Orange Street to Primer Street	City of Riverside	88' ARTERIAL / 4	*18,000*	24,605	**E**	100' ARTERIAL / 4	33,000	24,605	B
20	Columbia Avenue, Primer Street to E La Cadena Drive	City of Riverside	88' ARTERIAL / 4	*18,000*	36,749	**E**	120' ARTERIAL / 6	49,500	36,749	B

Footnote:
V/C and LOS shown in **bold** indicate deficient LOS based on ADT and roadway capacity.
Roadway classification shown in *italics* indicates a change proposed by the Specific Plan from the existing classification.

Other Transportation Recommendations

Heavy Vehicle Route Signage

The proposed heavy vehicle restriction on Main Street south of Center Street is expected to be implemented under either of the two land use scenarios that were evaluated (Scenarios One and Two). It is recommended that when the City is ready to implement the proposed heavy vehicle restriction, signage should be installed at the following locations to prohibit large trucks along Main Street south of Center Street, and to divert large trucks to Center Street between Main Street and I-215:

- Southbound Riverside Avenue/Main Street approaching the intersection with Center Street (Placentia Lane-Center Street).
- Southbound and Northbound I-215 approaching the Center Street interchange.
- Southbound and Northbound I-215 approaching the Columbia Avenue interchange (i.e. large trucks prohibited on Columbia Avenue).
- Eastbound and Westbound SR-60 approaching the Main Street interchange (i.e. large trucks prohibited on Main Street).

In addition, it is recommended that signage be installed on Center Street in both directions of travel approaching the intersection with Orange Street to prohibit large trucks from using Orange Street as a bypass route.

Concrete Upgrades

The proposed heavy vehicle restriction on Main Street will result in significantly higher heavy vehicle volumes on Center Street between Main Street and I-215. Due to the higher heavy vehicle volumes, it is recommended that the Specific Plan replace the existing asphalt with concrete pavement at the intersection approaches on Center Street.

Traffic Index Map

It is recommended that the City of Riverside update its Traffic Index map to account for future forecasted heavy vehicle usage within the Northside Specific Plan area.

Spacing of Median Breaks

It is recommended that the Specific Plan minimize the median breaks along Main Street, with a minimum separation of 600 feet.

SIGNAL WARRANT ANALYSIS

A signal warrant analysis was conducted at the following intersections where installation of a traffic signal is recommended to mitigate the Specific Plan's significant impacts:

- W. La Cadena Drive / I-215 Southbound Ramps-Stephens Avenue
- W. Center Street / Highgrove Place
- W. La Cadena Drive / I-215 Southbound Ramps-Interchange Drive
- E. La Cadena Drive / I-215 Northbound Ramps
- Main Street / Placentia Lane-Center Street
- Main Street / Garner Road
- Orange Street / Oakley Avenue / SR-60 WB Off-Ramp
- Orange Street / Strong Street
- S. Riverside Avenue / Future Pellisier Road

The signal warrant analysis was performed in accordance with the 2014 California Manual on Uniform Traffic Devices (MUTCD). The signal warrants, if satisfied, provide justification for the installation of a traffic signal, but would not require the installation of a signal. The following individual signal warrants from Chapter 4C (Traffic Control Signal Needs Studies) of the 2014 California MUTCD were performed in this study:

- Warrant 3: Peak Hour (Part A and Part B)

Satisfaction of either Part A or Part B satisfies the Peak Hour Warrant. The "70% Factor" threshold was applied to the two intersections along Main Street since the posted speed limit on Main Street (50 mph) exceeds 40 mph.

The findings of the traffic signal warrant analysis are summarized in **Table 34**. **Appendix I** contains the signal warrant worksheets.

As shown in the table, the peak hour warrant is satisfied for the study intersections where the signal warrant analysis was performed and for all Specific Plan scenarios except for the intersection of Orange Street / Strong Street under Existing Plus Project conditions. It is recommended that future signalization of the Orange Street / Strong Street occurs when a traffic signal becomes warranted at the intersection.

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TABLE 34
NORTHSIDE SPECIFIC PLAN
SIGNAL WARRANT SUMMARY

	IMPACTED STUDY INTERSECTION	EXISTING + PROJECT SCENARIO 1	EXISTING + PROJECT SCENARIO 2	SCENARIO 1 W/OUT ORANGE EXTENSION [a]	SCENARIO 2 W/OUT ORANGE EXTENSION [a]	SCENARIO 1 W/ ORANGE EXTENSION [a]	SCENARIO 2 W/ ORANGE EXTENSION [a]
2	**W La Cadena Drive / I-215 SB Ramps / Stephens Avenue**	YES	YES	YES	YES	YES	YES
4	**West Center Street / Highgrove Place**	YES	YES	-	-	YES	YES
6	**W La Cadena Drive / I-215 SB Ramps / Interchange Drive**	YES	YES	YES	YES	YES	YES
7	**E La Cadena Drive / I-215 NB Ramps**	YES	YES	YES	YES	YES	YES
9	**Main Street / Placentia Lane [b]**	YES	YES	YES	YES	YES	YES
10	**Main Street / Garner Road [b]**	NO	NO	YES	YES	YES	YES
16	**Orange Street / Oakley Avenue / SR60 WB Off Ramp**	YES	YES	-	-	-	-
17	**Orange Street / Strong Street**	NO	NO	-	-	-	-
22	**S. Riverside Avenue / Pellisier Road [b]**	YES	YES	YES	YES	YES	YES

Footnotes:

a) Source MUTCD Peak Hour Signal Warrant 3 Figure 4C-3.

b) Source MUTCD Peak Hour Signal Warrant 3 Figure 4C-4. Main Street Posted speed limit is 50mph.

PROJECT RESPONSIBILITY FOR RECOMMENDED MITIGATION MEASURES

The recommended improvements at the significantly impacted intersections are expected to be funded either 100% by the development projects within the Specific Plan or through fair share contributions from the development projects. Although the projects will contribute fair share payments toward the recommended mitigation measures at the intersections along the Center Street / I-215 and Columbia Avenue / I-215 interchanges, the development projects will also be required to pay fees into the Western Riverside Council of Governments' (WRCOG) Transportation Uniform Mitigation Fee (TUMF) Program toward funding of the ultimate long-range improvements that are planned at these two interchanges.

Table 35 and **Table 36** provide a summary of the recommended Existing Plus Project mitigation measures, the percent project responsibility (fair share), and opinions of probable costs of the recommended improvements for the impacted study intersections and roadway segments, respectively.

The recommended Horizon Year 2040 mitigation measures, the percent project responsibility (fair share), and opinions of probable costs of the recommended improvements for the impacted study intersections and roadway segments are summarized in **Table 37** and **Table 38**, respectively.

Table 39 and **Table 40** provide the methodology of how the fair share percentages were calculated for each recommended mitigation measure at the impacted study intersections and roadway segments, respectively.

The fair share percentages shown in Tables 39 and 40 were calculated based on the proportion of the project-related volumes to the total volumes at each intersection or roadway segment in the study scenario(s) in which the impact occurred. The project trips shown in Table 39 for the Existing Plus Project scenarios represent new development trips from the currently vacant parcels within the Specific Plan area, as previously described in the Existing Plus Project chapter of this report. The project trips shown in Table 40 for the Horizon Year 2040 Specific Plan scenarios represent the increase in trips over the Horizon Year Without Project (General Plan) scenario.

The fair share calculation methodology described above is based on the overall development of the Specific Plan. It is recommended that the City of Riverside develop a program to require payment of fair share fees in proportion with the number of estimated vehicular trips for a proposed development in the Specific Plan area.

It should be noted that because fair share payments are considered only partial mitigation, all identified impacts will remain significant and unavoidable at the locations where the Specific Plan will pay fair share contributions toward the recommended mitigation measures, until 100% of the funding needed for the improvements is collected.

TABLE 35
EXISTING PLUS PROJECT SUMMARY OF RECOMMENDED INTERSECTION MITIGATION MEASURES AND PROJECT RESPONSIBILITY

	INTERSECTION	JURISDICTION	RECOMMENDED MITIGATION	PROJECT RESPONSIBILITY		PRELIMINARY ESTIMATE [1]
				EXP SCENARIO 1	EXP SCENARIO 2	
1	Center Street / Stephens Avenue	COUNTY OF RIVERSIDE	• Widen east leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the westbound approach. • Widen west leg of intersection to construct one left-turn lane, one through lane, and one right-turn lane on the eastbound approach. • Provide protected left-turn phasing on the eastbound and westbound approaches.	Fair Share: 23.1%	Fair Share: 15.5%	$185,000
2.	W La Cadena Drive / I-215 SB Ramps / Stephens Avenue	COUNTY OF RIVERSIDE / CALTRANS	• Install a traffic signal at the intersection. • Widen south leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the northbound approach. • Widen north leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the southbound approach. • Widen west leg of intersection to construct one shared left-turn/through lane and one right-turn lane on the eastbound approach. • Provide protected left-turn phasing on the northbound and southbound approaches. • Provide split phasing on the eastbound and westbound approaches.	Fair Share: 23.7%	Fair Share: 16.0%	$335,000
4.	Center Street / Highgrove Place	COUNTY OF RIVERSIDE	• Install a traffic signal at the intersection. • Widen east leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the westbound approach. • Widen west leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the eastbound approach. • Provide permitted left-turn phasing on all four approaches.	Fair Share: 23.1%	Fair Share: 15.6%	$430,000
6.	W La Cadena Drive / I-215 SB Ramps / Interchange Drive	CITY OF RIVERSIDE / CALTRANS	• Install a traffic signal at the intersection. • Widen north leg of intersection to construct one left-turn lane, one shared left-turn/ through lane, and one right-turn lane on the southbound approach. • Widen westbound approach (Southbound I-215 Off-Ramp) to construct one shared left-turn/through lane and one shared through/right-turn lane. • Provide split phasing for all four intersection approaches. • Provide a right-turn overlap phase on the southbound approach.	Fair Share: 25.1%	Fair Share: 17.4%	$430,000
7.	E La Cadena Drive / I-215 NB Ramps	CITY OF RIVERSIDE / CALTRANS	• Install a traffic signal at the intersection. • Restripe northbound approach to provide one left-turn lane and one shared left-turn/through lane. • Restripe the Northbound I-215 On-Ramp to eliminate the existing southbound channelized right-turn movement and provide a second receiving lane for the recommended second northbound left-turn lane. • Provide split phasing on the northbound and southbound approaches.	Fair Share: 25.5%	Fair Share: 17.7%	$335,000
8.	Columbia Avenue / E La Cadena Drive	CITY OF RIVERSIDE	• Modify signal phasing to provide a right-turn overlap on the westbound approach.	Fair Share: 25.1%	Fair Share: 17.3%	$10,000
9.	Main Street / Placentia Lane (Center Street)	CITY OF RIVERSIDE / CITY OF COLTON	• Install a traffic signal at the intersection. • Widen east leg of intersection to construct one shared left-turn/through lane and one right-turn lane on the westbound approach. • Provide protected left-turn phasing on the northbound and southbound approaches. • Provide permitted left-turn phasing on the eastbound and westbound approaches. • Provide a right-turn overlap phase on the westbound approach.	Project: 100%	Project: 100%	$370,000
10.	Main Street / Garner Road	CITY OF RIVERSIDE	• Install a traffic signal at the intersection. • Provide protected left-turn phasing on the northbound and southbound approaches. • Provide split phasing on the eastbound and westbound approaches.	Fair Share: 16.6%	Fair Share: 11.3%	$320,000

EXP = Existing Plus Project

[1] This preliminary estimate is an opinion of probable cost, is based on the San Bernardino County CMP - 2003 Update "Preliminary Construction Cost Estimates for Congestion Management Plan" (Appendix G), and excludes environmental costs, R/W engineering, appraisal, acquisition, utility relocation costs, traffic control, drainage upgrades, retaining walls, and landscaping costs. The opinions of probable cost are not based on any design plans for the improvements identified within this study.

TABLE 35 (CONTINUED)
EXISTING PLUS PROJECT SUMMARY OF RECOMMENDED INTERSECTION MITIGATION MEASURES AND PROJECT RESPONSIBILITY

INTERSECTION		JURISDICTION	RECOMMENDED MITIGATION	PROJECT RESPONSIBILITY		PRELIMINARY ESTIMATE [1]
				EXP SCENARIO 1	EXP SCENARIO 2	
12.	Main Street / Strong Street	CITY OF RIVERSIDE	• Restripe the eastbound approach to provide one left-turn lane and one shared through/ right-turn lane. • Restripe the westbound approach to provide one left-turn lane and one shared through/ right-turn lane.	Fair Share: 11.6%	Fair Share: 9.7%	$10,000
13.	Main Street / Oakley Avenue / SR60 WB On-Ramp	CITY OF RIVERSIDE / CALTRANS	• Restripe westbound approach to provide one shared left-turn/through/right-turn lane and one right-turn lane.	Fair Share: 15.3%	NO IMPACT	$5,000
20.	Orange Street / Center Street	CITY OF RIVERSIDE	• Widen east leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the westbound approach, and construct two eastbound receiving lanes. • Widen and restripe west leg of intersection to provide one shared left-turn/through lane and one shared through/right-turn lane on the eastbound approach.	Fair Share: 33.3%	NO IMPACT	$110,000
22.	S. Riverside Avenue / Pellisier Road	CITY OF COLTON	• Install a traffic signal at the intersection. • Construct one left-turn lane and one right-turn lane on the westbound approach. • Provide protected left-turn phasing on the southbound approach.	Fair Share: 35.9%	Fair Share: 36.2%	$330,000

EXP = Existing Plus Project

[1] This preliminary estimate is an opinion of probable cost, is based on the San Bernardino County CMP - 2003 Update "Preliminary Construction Cost Estimates for Congestion Management Plan" (Appendix G), and excludes environmental costs, R/W engineering, appraisal, acquisition, utility relocation costs, traffic control, drainage upgrades, retaining walls, and landscaping costs. The opinions of probable cost are not based on any design plans for the improvements identified within this study.

TABLE 36
EXISTING PLUS PROJECT SUMMARY OF RECOMMENDED ROADWAY SEGMENT MITIGATION MEASURES AND PROJECT RESPONSIBILITY

STREET SEGMENT		JURISDICTION	RECOMMENDED MITIGATION	PROJECT RESPONSIBILITY		PRELIMINARY ESTIMATE [1]
				EXP SCENARIO 1	EXP SCENARIO 2	
5	Main Street, Strong Street to Oakley Avenue	CITY OF RIVERSIDE	• Widen roadway segment to proposed four-lane Arterial standards (78' pavement width, 100' right-of-way width)	NO IMPACT	Fair Share: 10.9%	$375,000
8	Orange Street, Center Street to Garner Road	CITY OF RIVERSIDE	• Widen roadway segment to proposed two-lane Collector standards (42' pavement width, 66' right-of-way width)	Fair Share: 52.1%	NO IMPACT	$466,667
9	Orange Street, Garner Road to Columbia Avenue	CITY OF RIVERSIDE	• Widen roadway segment to proposed two-lane Collector standards (42' pavement width, 66' right-of-way width)	Fair Share: 56.1%	Fair Share: 37.4%	$125,000
10	Orange Street, Columbia Avenue to Strong Street	CITY OF RIVERSIDE	• Widen roadway segment to proposed two-lane Collector standards (42' pavement width, 66' right-of-way width)	Fair Share: 15.4%	Fair Share: 13.1%	$200,000
11	Orange Street, Strong Street to Oakley Avenue	CITY OF RIVERSIDE	• Widen roadway segment to proposed two-lane Collector standards (42' pavement width, 66' right-of-way width)	Fair Share: 10.5%	Fair Share: 9.5%	$83,333
12	W. La Cadena Drive, Chase Road to I-215 SB Ramps	CITY OF RIVERSIDE	• Widen roadway segment to two-lane Collector standards (40' pavement width, 66' right-of-way width)	Fair Share: 24.1%	Fair Share: 13.8%	$525,000
19	Columbia Avenue, Primer Street to E La Cadena Drive	CITY OF RIVERSIDE	• Widen roadway segment to four-lane Arterial standards (80' pavement width, 100' right-of-way width).	Fair Share: 38.8%	Fair Share: 28.8%	$1,755,000
20	Strong Street, Main Street to Orange Street	CITY OF RIVERSIDE	• Widen roadway segment to two-lane Collector standards (42' pavement width, 66' right-of-way width)	Fair Share: 25.7%	Fair Share: 22.3%	$200,000

EXP = Existing Plus Project

[1] This preliminary estimate is an opinion of probable cost, is based on the San Bernardino County CMP - 2003 Update "Preliminary Construction Cost Estimates for Congestion Management Plan" (Appendix G), and excludes environmental costs, R/W engineering, appraisal, acquisition, utility relocation costs, traffic control, drainage upgrades, retaining walls, and landscaping costs. The opinions of probable cost are not based on any design plans for the improvements identified within this study.

TABLE 37
HORIZON YEAR 2040 SUMMARY OF RECOMMENDED INTERSECTION MITIGATION MEASURES AND PROJECT RESPONSIBILITY

INTERSECTION		JURISDICTION	RECOMMENDED MITIGATION	PROJECT RESPONSIBILITY				PRELIMINARY ESTIMATE [1]
				HY40 SP SCENARIO 1		HY40 SP SCENARIO 2		
				WITHOUT ORANGE	WITH ORANGE	WITHOUT ORANGE	WITH ORANGE	
2.	W La Cadena Drive / I-215 SB Ramps / Stephens Avenue	COUNTY OF RIVERSIDE / CALTRANS	• Install a traffic signal at the intersection. • Widen south leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the northbound approach. • Widen north leg of intersection to construct one left-turn lane and one shared through/ right-turn lane on the southbound approach. • Widen west leg of intersection to construct one shared left-turn/through lane and one right-turn lane on the eastbound approach. • Provide protected left-turn phasing on the northbound and southbound approaches. • Provide split phasing on the eastbound and westbound approaches.	Fair Share: 15.1%	Fair Share: 24.9%	Fair Share: 14.3%	Fair Share: 23.3%	$530,000
4.	Center Street / Highgrove Place	COUNTY OF RIVERSIDE	• Install a traffic signal at the intersection. • Provide permitted left-turn phasing on all four approaches.	Fair Share: 14.7%	Fair Share: 22.0%	Fair Share: 13.9%	Fair Share: 18.3%	$320,000
6.	W La Cadena Drive / I-215 SB Ramps / Interchange Drive	CITY OF RIVERSIDE / CALTRANS	• Install a traffic signal at the intersection. • Widen north leg of intersection to construct one left-turn lane, one shared left-turn/ through lane, and one right-turn lane on the southbound approach. • Widen westbound approach (Southbound I-215 Off-Ramp) to construct one shared left-turn/through lane and one shared through/ right-turn lane. • Provide split phasing for all four intersection approaches. • Provide a right-turn overlap phase on the southbound approach.	Fair Share: 14.5%	Fair Share: 20.2%	Fair Share: 15.2%	Fair Share: 15.9%	$430,000
7.	E La Cadena Drive / I-215 NB Ramps	CITY OF RIVERSIDE / CALTRANS	• Install a traffic signal at the intersection. • Restripe northbound approach to provide one left-turn lane and one shared left-turn/through lane. • Restripe the Northbound I-215 On-Ramp to eliminate the existing southbound channelized right-turn movement and provide a second receiving lane for the recommended second northbound left-turn lane. • Provide split phasing on the northbound and southbound approaches.	Fair Share: 16.0%	Fair Share: 20.3%	Fair Share: 15.6%	Fair Share: 16.0%	$335,000
8.	Columbia Avenue / E La Cadena Drive	CITY OF RIVERSIDE	• Modify signal phasing to provide a right-turn overlap on the westbound approach. • Restripe eastbound approach to convert the existing right-turn lane to a shared through/right-turn lane, which will provide three through lanes on the eastbound approach.	Fair Share: 15.9%	Fair Share: 20.2%	NO IMPACT	Fair Share: 15.9%	$15,000
9.	Main Street / Placentia Lane Center Street)	CITY OF RIVERSIDE / CITY OF COLTON	• Install a traffic signal at the intersection. • Provide protected left-turn phasing on the northbound and southbound approaches. • Provide permitted left-turn phasing on the eastbound and westbound approaches. • Provide a right-turn overlap phase on the westbound approach.	Project: 100%	Project: 100%	Project: 100%	Project: 100%	$320,000
10.	Main Street / Garner Road	CITY OF RIVERSIDE	• Install a traffic signal at the intersection. • Provide protected left-turn phasing on the northbound and southbound approaches. • Provide split phasing on the eastbound and westbound approaches.	Fair Share: 9.0%	Fair Share: 9.3%	Fair Share: 9.4%	Fair Share: 9.3%	$320,000
13.	Main Street / Oakley Avenue / SR60 WB On-Ramp	CITY OF RIVERSIDE / CALTRANS	• Restripe westbound approach to provide one shared left-turn/through/right-turn lane and one right-turn lane.	Fair Share: 12.9%	Fair Share: 12.9%	NO IMPACT	Fair Share: 11.4%	$5,000

HY 40 = Horizon Year 2040; SP = Specific Plan

[1] This preliminary estimate is an opinion of probable cost, is based on the San Bernardino County CMP - 2003 Update “Preliminary Construction Cost Estimates for Congestion Management Plan” (Appendix G), and excludes environmental costs, R/W engineering, appraisal, acquisition, utility relocation costs, traffic control, drainage upgrades, retaining walls, and landscaping costs. The opinions of probable cost are not based on any design plans for the improvements identified within this study.

TABLE 37 (CONTINUED)
HORIZON YEAR 2040 SUMMARY OF RECOMMENDED INTERSECTION MITIGATION MEASURES AND PROJECT RESPONSIBILITY

INTERSECTION		JURISDICTION	RECOMMENDED MITIGATION	PROJECT RESPONSIBILITY				PRELIMINARY ESTIMATE [1]
				HY40 SP SCENARIO 1		HY40 SP SCENARIO 2		
				WITHOUT ORANGE	WITH ORANGE	WITHOUT ORANGE	WITH ORANGE	
15.	Main Street / Spruce Street	CITY OF RIVERSIDE	• Transition the existing shared through/right-turn lane to a dedicated right-turn lane. The other Specific Plan scenarios assume a single shared through/right-turn lane per proposed road diet on Main Street.	Fair Share: 15.5%	Fair Share: 15.5%	NO IMPACT	Fair Share: 14.4%	$5,000
18.	Orange Street / Columbia Avenue	CITY OF RIVERSIDE	• Restripe the north leg of intersection to provide one left-turn lane and one shared through/right-turn lane on the southbound approach. • Restripe the south leg of intersection to provide one left-turn lane and one shared through/right-turn lane on the northbound approach.	Fair Share: 11.5%	Fair Share: 13.4%	NO IMPACT	NO IMPACT	$20,000
			• Widen westbound approach to construct a dedicated right-turn lane.	Improvement Not Needed	Fair Share: 13.4%			$55,000
20.	Orange Street / Center Street	CITY OF RIVERSIDE	• Restripe westbound approach to provide one left-turn lane, one through lane and one right-turn lane.	NO IMPACT	NO IMPACT	NO IMPACT	Fair Share: 43.2%	$5,000
22.	S. Riverside Avenue / Pellisier Road	CITY OF COLTON	• Install a traffic signal at the intersection. • Construct one left-turn lane and one right-turn lane on the westbound approach. • Provide protected left-turn phasing on the southbound approach.	Fair Share: 26.1%	Fair Share: 22.0%	Fair Share: 27.0%	Fair Share: 24.8%	$330,000

HY 40 = Horizon Year 2040; SP = Specific Plan

[1] This preliminary estimate is an opinion of probable cost, is based on the San Bernardino County CMP - 2003 Update "Preliminary Construction Cost Estimates for Congestion Management Plan" (Appendix G), and excludes environmental costs, R/W engineering, appraisal, acquisition, utility relocation costs, traffic control, drainage upgrades, retaining walls, and landscaping costs. The opinions of probable cost are not based on any design plans for the improvements identified within this study.

TABLE 38
HORIZON YEAR 2040 SUMMARY OF RECOMMENDED ROADWAY SEGMENT MITIGATION MEASURES AND PROJECT RESPONSIBILITY

STREET SEGMENT		JURISDICTION	RECOMMENDED MITIGATION	PROJECT RESPONSIBILITY				PRELIMINARY ESTIMATE [1]
				HY40 SP SCENARIO 1		HY40 SP SCENARIO 2		
				WITHOUT ORANGE	WITH ORANGE	WITHOUT ORANGE	WITH ORANGE	
18	Columbia Avenue, Orange Street to Primer Street	CITY OF RIVERSIDE	• Widen roadway segment to four-lane Arterial standards (80' pavement width, 100' right-of-way width)	Fair Share: 16.4%	Fair Share: 33.1%	Fair Share: 6.5%	Fair Share: 11.9%	$400,000
19	Columbia Avenue, Primer Street to E La Cadena Drive	CITY OF RIVERSIDE / CALTRANS	• Widen roadway segment to four-lane Arterial standards (80' pavement width, 100' right-of-way width).			Fair Share: 4.8%		$1,755,000
			• Widen roadway segment to six-lane Arterial standards (100' pavement width, 120' right-of-way width)	Fair Share: 18.7%	Fair Share: 29.3%	Improvement Not Needed	Fair Share: 19.2%	$3,105,000
23	Pellisier Road, from S Riverside Avenue to Roquet Ranch	CITY OF COLTON	• Improve roadway segment to four-lane Secondary standards per City of Colton General Plan	Fair Share: 87.6%	NO IMPACT	NO IMPACT	NO IMPACT	$2,000,000

HY 40 = Horizon Year 2040; SP = Specific Plan

[1] This preliminary estimate is an opinion of probable cost, is based on the San Bernardino County CMP - 2003 Update "Preliminary Construction Cost Estimates for Congestion Management Plan" (Appendix G), and excludes environmental costs, R/W engineering, appraisal, acquisition, utility relocation costs, traffic control, drainage upgrades, retaining walls, and landscaping costs. The opinions of probable cost are not based on any design plans for the improvements identified within this study.

TABLE 39
FAIR SHARE CALCULATIONS FOR RECOMMENDED INTERSECTION MITIGATION MEASURES

	INTERSECTION	PEAK HOUR	EXISTING + PROJECT						HORIZON YEAR 2040 SCENARIOS											
			SCENARIO 1			SCENARIO 2			SPECIFIC PLAN SCENARIO 1						SPECIFIC PLAN SCENARIO 2					
									WITHOUT ORANGE			WITH ORANGE			WITHOUT ORANGE			WITH ORANGE		
			VOLUME	PROJECT TRIPS	FAIR SHARE	VOLUME	PROJECT TRIPS	FAIR SHARE	VOLUME	PROJECT TRIPS	FAIR SHARE	VOLUME	PROJECT TRIPS	FAIR SHARE	VOLUME	PROJECT TRIPS	FAIR SHARE	VOLUME	PROJECT TRIPS	FAIR SHARE
1.	Center St / Stephens Ave	AM	1,272	294	**23.1%**	1,156	179	**15.5%**	No Impact			No Impact			No Impact			No Impact		
		PM	1,336	289	**21.6%**	1,227	181	**14.8%**												
2.	W La Cadena Drive / I-215 SB Ramps / Stephens Avenue	AM	1,399	332	**23.7%**	1,268	203	**16.0%**	1,595	241	**15.1%**	1,802	448	**24.9%**	1,423	203	**14.3%**	1,766	412	**23.3%**
		PM	1,596	351	**22.0%**	1,465	222	**15.2%**	1,801	228	**12.7%**	2,049	476	**23.2%**	1,633	222	**13.6%**	1,975	402	**20.4%**
4.	West Center Street / Highgrove Place	AM	1,317	304	**23.1%**	1,196	187	**15.6%**	1,499	221	**14.7%**	1,633	355	**21.7%**	1,341	187	**13.9%**	1,554	276	**17.8%**
		PM	1,399	297	**21.2%**	1,288	190	**14.8%**	1,573	190	**12.1%**	1,773	390	**22.0%**	1,431	190	**13.3%**	1,693	310	**18.3%**
6.	W La Cadena Drive / I-215 SB Ramps / Interchange Drive	AM	1,603	403	**25.1%**	1,445	251	**17.4%**	1,836	267	**14.5%**	1,965	396	**20.2%**	1,656	251	**15.2%**	1,866	297	**15.9%**
		PM	2,042	470	**23.0%**	1,865	299	**16.0%**	2,323	304	**13.1%**	2,468	449	**18.2%**	2,099	299	**14.2%**	2,355	336	**14.3%**
7.	E La Cadena Drive / I-215 NB Ramps	AM	1,679	428	**25.5%**	1,511	267	**17.7%**	1,932	310	**16.0%**	2,034	412	**20.3%**	1,713	267	**15.6%**	1,932	310	**16.0%**
		PM	1,641	377	**23.0%**	1,502	245	**16.3%**	1,883	246	**13.1%**	1,999	362	**18.1%**	1,702	245	**14.4%**	1,909	272	**14.2%**
8.	Columbia Avenue / E La Cadena Drive	AM	3,013	757	**25.1%**	2,718	470	**17.3%**	3,457	549	**15.9%**	3,642	734	**20.2%**	No Impact			3,457	549	**15.9%**
		PM	3,619	826	**22.8%**	3,309	524	**15.8%**	4,118	539	**13.1%**	4,370	791	**18.1%**				4,173	594	**14.2%**
9.	Main Street / Placentia Lane (Center Street)	AM	Project 100% Responsible for Constructing Improvements			Project 100% Responsible for Constructing Improvements			Project 100% Responsible for Constructing Improvements			Project 100% Responsible for Constructing Improvements			Project 100% Responsible for Constructing Improvements			Project 100% Responsible for Constructing Improvements		
		PM																		
10.	Main Street / Garner Road	AM	1,833	304	**16.6%**	1,712	193	**11.3%**	2,213	199	**9.0%**	2,221	207	**9.3%**	2,058	193	**9.4%**	2,065	193	**9.3%**
		PM	1,971	153	**7.8%**	1,909	101	**5.3%**	2,319	153	**6.6%**	2,341	153	**6.5%**	2,237	101	**4.5%**	2,267	101	**4.5%**
13.	Main Street / Oakley Avenue / SR60 WB On-Ramp	AM	2,253	328	**14.6%**	2,161	249	**11.5%**	2,630	328	**12.5%**	2,638	328	**12.4%**	No Impact			2,567	249	**9.7%**
		PM	2,756	423	**15.3%**	2,684	364	**13.6%**	3,267	423	**12.9%**	3,287	423	**12.9%**				3,197	364	**11.4%**
15.	Main Street / Spruce Street	AM	1,347	219	**16.3%**	1,332	219	**16.4%**	1,570	219	**13.9%**	1,613	219	**13.6%**	No Impact			1,562	219	**14.0%**
		PM	1,827	321	**17.6%**	1,787	296	**16.6%**	2,076	321	**15.5%**	2,068	321	**15.5%**				2,060	296	**14.4%**
16.	Orange St / Oakley Ave / SR60 WB Off Ramp	AM	No Mitigation Required – Exchange Project Required to Install Signal			No Mitigation Required – Exchange Project Required to Install Signal			No Impact			No Impact			No Impact			No Impact		
		PM																		
17.	Orange St / Strong St	AM	No Mitigation Required – Exchange Project Required to Install Signal			No Mitigation Required – Exchange Project Required to Install Signal			No Impact			No Impact			No Impact			No Impact		
		PM																		
18.	Orange St / Columbia Ave	AM	1,788	530	**29.6%**	1,633	393	**24.1%**	2,150	247	**11.5%**	2,176	273	**12.5%**	No Impact			No Impact		
		PM	2,162	476	**22.0%**	2,022	354	**17.5%**	2,560	238	**9.3%**	2,682	360	**13.4%**						
20.	Orange St / Center St	AM	786	242	**30.8%**	692	168	**24.3%**	No Impact			No Impact			No Impact			1,162	378	**32.5%**
		PM	1,055	351	**33.3%**	908	224	**24.7%**										1,829	791	**43.2%**
22.	S. Riverside Ave / Pellisier Rd	AM	2,196	789	**35.9%**	2,207	800	**36.2%**	2,444	639	**26.1%**	2,313	508	**22.0%**	2,474	669	**27.0%**	2,401	596	**24.8%**
		PM	2,800	856	**30.6%**	2,868	924	**32.2%**	3,146	634	**20.2%**	3,036	524	**17.3%**	3,307	795	**24.0%**	3,190	678	**21.3%**

TABLE 40
FAIR SHARE CALCULATIONS FOR RECOMMENDED ROADWAY SEGMENT MITIGATION MEASURES

	STREET SEGMENT	EXISTING + PROJECT						HORIZON YEAR 2040 SCENARIOS											
		SCENARIO 1			SCENARIO 2			SPECIFIC PLAN SCENARIO 1						SPECIFIC PLAN SCENARIO 2					
								WITHOUT ORANGE			WITH ORANGE			WITHOUT ORANGE			WITH ORANGE		
		VOLUME	PROJECT TRIPS	FAIR SHARE	VOLUME	PROJECT TRIPS	FAIR SHARE	VOLUME	PROJECT TRIPS	FAIR SHARE	VOLUME	PROJECT TRIPS	FAIR SHARE	VOLUME	PROJECT TRIPS	FAIR SHARE	VOLUME	PROJECT TRIPS	FAIR SHARE
5	Main Street, Strong Street to Oakley Avenue	No Impact			22,212	2,428	**10.9%**	No Impact			No Impact			No Impact			No Impact		
8	Orange Street, Center Street to Garner Road	4,027	2,097	**52.1%**	No Impact			No Impact			No Impact			No Impact			No Impact		
9	Orange Street, Garner Road to Columbia Avenue	6,428	3,604	**56.1%**	4,511	1,687	**37.4%**	No Impact			No Impact			No Impact			No Impact		
10	Orange Street, Columbia Avenue to Strong Street	4,708	726	**15.4%**	4,583	601	**13.1%**	No Impact			No Impact			No Impact			No Impact		
11	Orange Street, Strong Street to Oakley Avenue	5,290	555	**10.5%**	5,235	500	**9.5%**	No Impact			No Impact			No Impact			No Impact		
12	W. La Cadena Drive, Chase Road to I-215 SB Ramps	7,404	1,784	**24.1%**	6,520	900	**13.8%**	No Impact			No Impact			No Impact			No Impact		
18	Columbia Avenue, Orange Street to Primer Street	No Impact			No Impact			25,867	4,249	**16.4%**	32,391	10,707	**33.1%**	23,188	1,504	**6.5%**	24,605	2,921	**11.9%**
19	Columbia Avenue, Primer Street to E La Cadena Drive	29,468	11,440	**38.8%**	25,303	7,276	**28.8%**	36,508	6,835	**18.7%**	42,045	12,338	**29.3%**	31,212	1,505	**4.8%**	36,749	7,042	**19.2%**
20	Strong Street, Main Street to Orange Street	3,867	994	**25.7%**	3,698	825	**22.3%**	No Impact			No Impact			No Impact			No Impact		
23	Pellisier Road, S. Riverside Avenue to Roquet Ranch	No Impact			No Impact			No Impact			No Impact			12,853	11,253	**87.6%**	No Impact		

Footnote:
N/A = Not applicable, as no improvement is recommended.

REFERENCES

1. Caltrans Division of Traffic Operations, California Manual on Uniform Traffic Control Devices, Sacramento, CA, 2014.

2. City of Riverside, General Plan 2025 Circulation and Community Mobility Element, Riverside, CA, 2012.

3. City of Riverside, Traffic Impact Analysis Preparation Guide, Riverside, CA, 2019.

4. County of Riverside, Traffic Impact Analysis Preparation Guide, Riverside, CA, 2008.

5. Trafficware, SYNCHRO, Version 10, Berkeley, California, 2017.

6. Transportation Research Board, Highway Capacity Manual, 6th Edition, Washington, D.C., 2016.

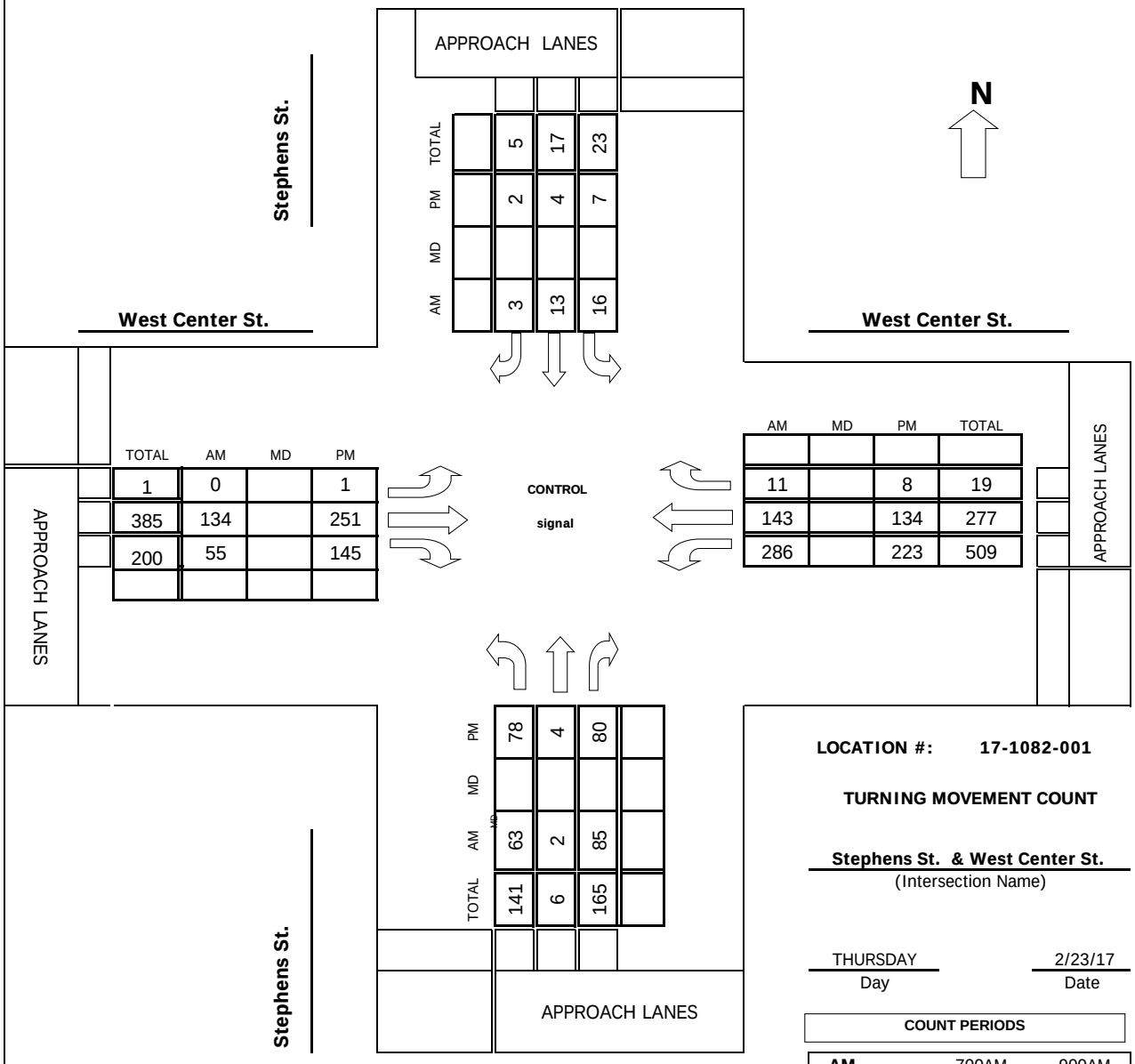
APPENDIX A

TRAFFIC COUNTS

INTERSECTIONS

Project #: 17-1082-001

TMC SUMMARY OF Stephens St. & West Center St.



LOCATION #: 17-1082-001

TURNING MOVEMENT COUNT

Stephens St. & West Center St.
(Intersection Name)

THURSDAY (Day) 2/23/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

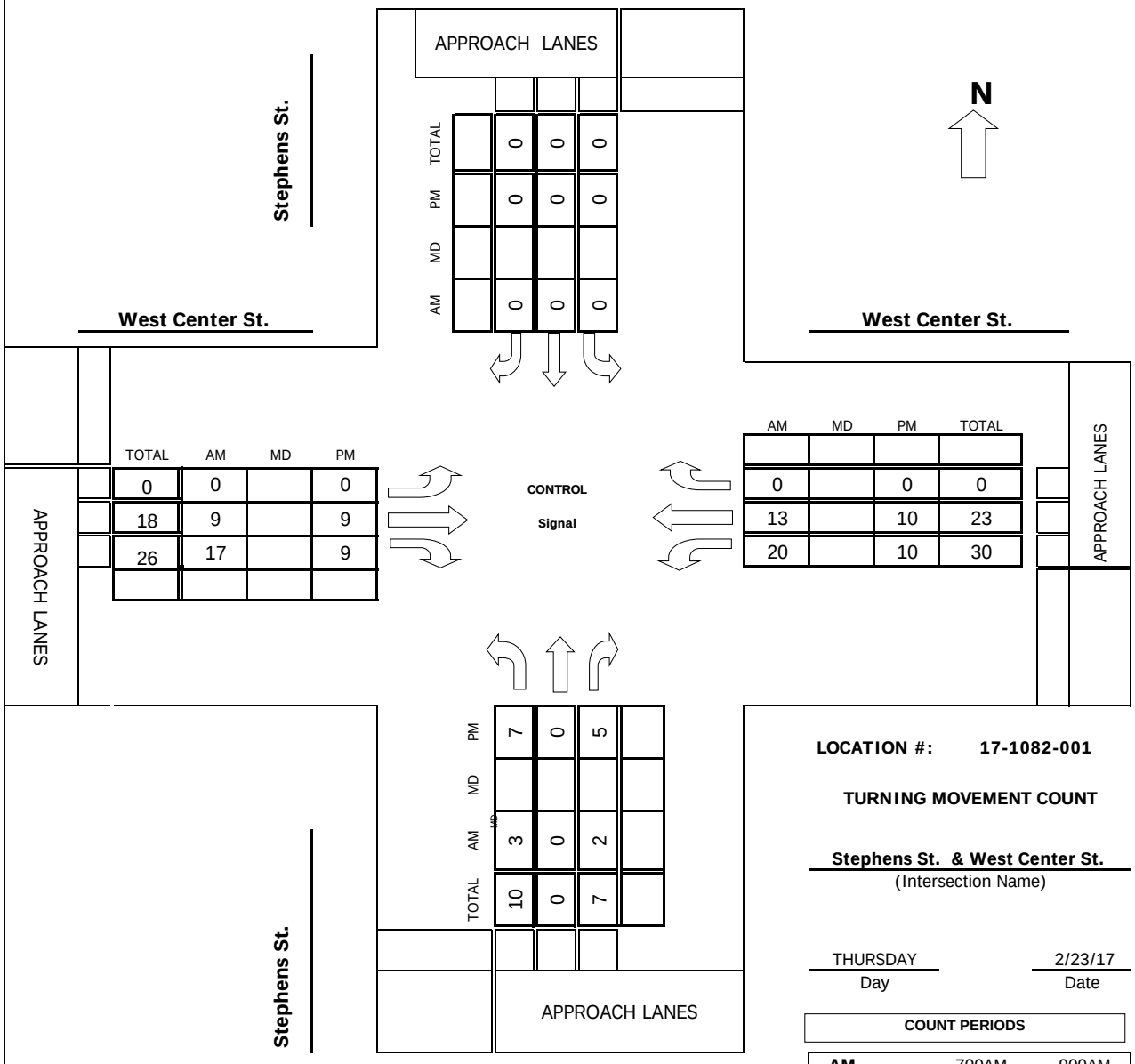
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-001

TMC SUMMARY OF Stephens St. & West Center St.



LOCATION #: 17-1082-001

TURNING MOVEMENT COUNT

Stephens St. & West Center St.
(Intersection Name)

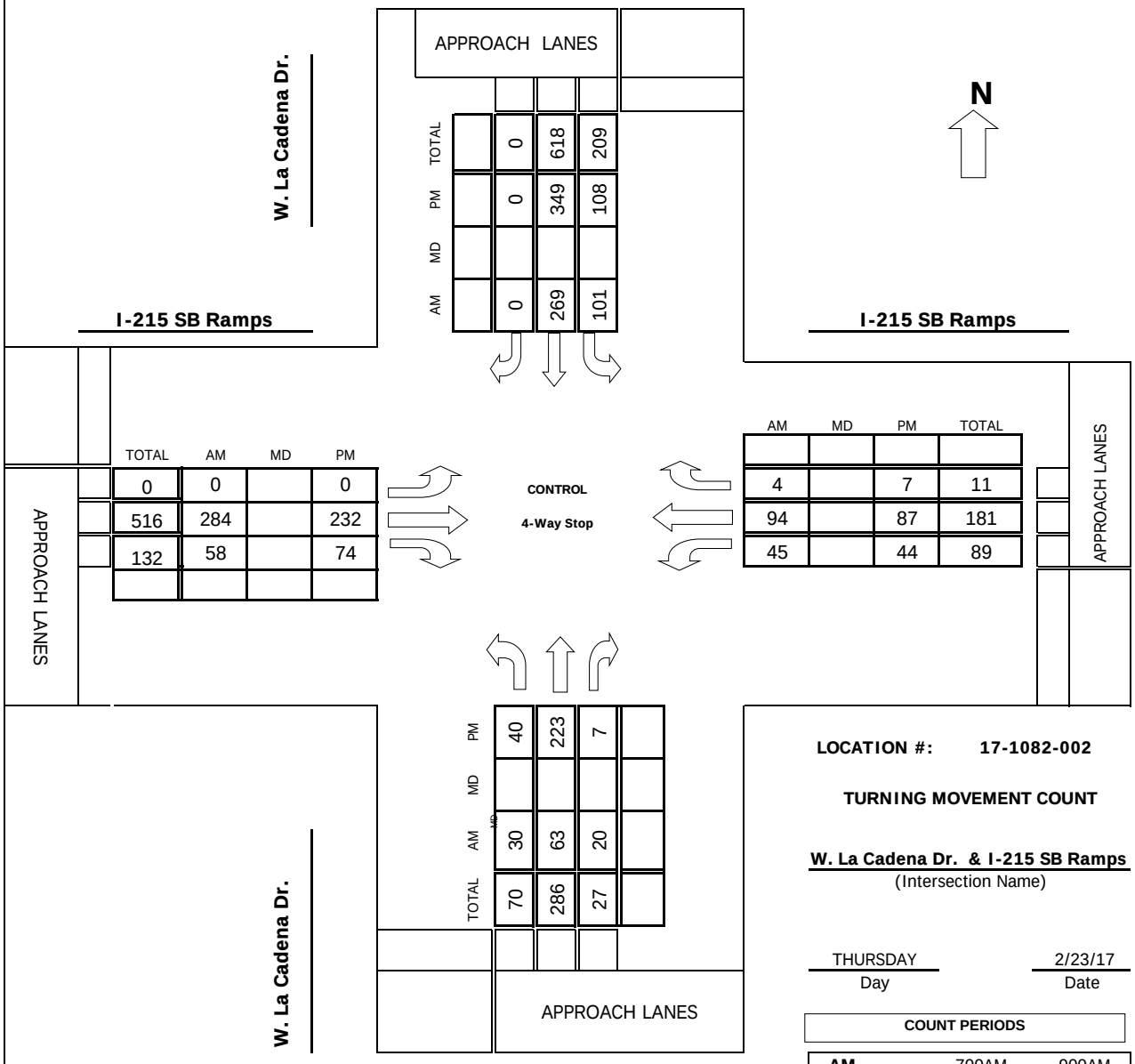
THURSDAY (Day) 2/23/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR	800 AM
NOON PEAK HOUR	
PM PEAK HOUR	415 PM

Project #: 17-1082-002

TMC SUMMARY OF W. La Cadena Dr. & I-215 SB Ramps



LOCATION #: 17-1082-002

TURNING MOVEMENT COUNT

W. La Cadena Dr. & I-215 SB Ramps
(Intersection Name)

THURSDAY (Day) 2/23/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

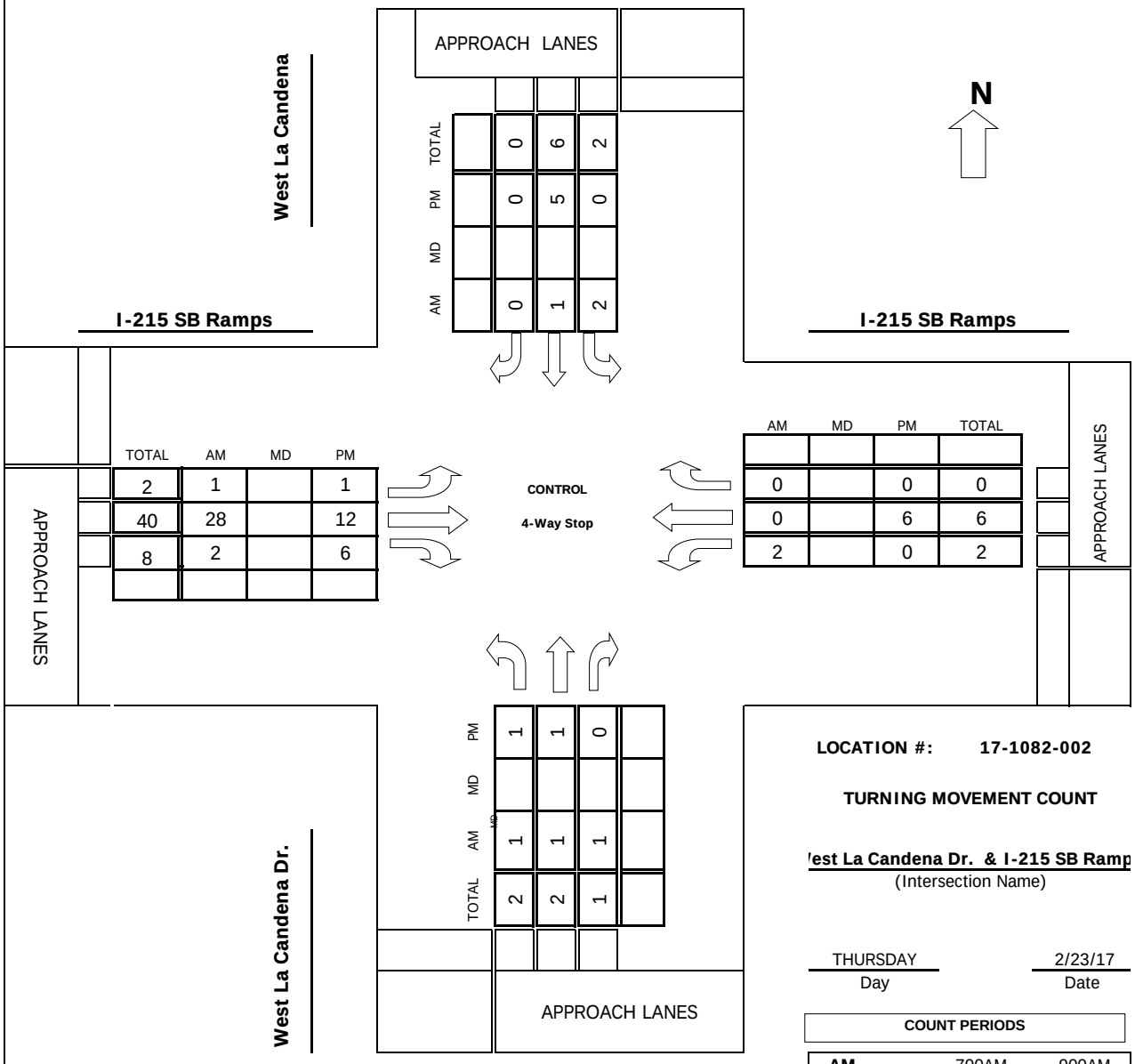
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Project #: 17-1082-002

TMC SUMMARY OF West La Candena Dr. & I-215 SB Ramps



LOCATION #: 17-1082-002

TURNING MOVEMENT COUNT

'est La Candena Dr. & I-215 SB Ramp
(Intersection Name)

THURSDAY — Day
2/23/17 — Date

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

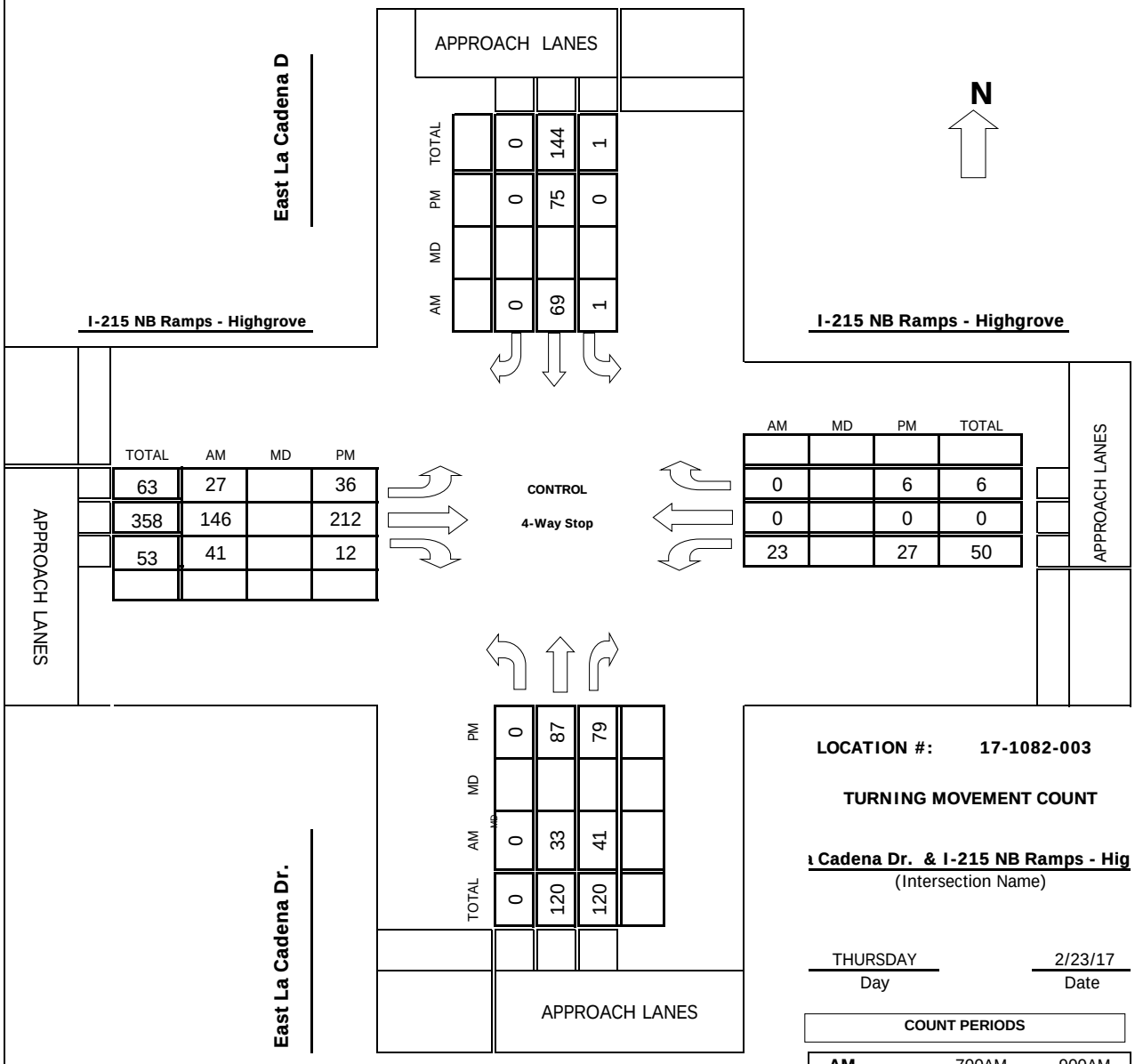
AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Project #: 17-1082-003

TMC SUMMARY OF East La Cadena Dr. & I-215 NB Ramps - Highgrove



LOCATION #: 17-1082-003

TURNING MOVEMENT COUNT

a Cadena Dr. & I-215 NB Ramps - Hig
(Intersection Name)

THURSDAY (Day) 2/23/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

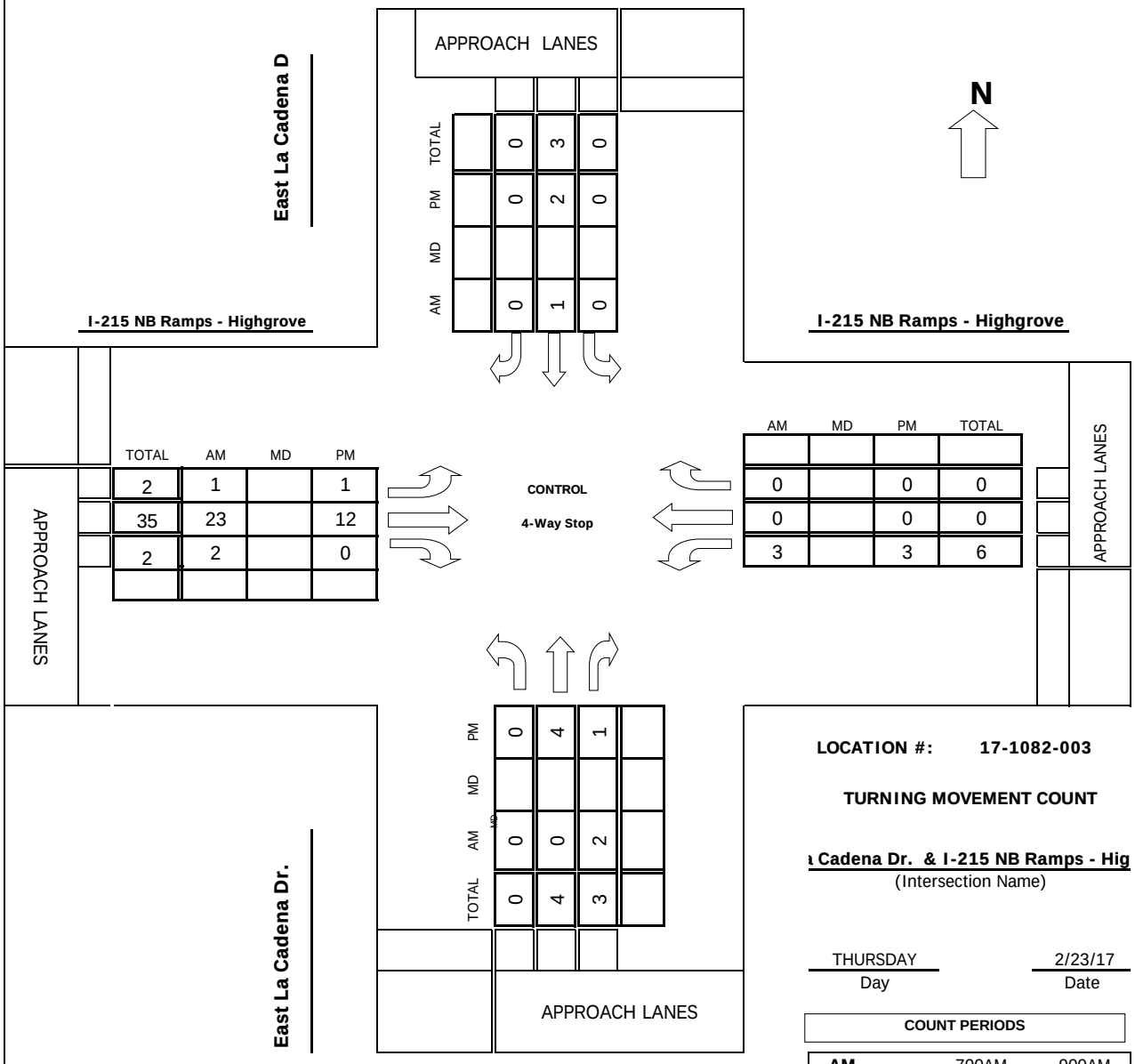
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 500 PM

Project #: 17-1082-003

TMC SUMMARY OF East La Cadena Dr. & I-215 NB Ramps - Highgrove



LOCATION #: 17-1082-003

TURNING MOVEMENT COUNT

a Cadena Dr. & I-215 NB Ramps - Hig
(Intersection Name)

THURSDAY — Day
2/23/17 — Date

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

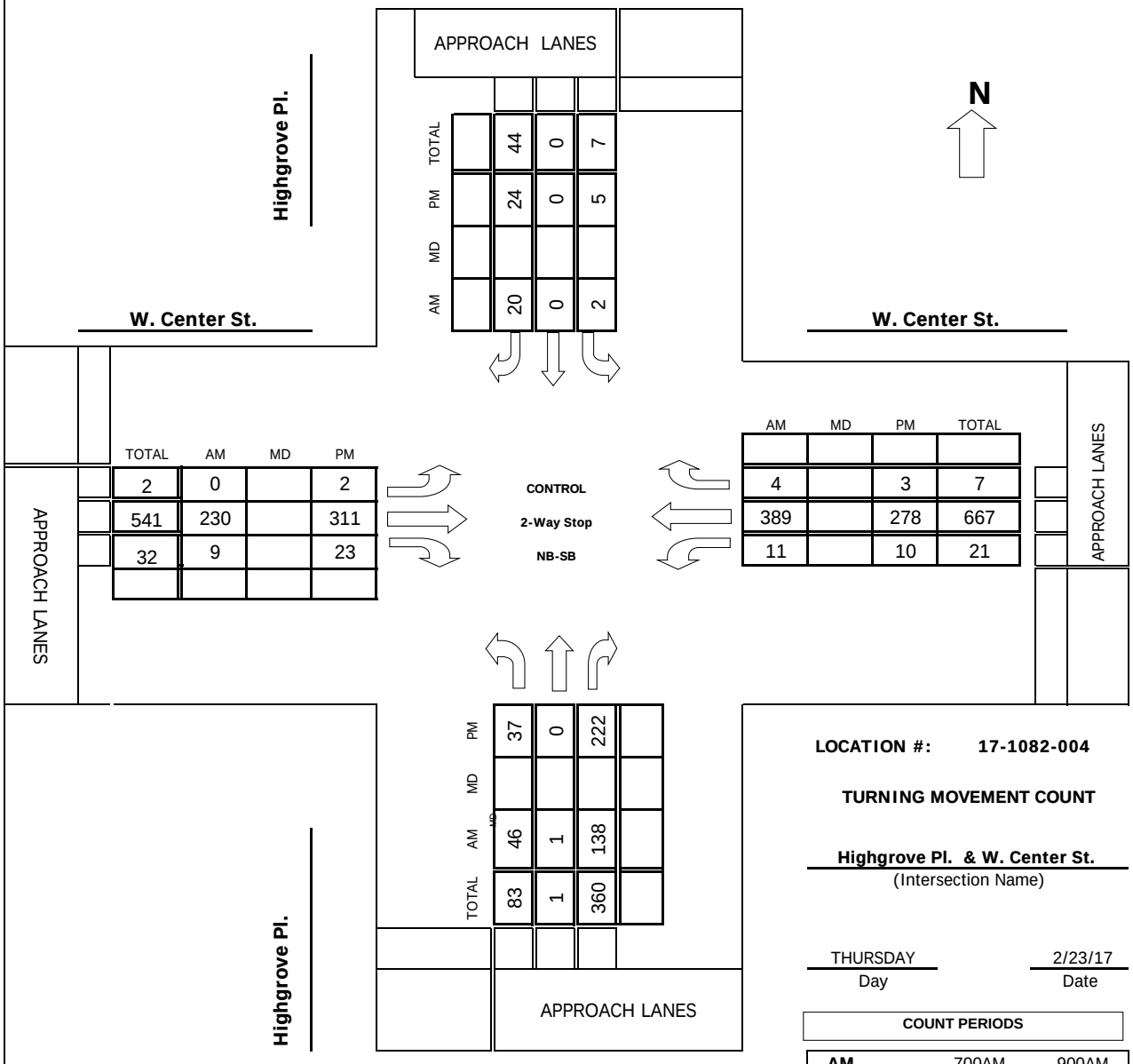
AM PEAK HOUR: 800 AM

NOON PEAK HOUR:

PM PEAK HOUR: 400 PM

Project #: 17-1082-004

TMC SUMMARY OF Highgrove Pl. & W. Center St.



LOCATION #: 17-1082-004

TURNING MOVEMENT COUNT

Highgrove Pl. & W. Center St.
(Intersection Name)

THURSDAY (Day) 2/23/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

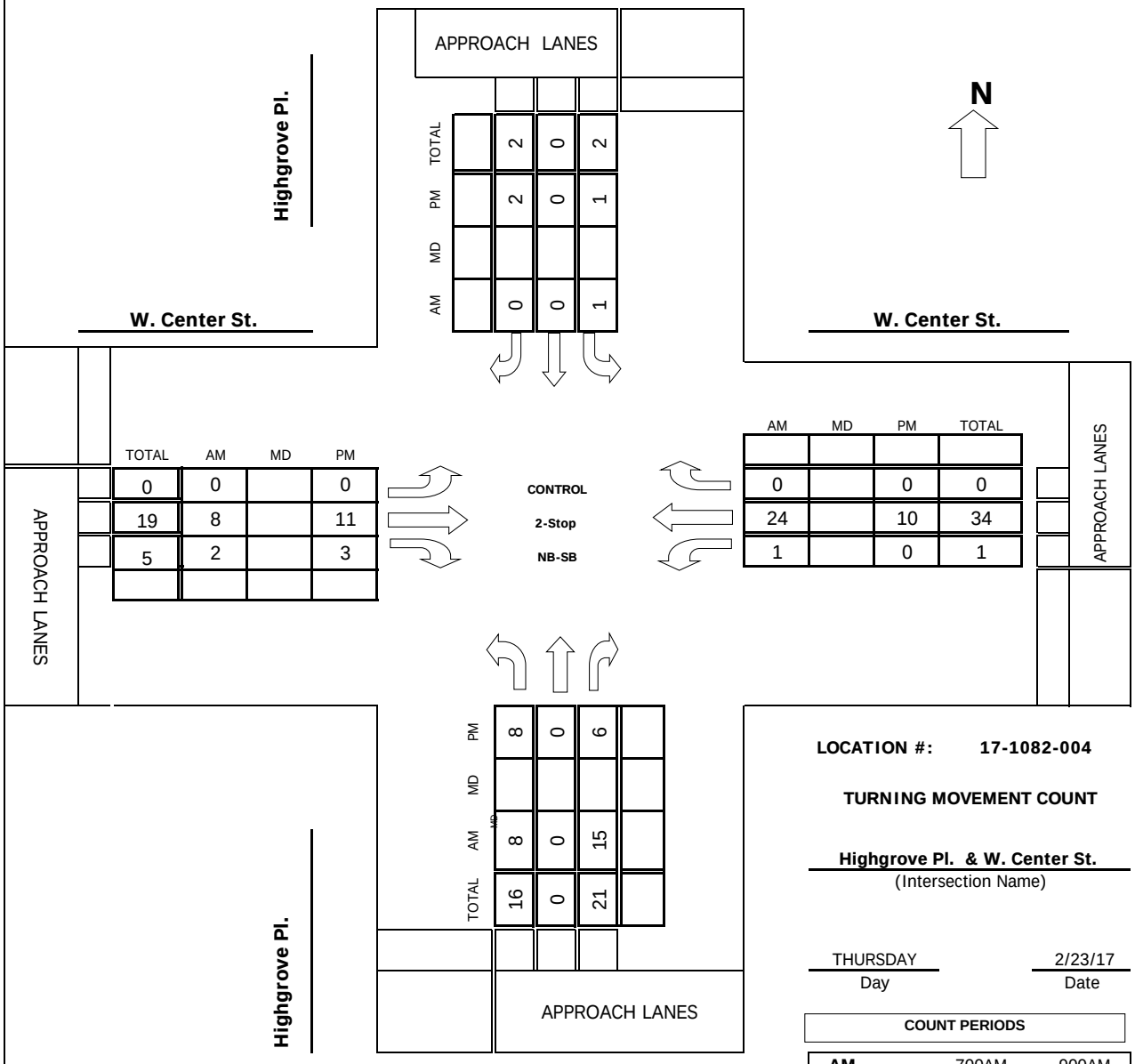
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Project #: 17-1082-004

TMC SUMMARY OF Highgrove Pl. & W. Center St.



LOCATION #: 17-1082-004

TURNING MOVEMENT COUNT

Highgrove Pl. & W. Center St.
(Intersection Name)

THURSDAY (Day) 2/23/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

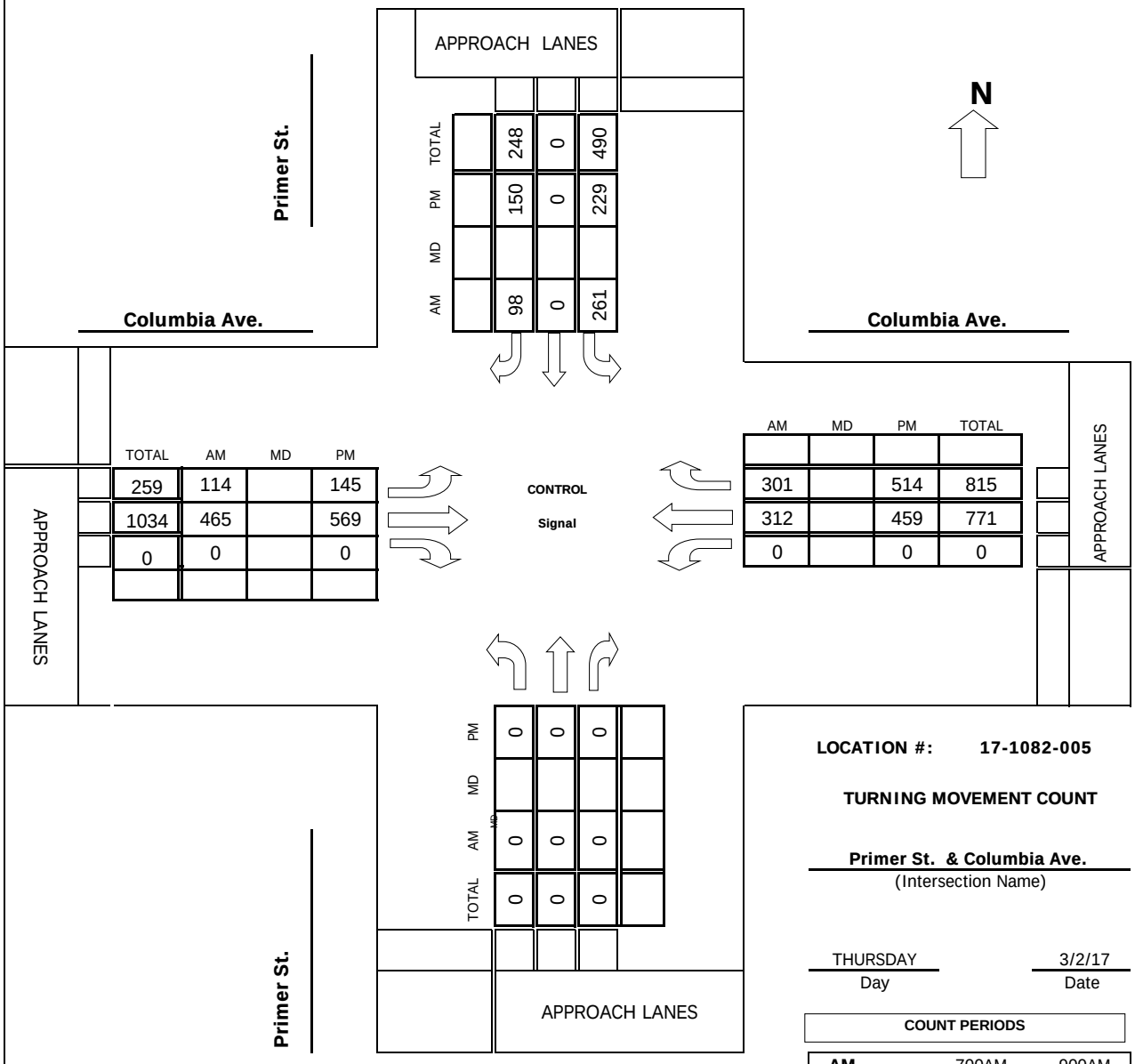
AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-005

TMC SUMMARY OF Primer St. & Columbia Ave.



LOCATION #: 17-1082-005

TURNING MOVEMENT COUNT

Primer St. & Columbia Ave.
(Intersection Name)

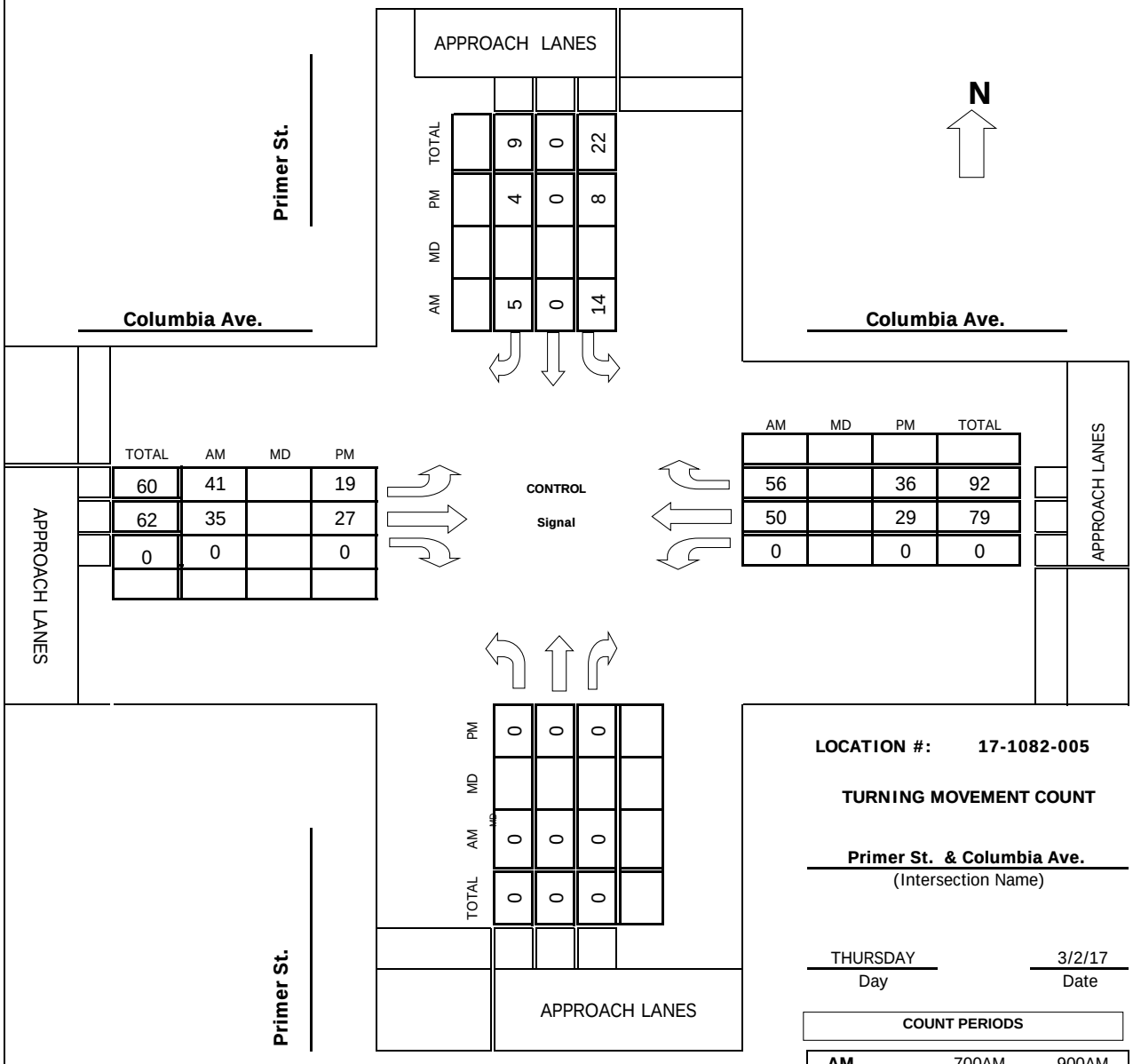
THURSDAY (Day) 3/2/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR	700 AM
NOON PEAK HOUR	
PM PEAK HOUR	430 PM

Project #: 17-1082-005

TMC SUMMARY OF Primer St. & Columbia Ave.



LOCATION #: 17-1082-005

TURNING MOVEMENT COUNT

Primer St. & Columbia Ave.
(Intersection Name)

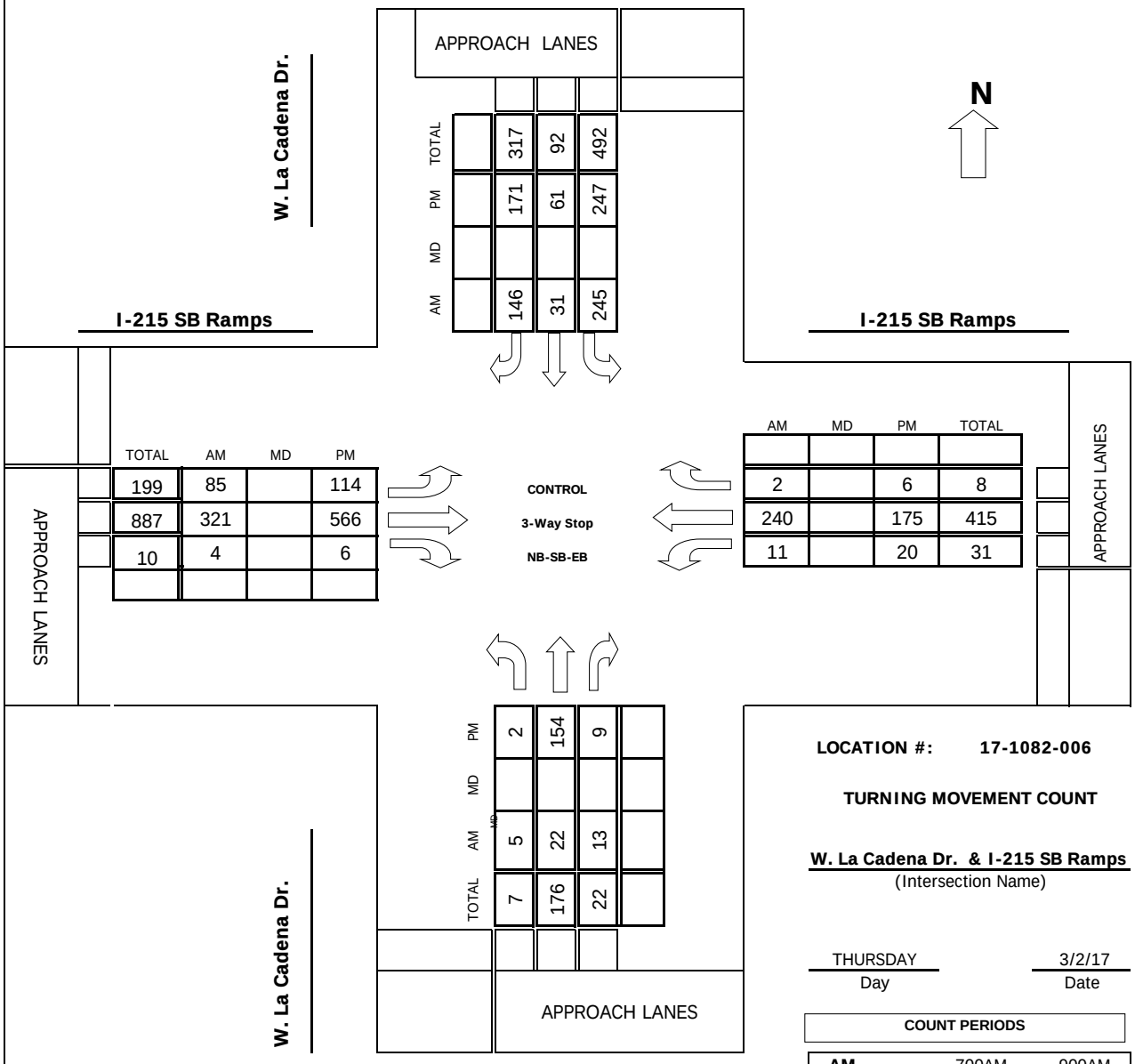
THURSDAY (Day) 3/2/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR	700 AM
NOON PEAK HOUR	
PM PEAK HOUR	400 PM

Project #: 17-1082-006

TMC SUMMARY OF W. La Cadena Dr. & I-215 SB Ramps



LOCATION #: 17-1082-006

TURNING MOVEMENT COUNT

W. La Cadena Dr. & I-215 SB Ramps
(Intersection Name)

THURSDAY (Day) 3/2/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

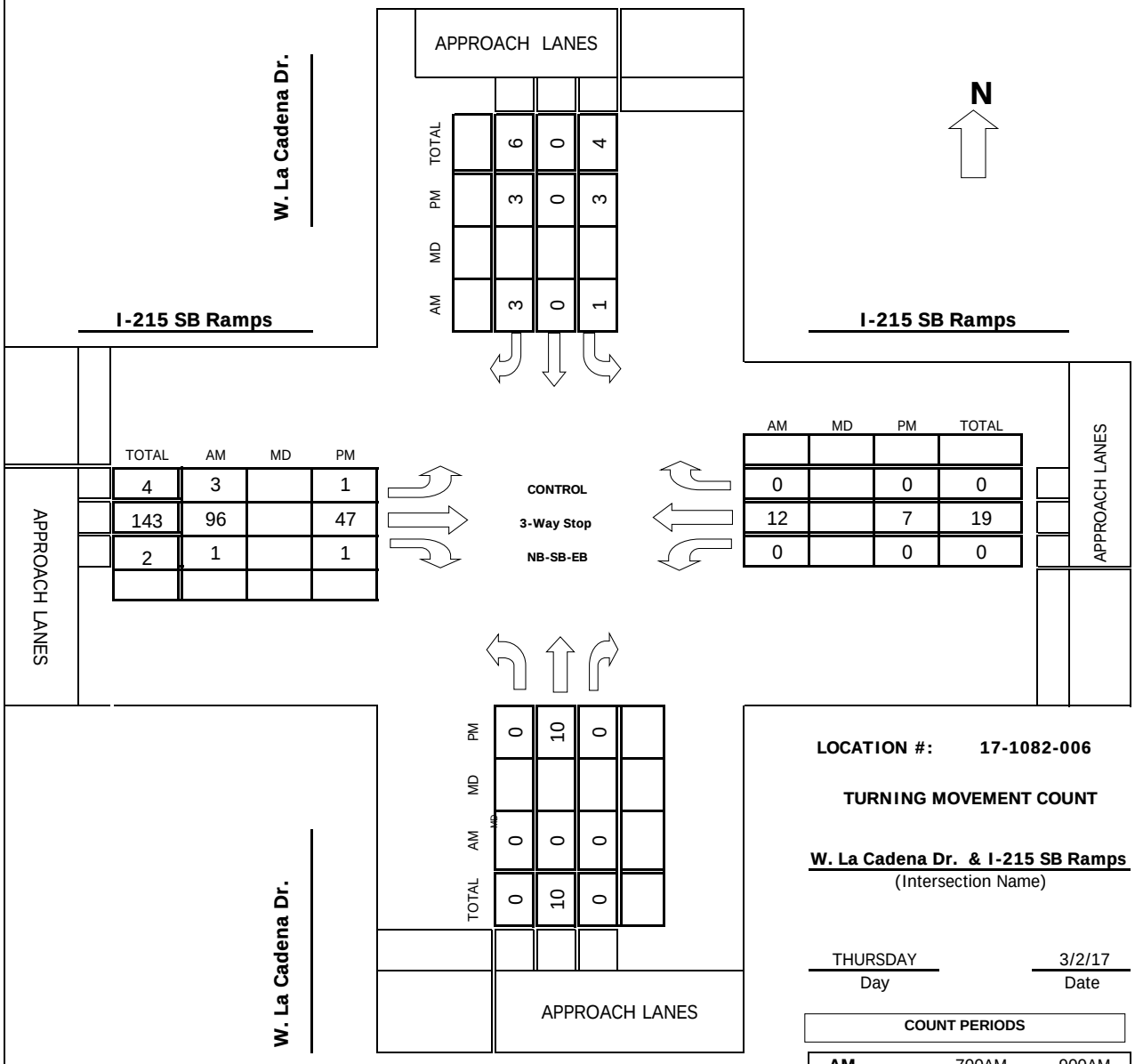
AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Project #: 17-1082-006

TMC SUMMARY OF W. La Cadena Dr. & I-215 SB Ramps



LOCATION #: 17-1082-006

TURNING MOVEMENT COUNT

W. La Cadena Dr. & I-215 SB Ramps
(Intersection Name)

THURSDAY (Day) 3/2/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

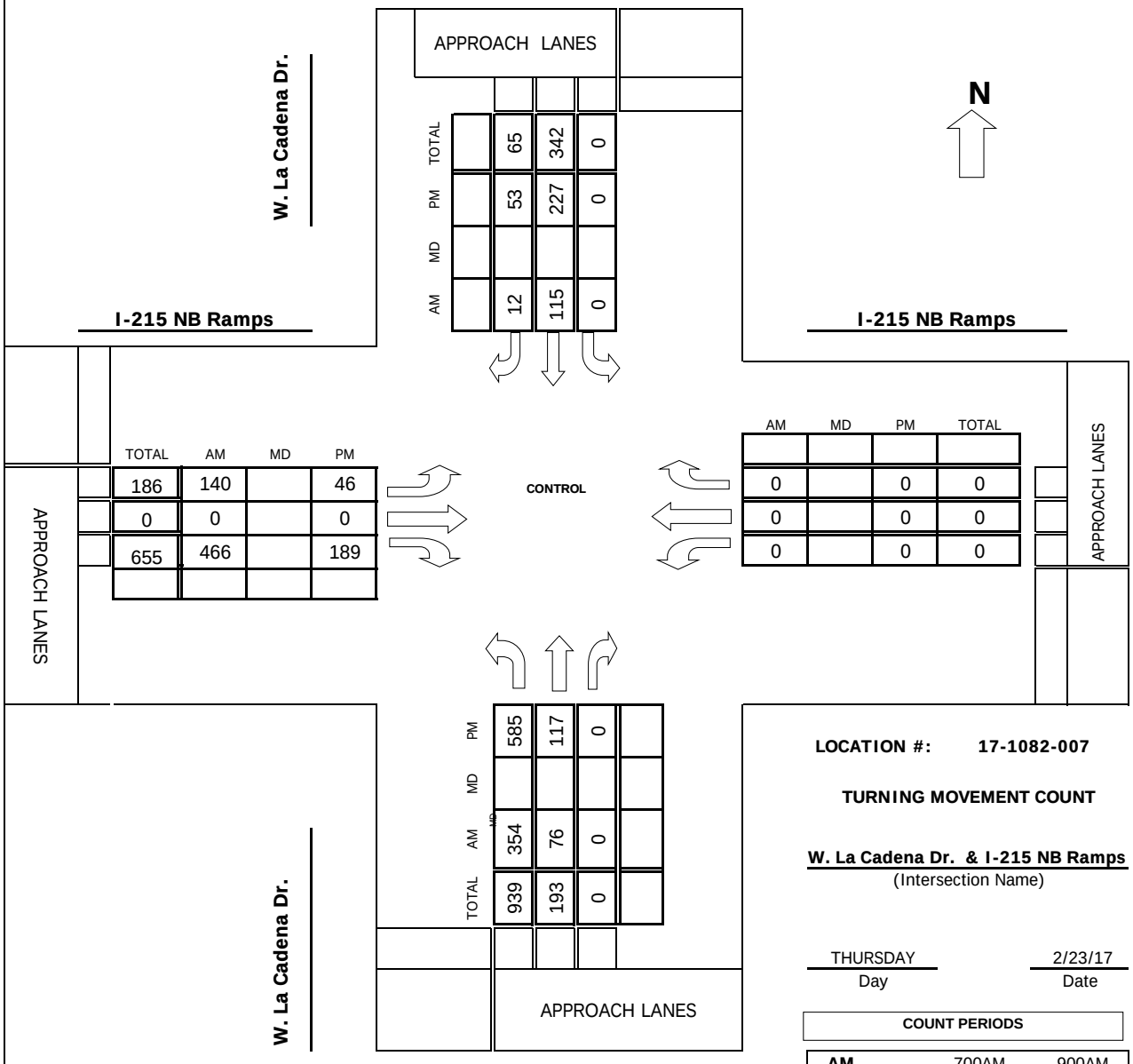
AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-007

TMC SUMMARY OF W. La Cadena Dr. & I-215 NB Ramps



LOCATION #: 17-1082-007

TURNING MOVEMENT COUNT

W. La Cadena Dr. & I-215 NB Ramps
(Intersection Name)

THURSDAY (Day) 2/23/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

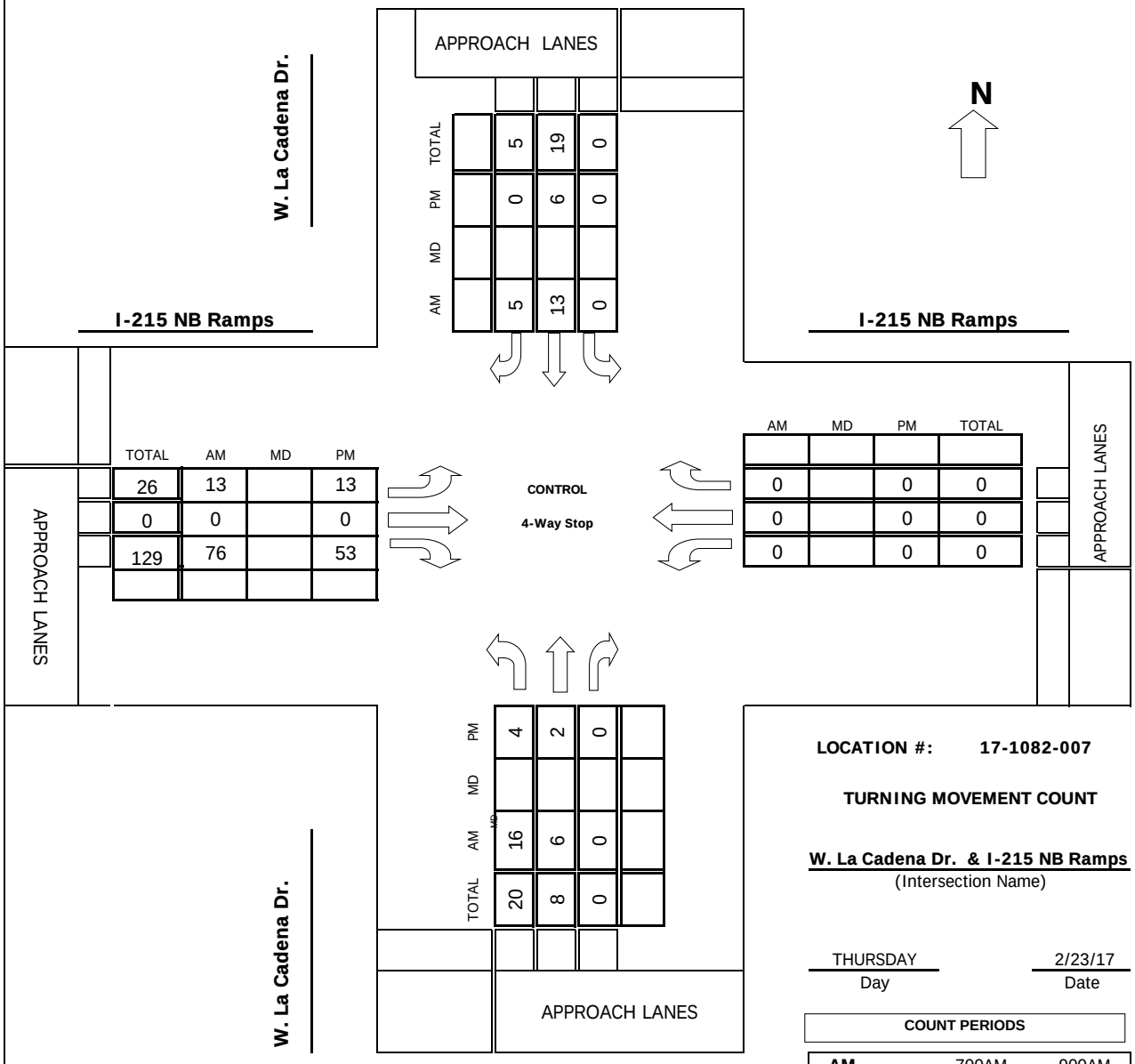
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-007

TMC SUMMARY OF W. La Cadena Dr. & I-215 NB Ramps



LOCATION #: 17-1082-007

TURNING MOVEMENT COUNT

W. La Cadena Dr. & I-215 NB Ramps
(Intersection Name)

THURSDAY (Day) 2/23/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

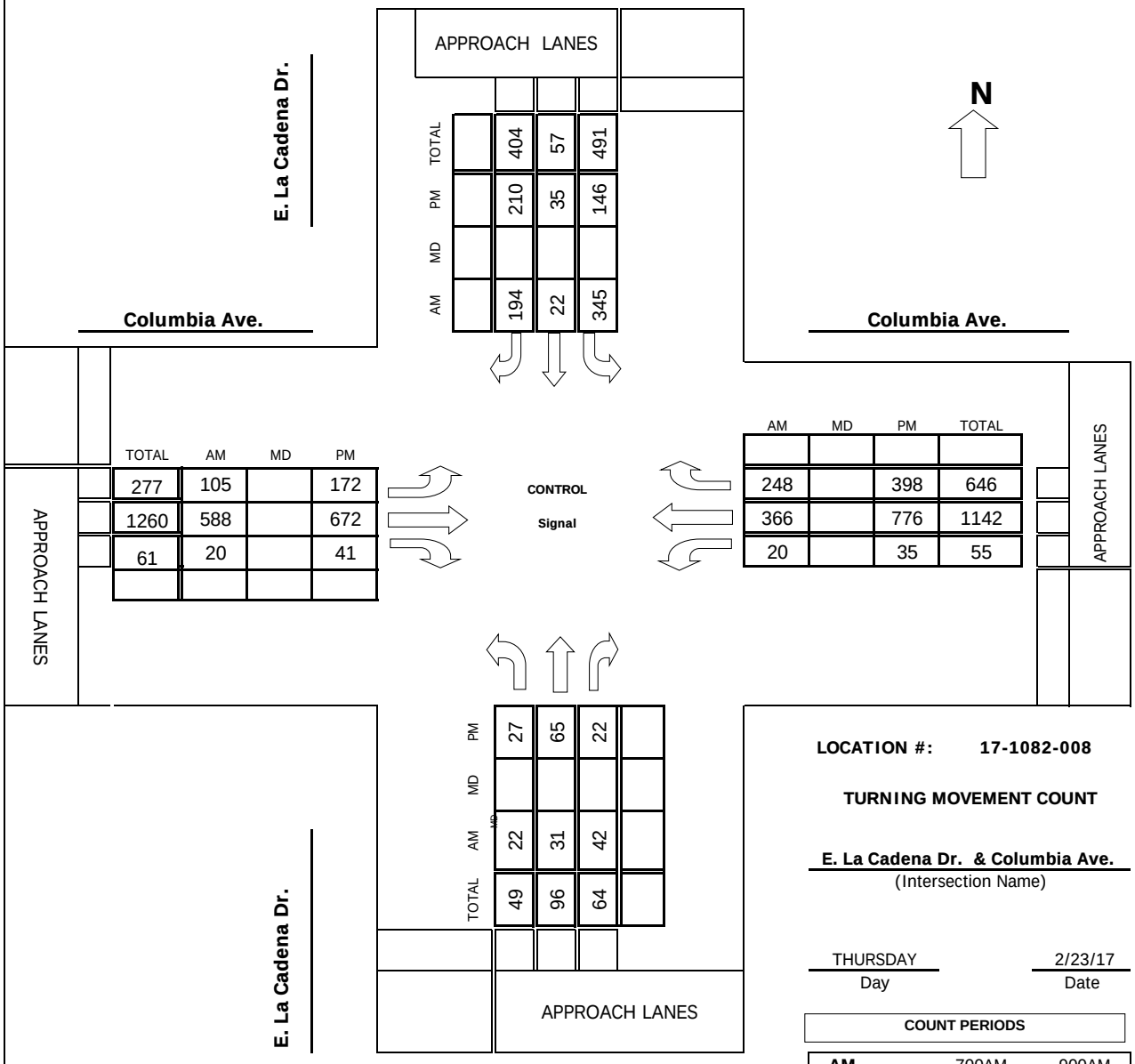
AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-008

TMC SUMMARY OF E. La Cadena Dr. & Columbia Ave.



LOCATION #: 17-1082-008

TURNING MOVEMENT COUNT

E. La Cadena Dr. & Columbia Ave.
(Intersection Name)

THURSDAY (Day) 2/23/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

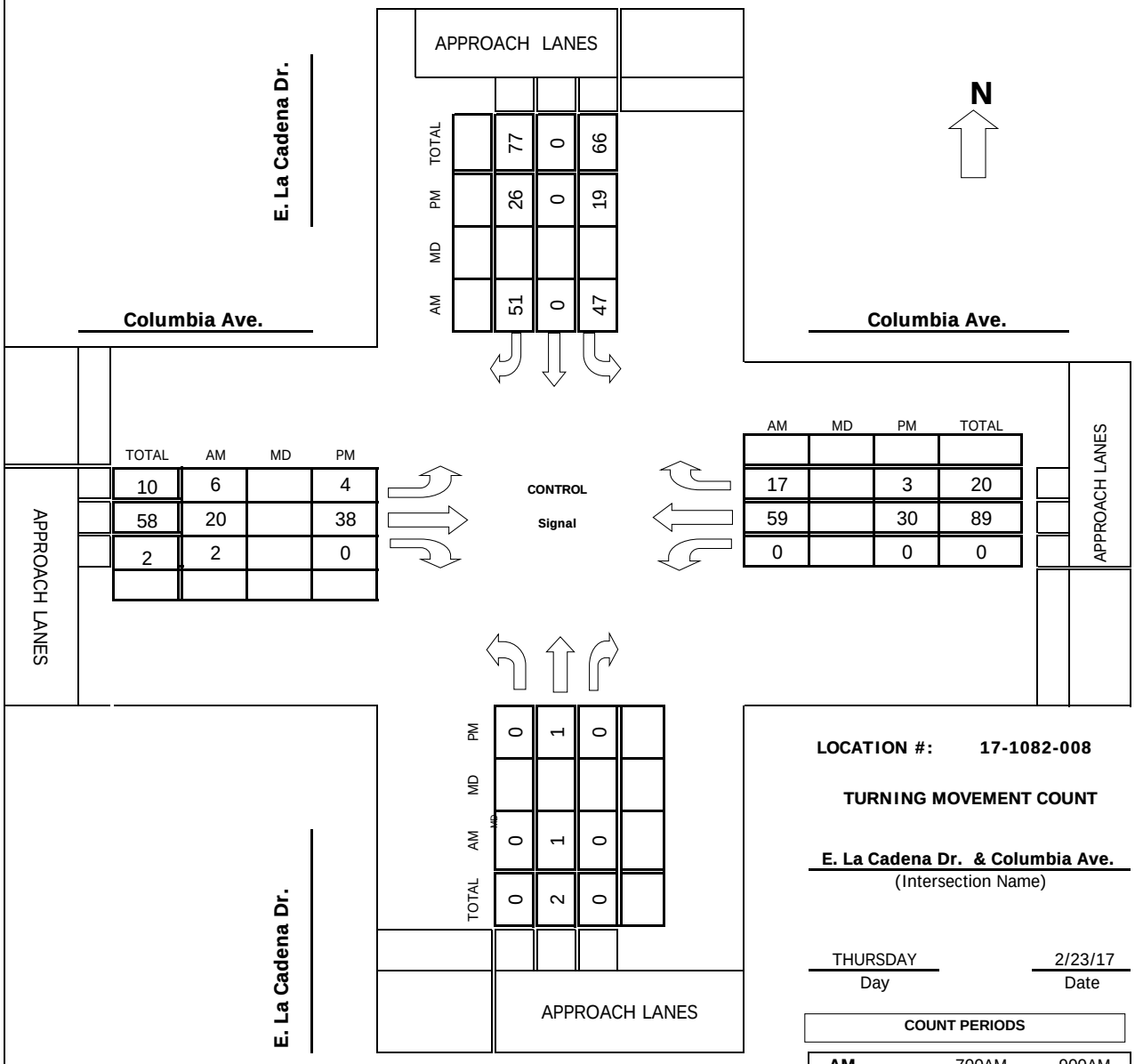
AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Project #: 17-1082-008

TMC SUMMARY OF E. La Cadena Dr. & Columbia Ave.



LOCATION #: 17-1082-008

TURNING MOVEMENT COUNT

E. La Cadena Dr. & Columbia Ave.
(Intersection Name)

THURSDAY (Day) 2/23/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

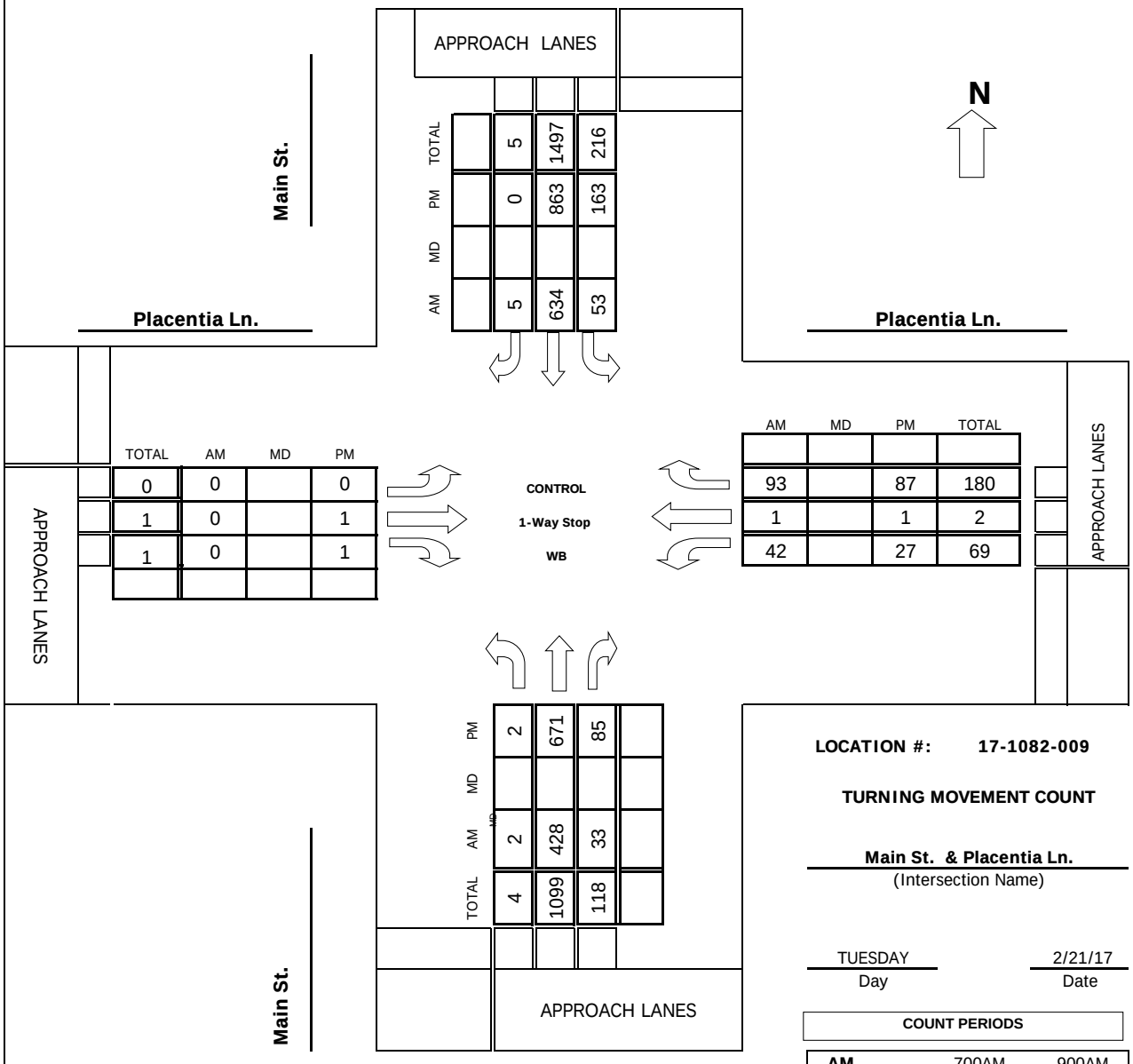
AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-009

TMC SUMMARY OF Main St. & Placentia Ln.



LOCATION #: 17-1082-009

TURNING MOVEMENT COUNT

Main St. & Placentia Ln.
(Intersection Name)

TUESDAY (Day) 2/21/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

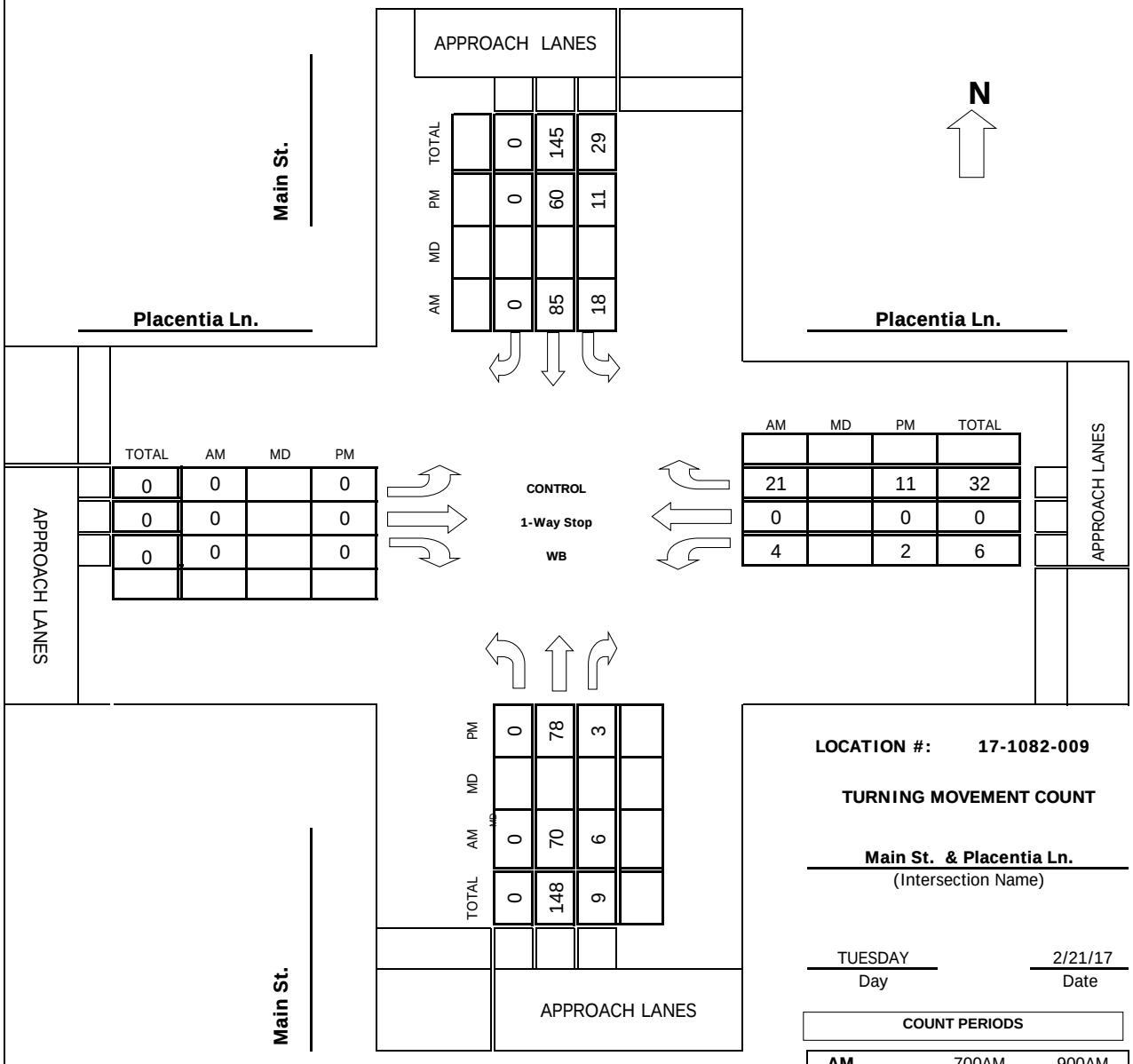
AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Project #: 17-1082-009

TMC SUMMARY OF Main St. & Placentia Ln.



LOCATION #: 17-1082-009

TURNING MOVEMENT COUNT

Main St. & Placentia Ln.
(Intersection Name)

TUESDAY (Day) 2/21/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

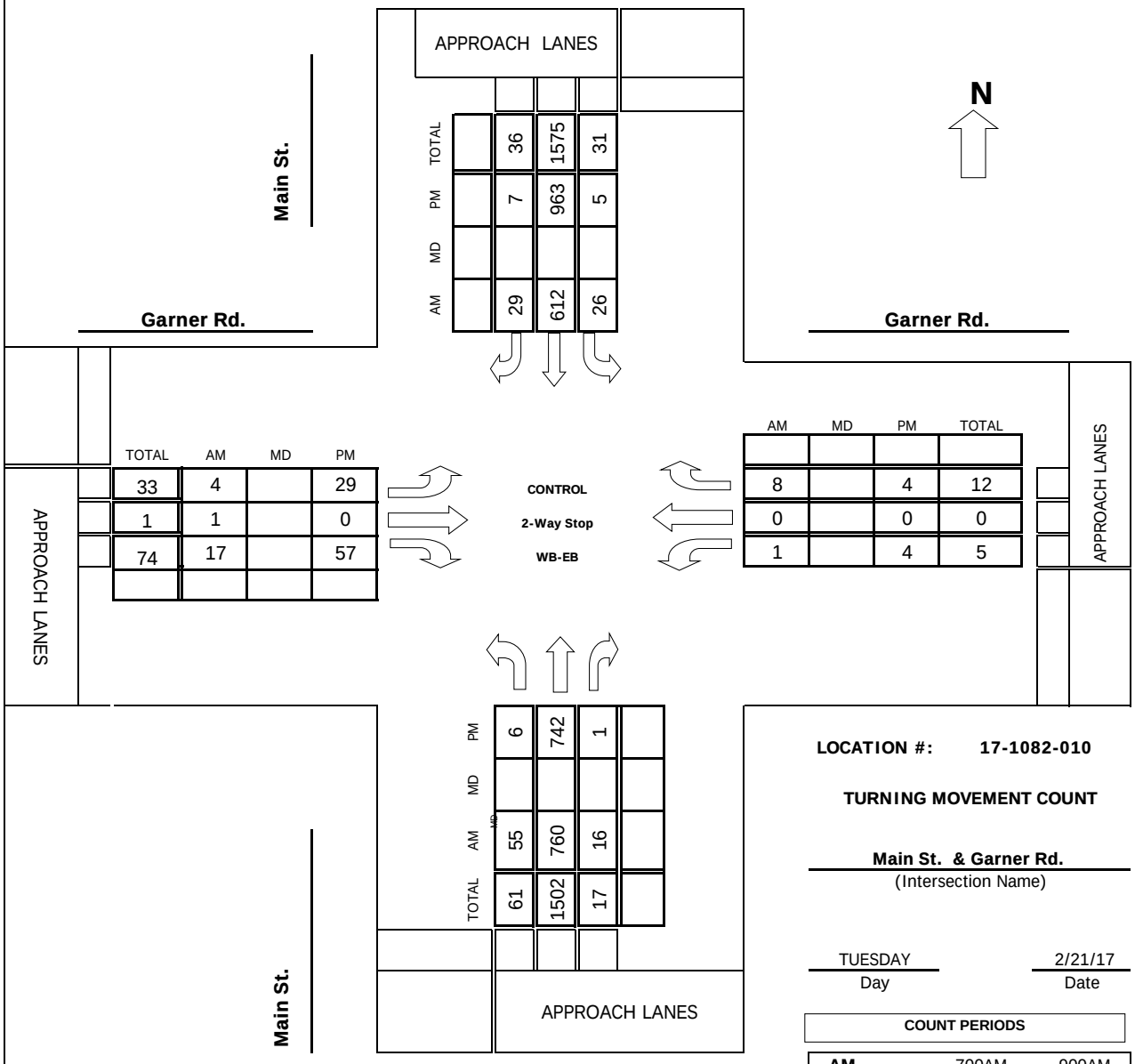
AM PEAK HOUR 745 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Project #: 17-1082-010

TMC SUMMARY OF Main St. & Garner Rd.



LOCATION #: 17-1082-010

TURNING MOVEMENT COUNT

Main St. & Garner Rd.
(Intersection Name)

TUESDAY (Day) 2/21/17 (Date)

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

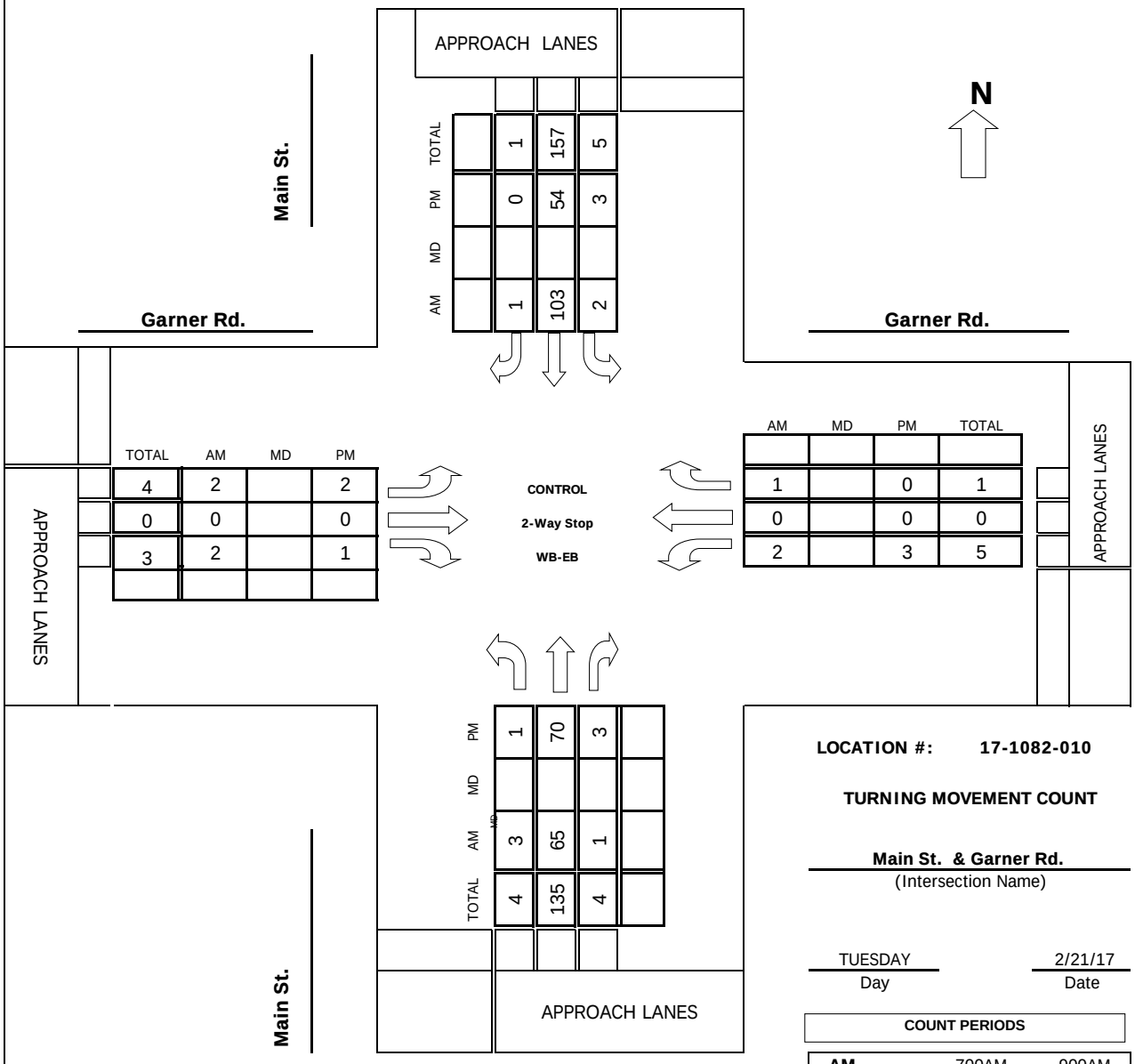
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Project #: 17-1082-010

TMC SUMMARY OF Main St. & Garner Rd.



LOCATION #: 17-1082-010

TURNING MOVEMENT COUNT

Main St. & Garner Rd.
(Intersection Name)

TUESDAY (Day) 2/21/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

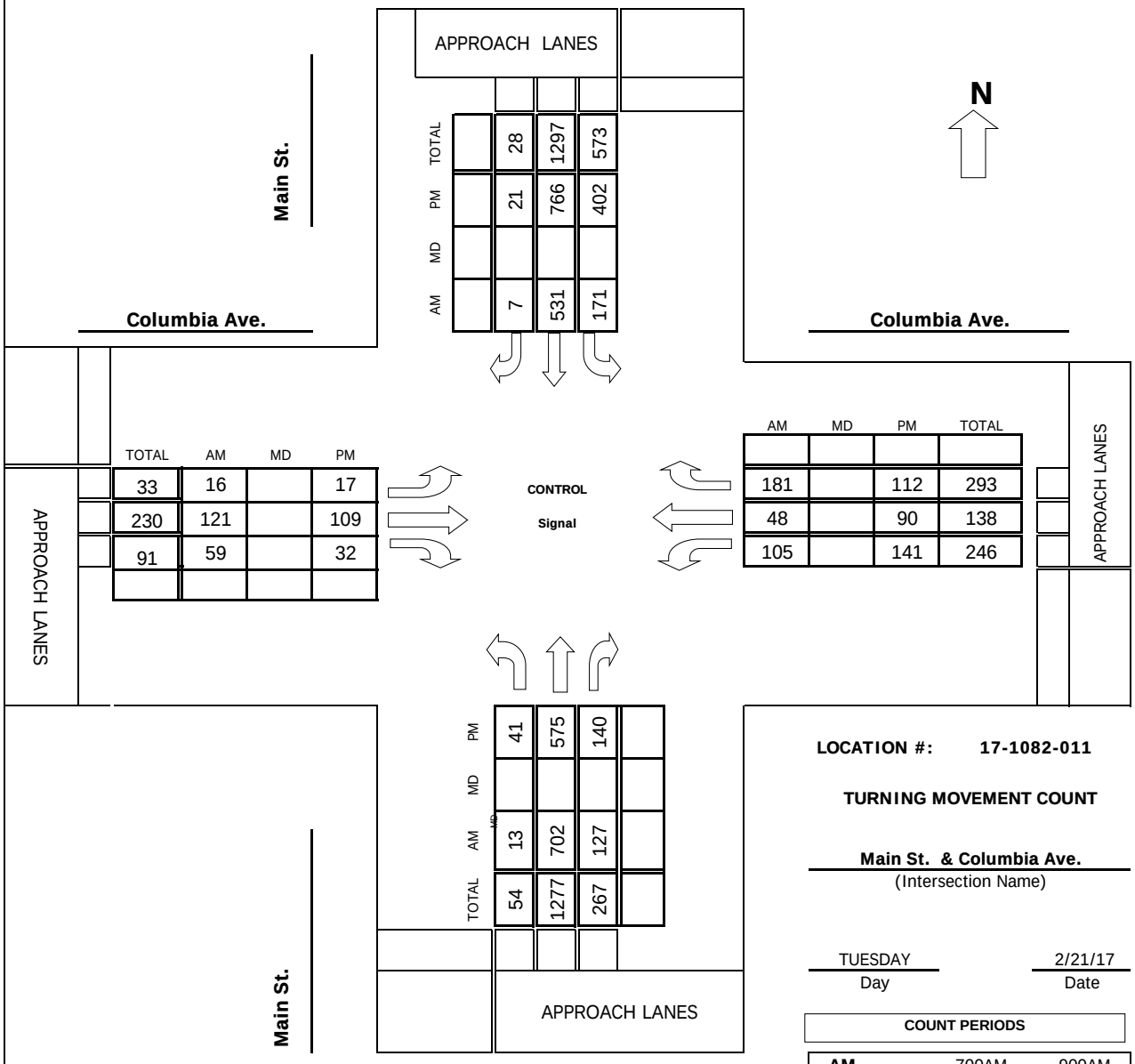
AM PEAK HOUR 745 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-011

TMC SUMMARY OF Main St. & Columbia Ave.



LOCATION #: 17-1082-011

TURNING MOVEMENT COUNT

Main St. & Columbia Ave.
(Intersection Name)

TUESDAY (Day) 2/21/17 (Date)

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

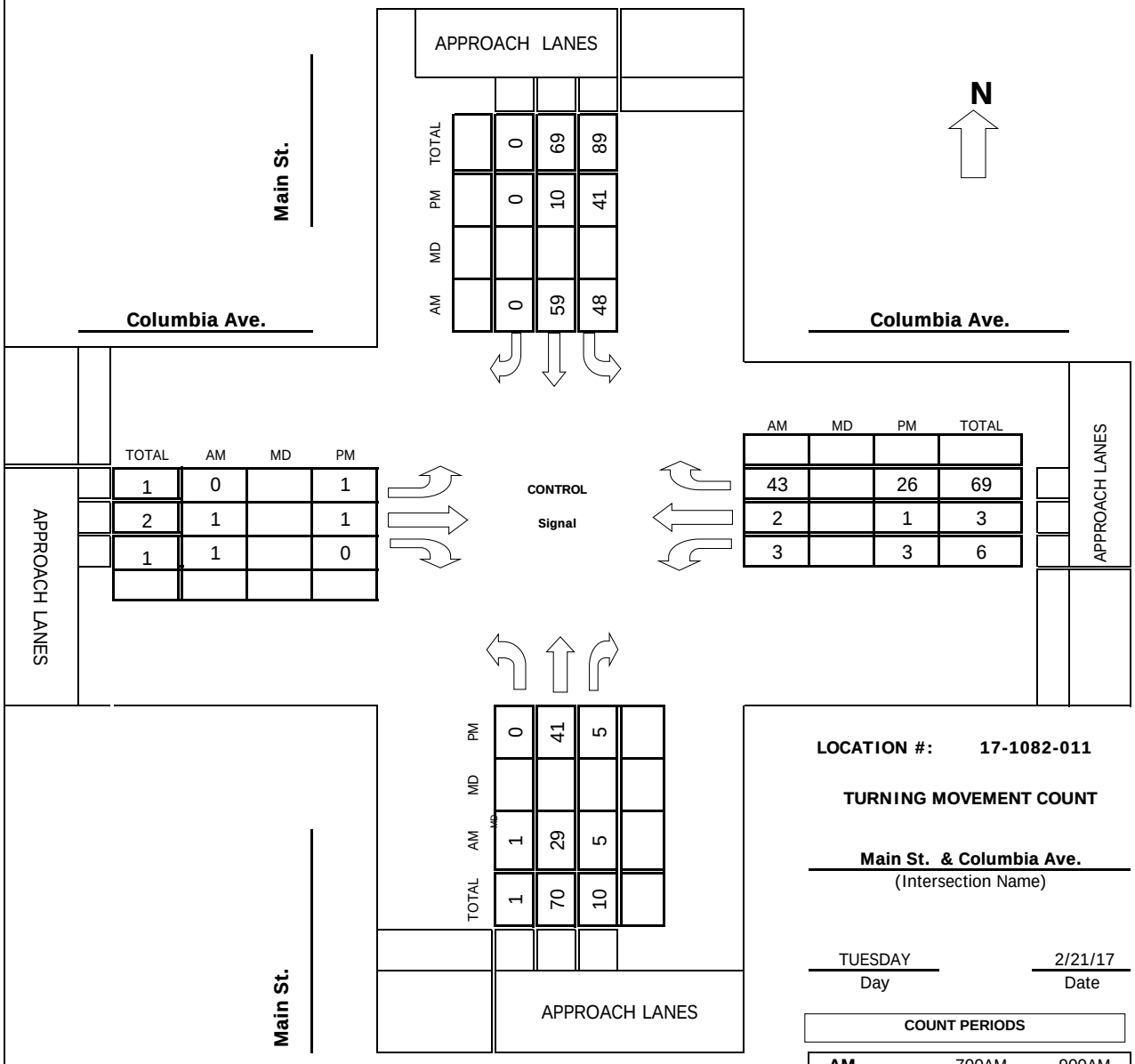
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Project #: 17-1082-011

TMC SUMMARY OF Main St. & Columbia Ave.



LOCATION #: 17-1082-011

TURNING MOVEMENT COUNT

Main St. & Columbia Ave.
(Intersection Name)

TUESDAY (Day) 2/21/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

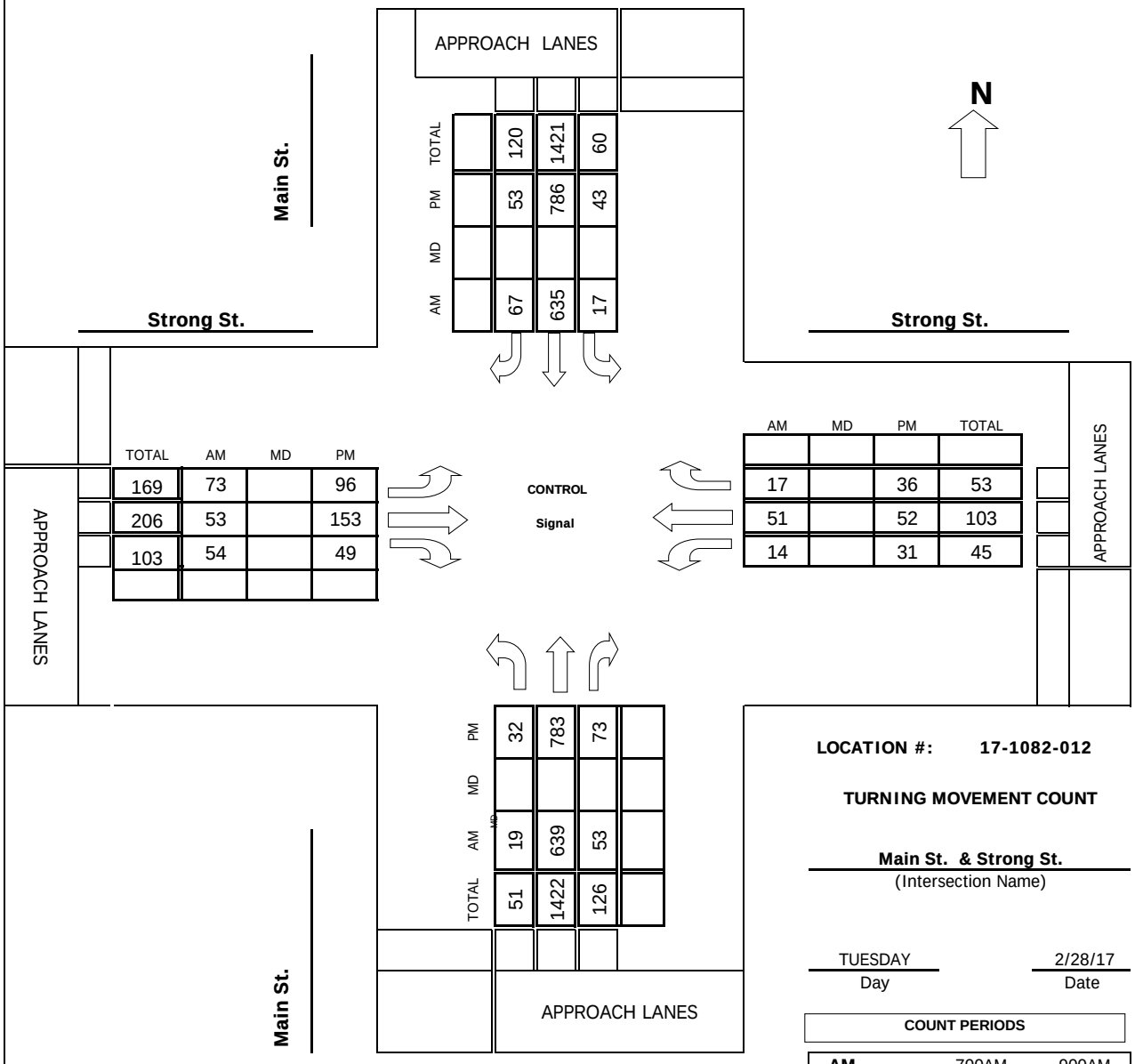
AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-012

TMC SUMMARY OF Main St. & Strong St.



LOCATION #: 17-1082-012

TURNING MOVEMENT COUNT

Main St. & Strong St.
(Intersection Name)

TUESDAY (Day) 2/28/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

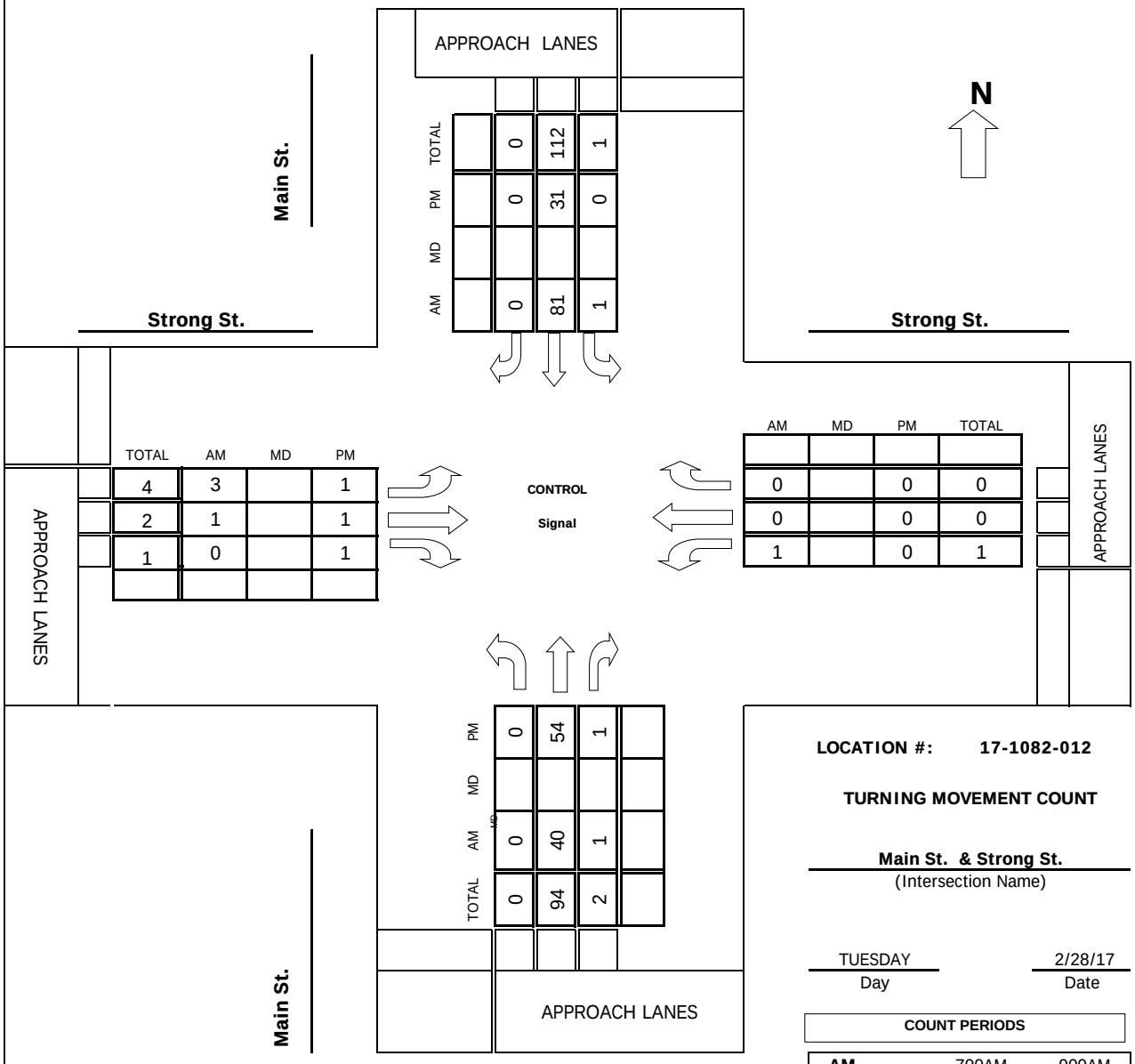
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Project #: 17-1082-012

TMC SUMMARY OF Main St. & Strong St.



LOCATION #: 17-1082-012

TURNING MOVEMENT COUNT

Main St. & Strong St.
(Intersection Name)

TUESDAY
Day

2/28/17
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

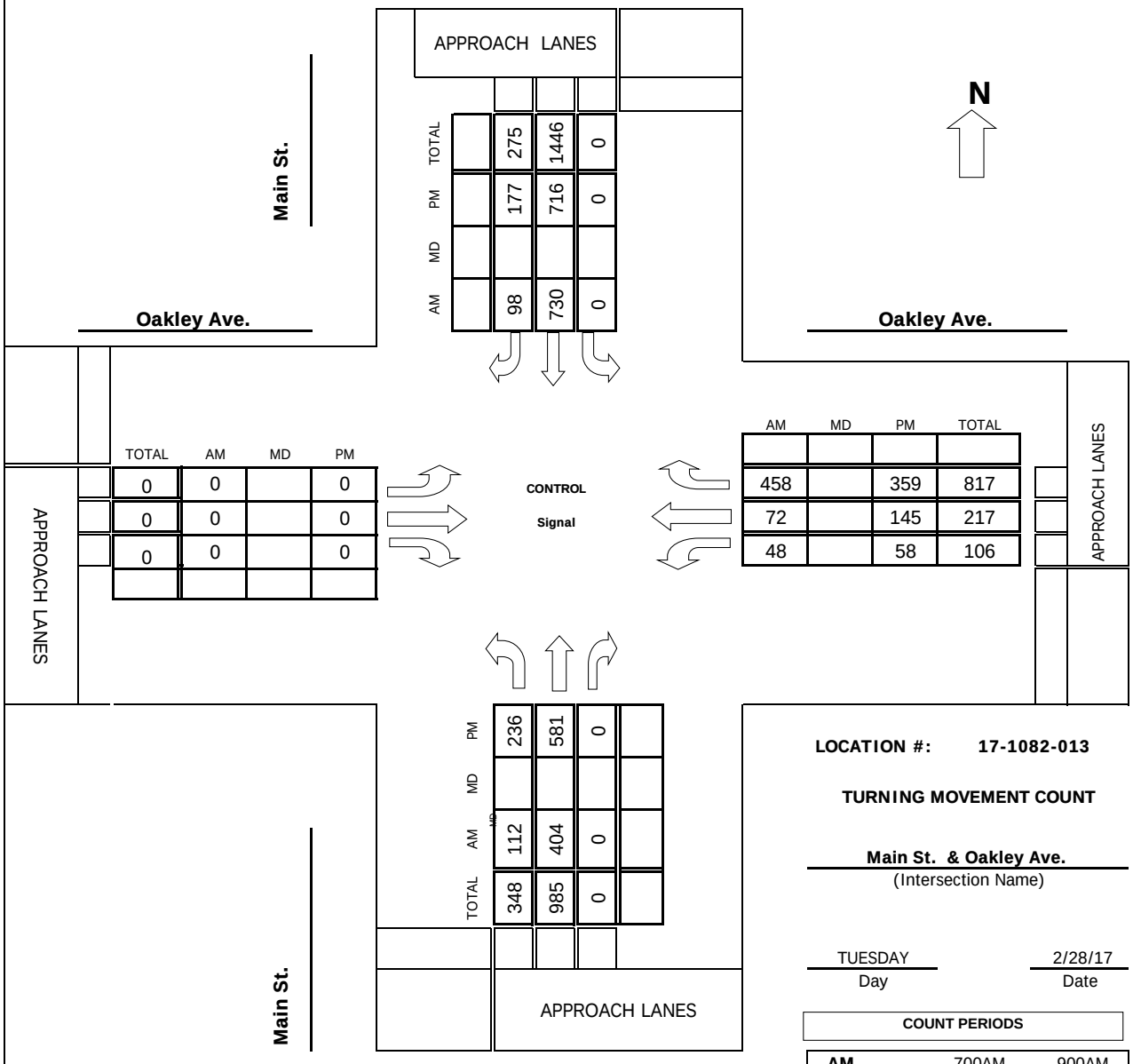
AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 500 PM

Project #: 17-1082-013

TMC SUMMARY OF Main St. & Oakley Ave.



LOCATION #: 17-1082-013

TURNING MOVEMENT COUNT

Main St. & Oakley Ave.
(Intersection Name)

TUESDAY
Day

2/28/17
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

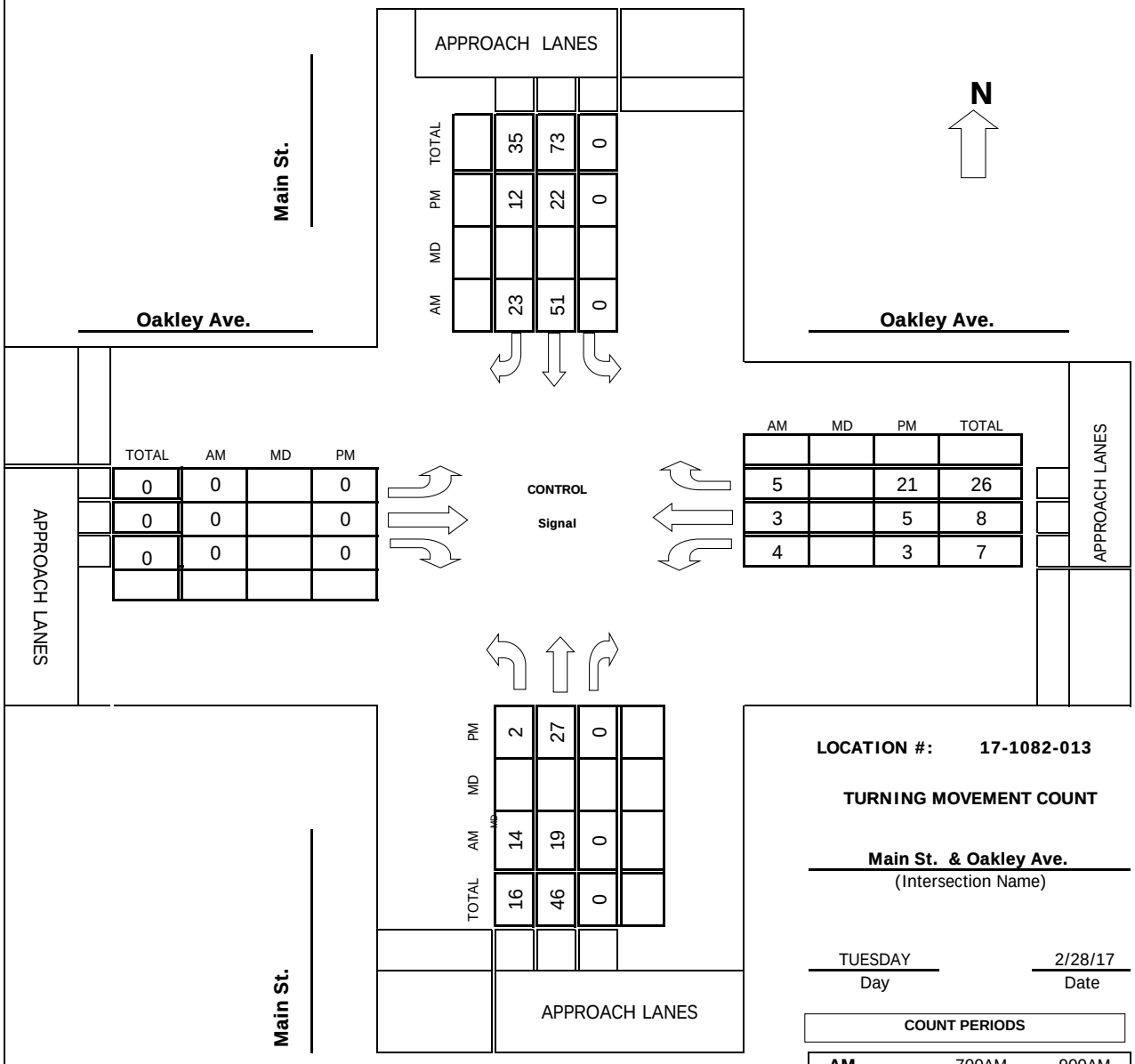
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Project #: 17-1082-013

TMC SUMMARY OF Main St. & Oakley Ave.



LOCATION #: 17-1082-013

TURNING MOVEMENT COUNT

Main St. & Oakley Ave.
(Intersection Name)

TUESDAY
Day

2/28/17
Date

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

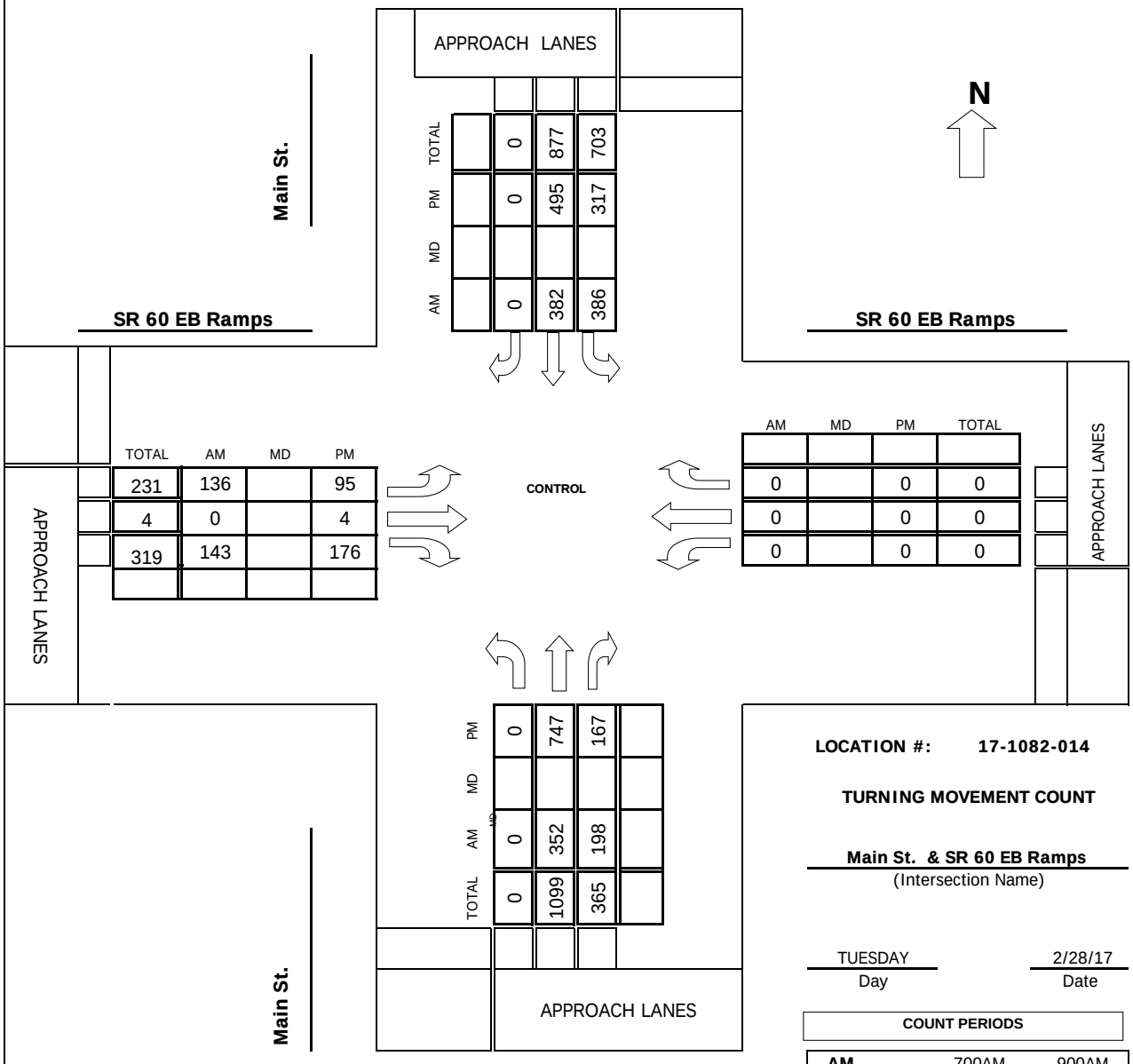
AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 500 PM

Project #: 17-1082-014

TMC SUMMARY OF Main St. & SR 60 EB Ramps



LOCATION #: 17-1082-014

TURNING MOVEMENT COUNT

Main St. & SR 60 EB Ramps
(Intersection Name)

TUESDAY (Day) 2/28/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

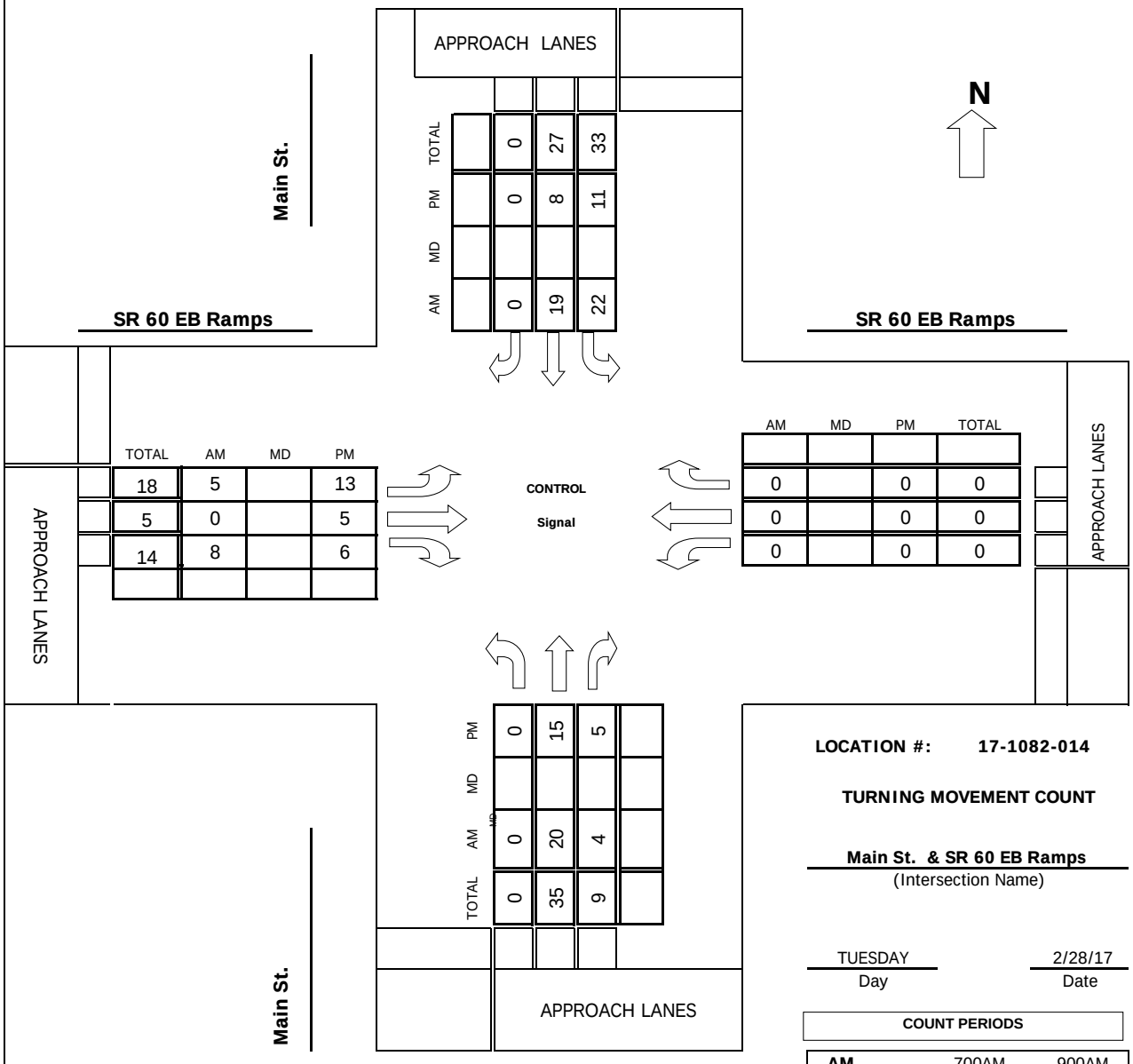
AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Project #: 17-1082-014

TMC SUMMARY OF Main St. & SR 60 EB Ramps



LOCATION #: 17-1082-014

TURNING MOVEMENT COUNT

Main St. & SR 60 EB Ramps
(Intersection Name)

TUESDAY (Day) 2/28/17 (Date)

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

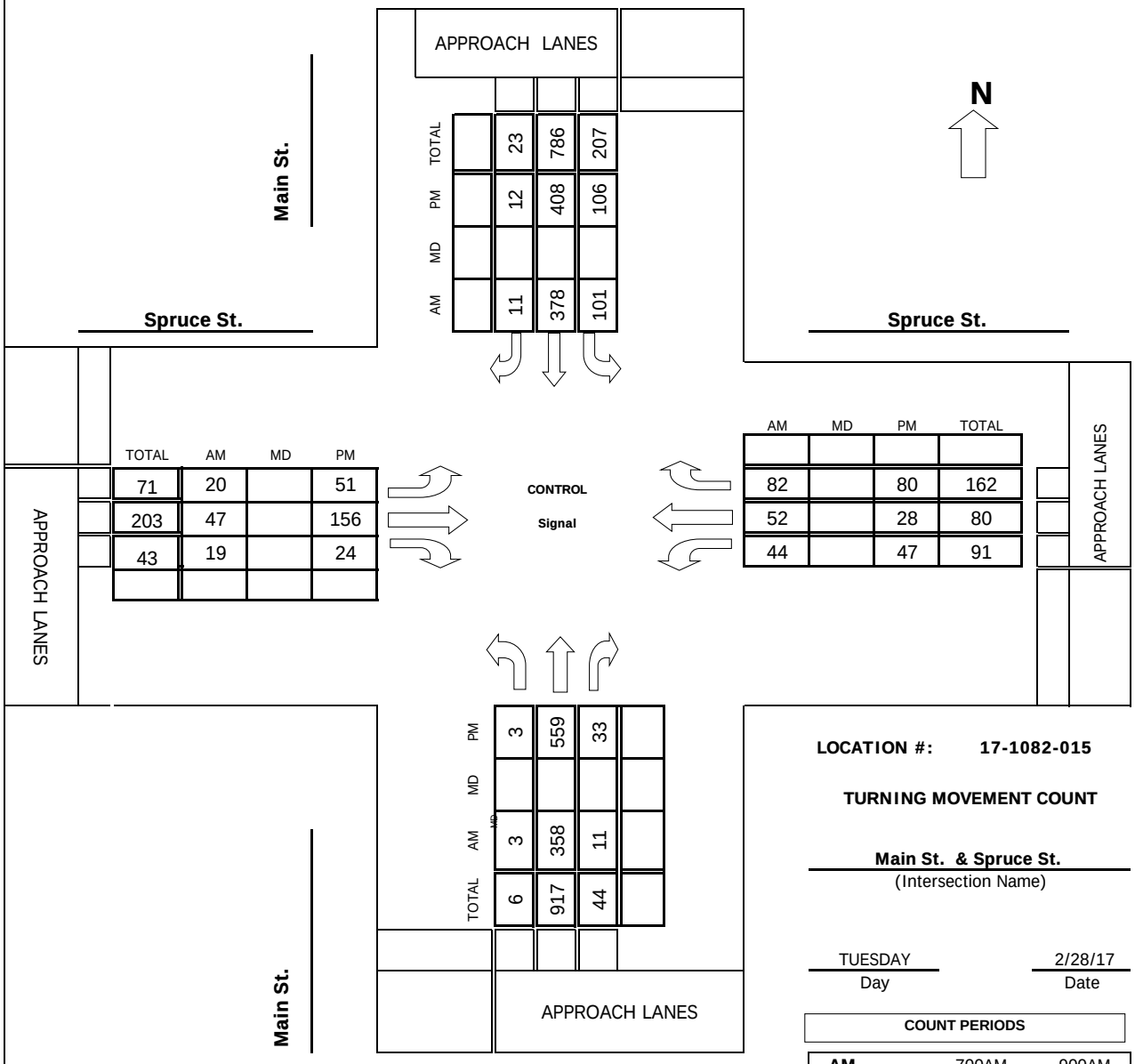
AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Project #: 17-1082-015

TMC SUMMARY OF Main St. & Spruce St.



LOCATION #: 17-1082-015

TURNING MOVEMENT COUNT

Main St. & Spruce St.
(Intersection Name)

TUESDAY
Day

2/28/17
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

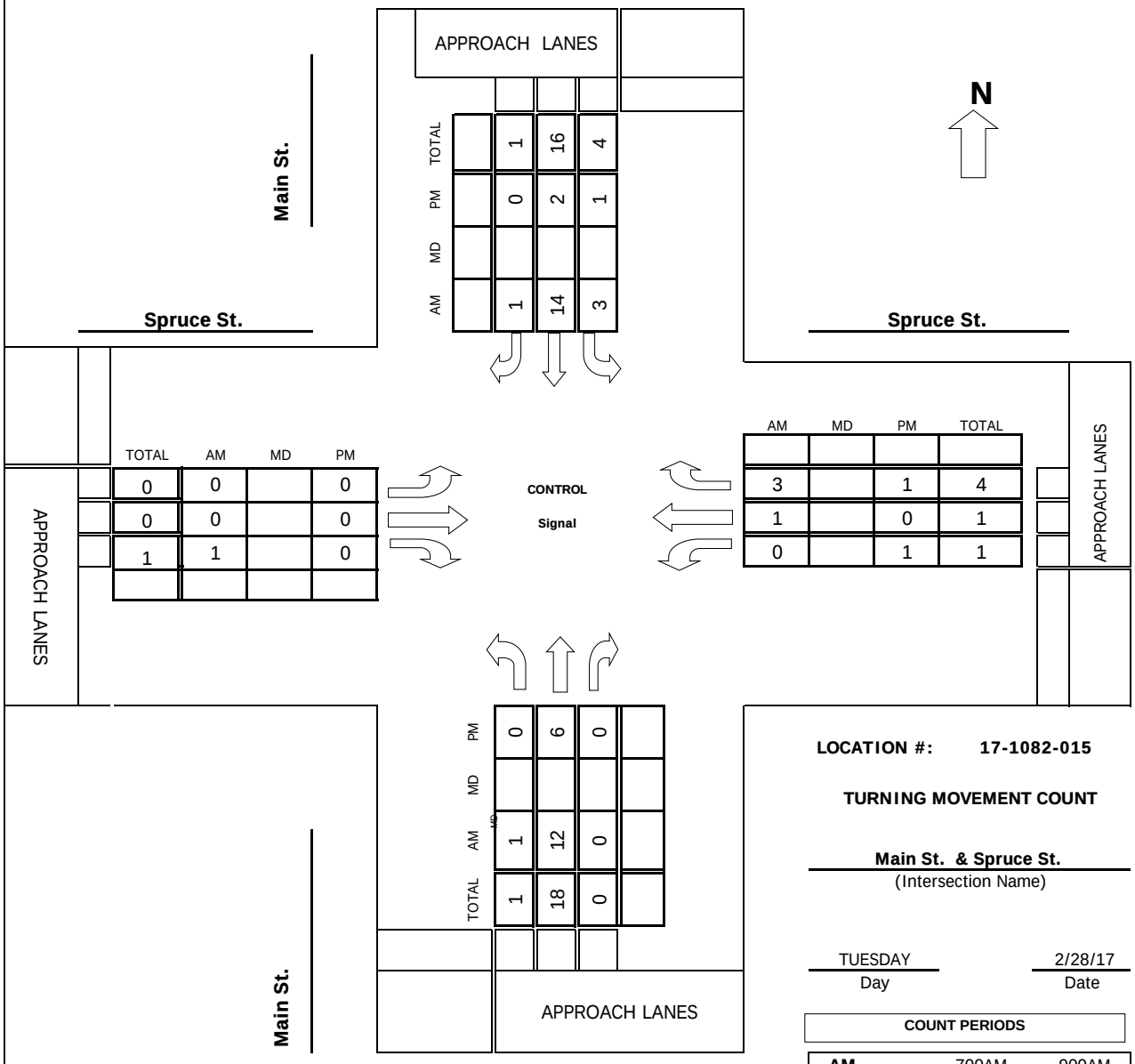
AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Project #: 17-1082-015

TMC SUMMARY OF Main St. & Spruce St.



LOCATION #: 17-1082-015

TURNING MOVEMENT COUNT

Main St. & Spruce St.
(Intersection Name)

TUESDAY (Day) 2/28/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

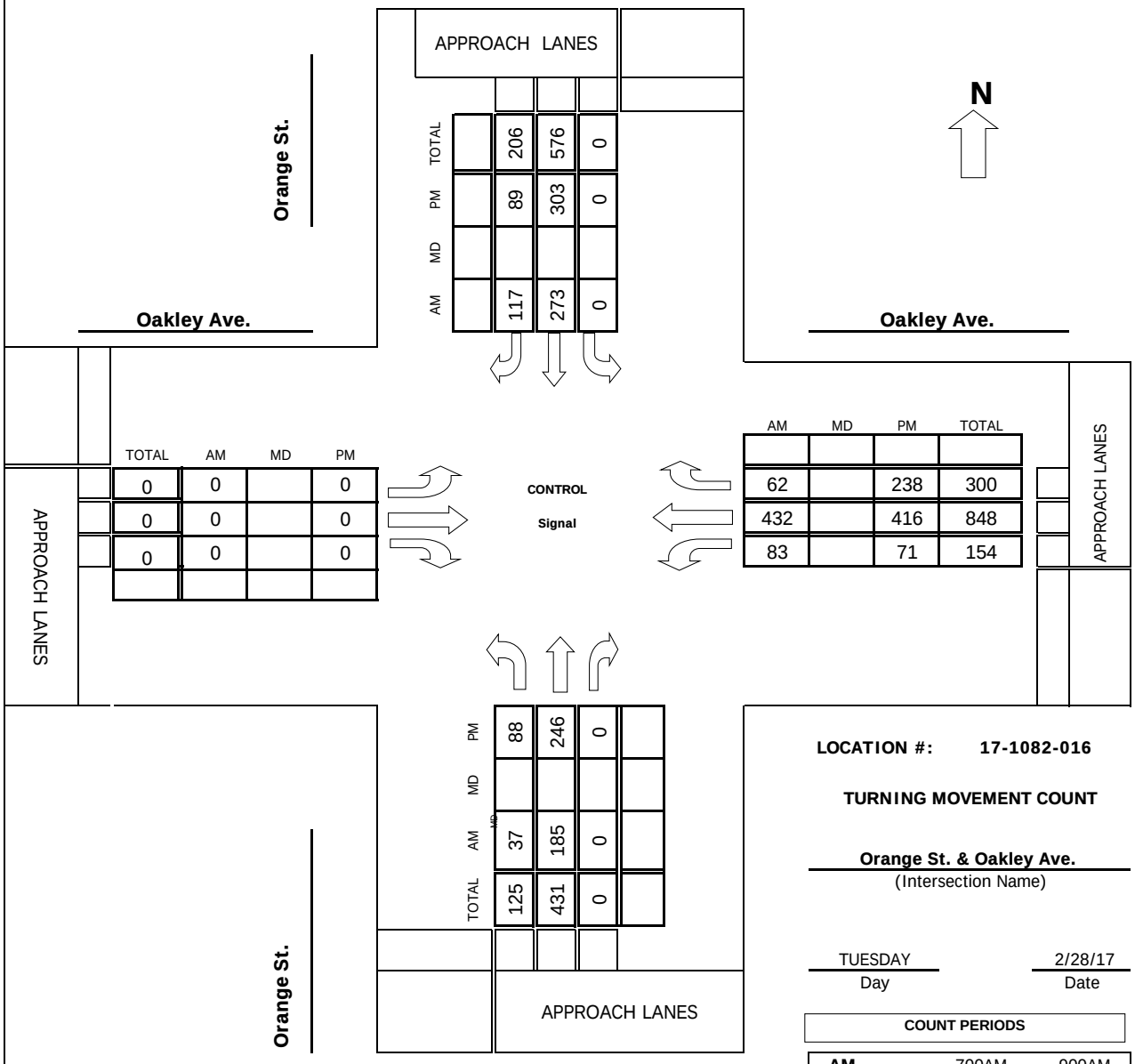
AM PEAK HOUR 745 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-016

TMC SUMMARY OF Orange St. & Oakley Ave.



LOCATION #: 17-1082-016

TURNING MOVEMENT COUNT

Orange St. & Oakley Ave.
(Intersection Name)

TUESDAY
Day

2/28/17
Date

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

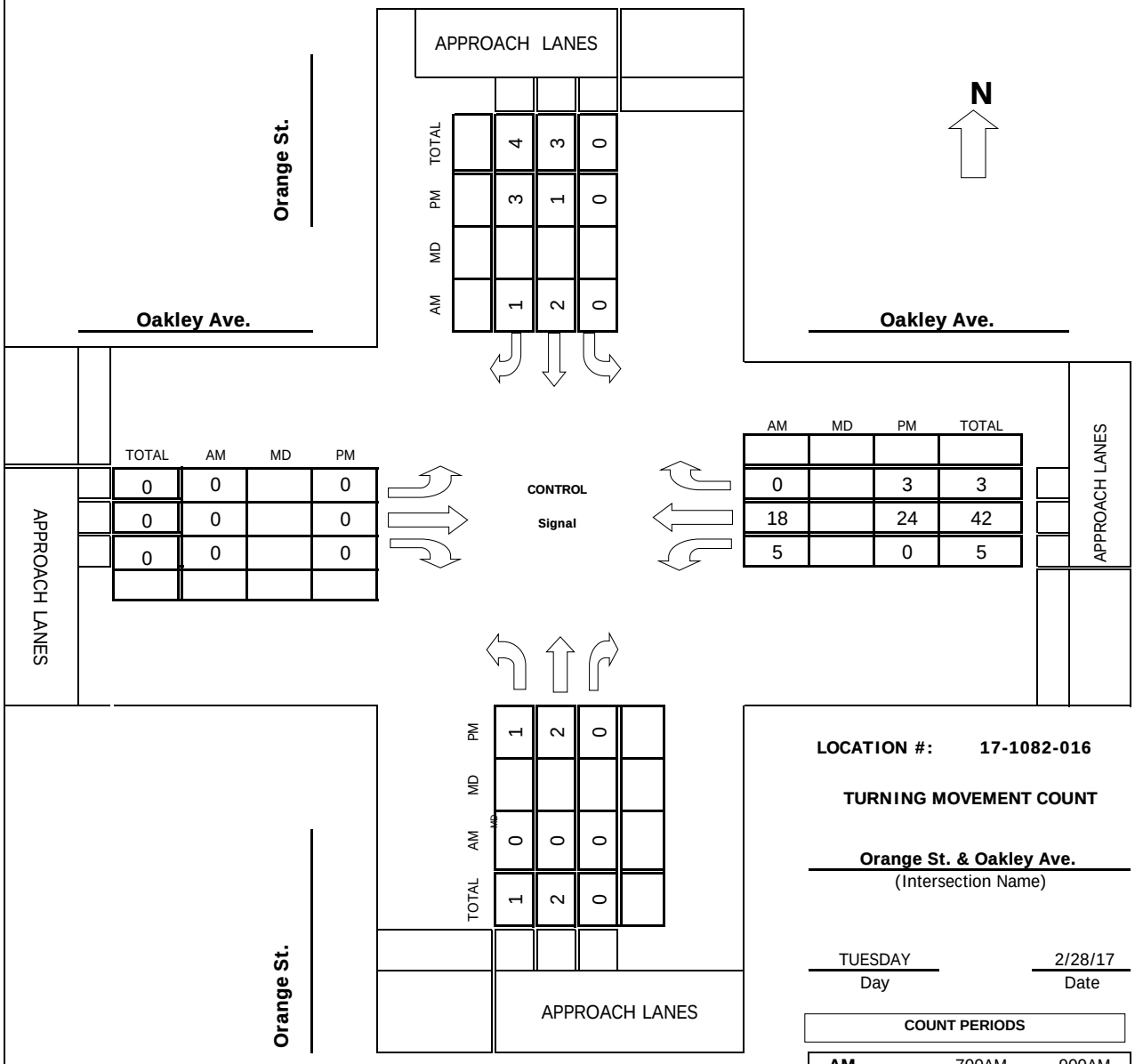
AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Project #: 17-1082-016

TMC SUMMARY OF Orange St. & Oakley Ave.



LOCATION #: 17-1082-016

TURNING MOVEMENT COUNT

Orange St. & Oakley Ave.
(Intersection Name)

TUESDAY
Day

2/28/17
Date

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

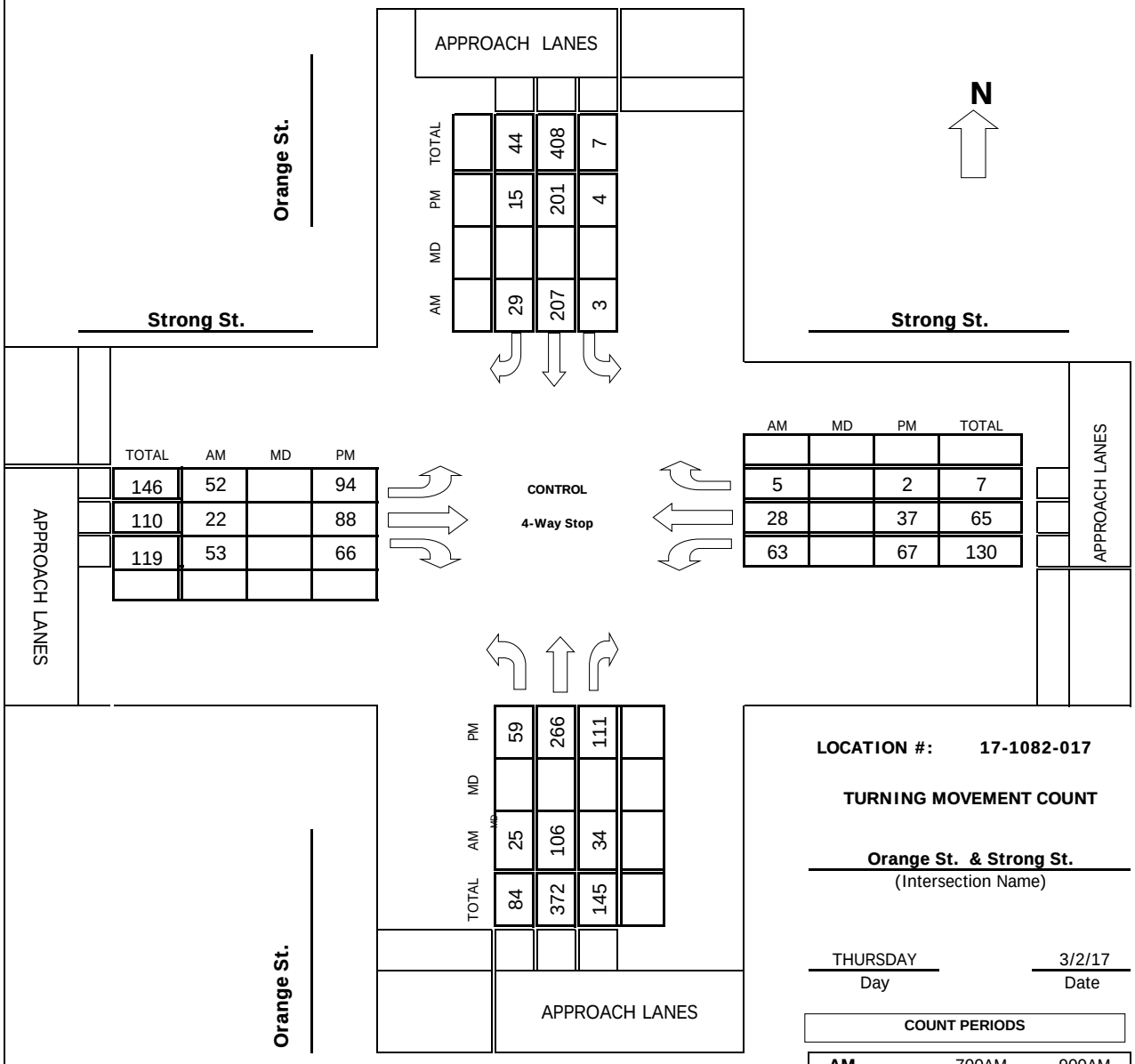
AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 500 PM

Project #: 17-1082-017

TMC SUMMARY OF Orange St. & Strong St.



LOCATION #: 17-1082-017

TURNING MOVEMENT COUNT

Orange St. & Strong St.
(Intersection Name)

THURSDAY (Day) 3/2/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

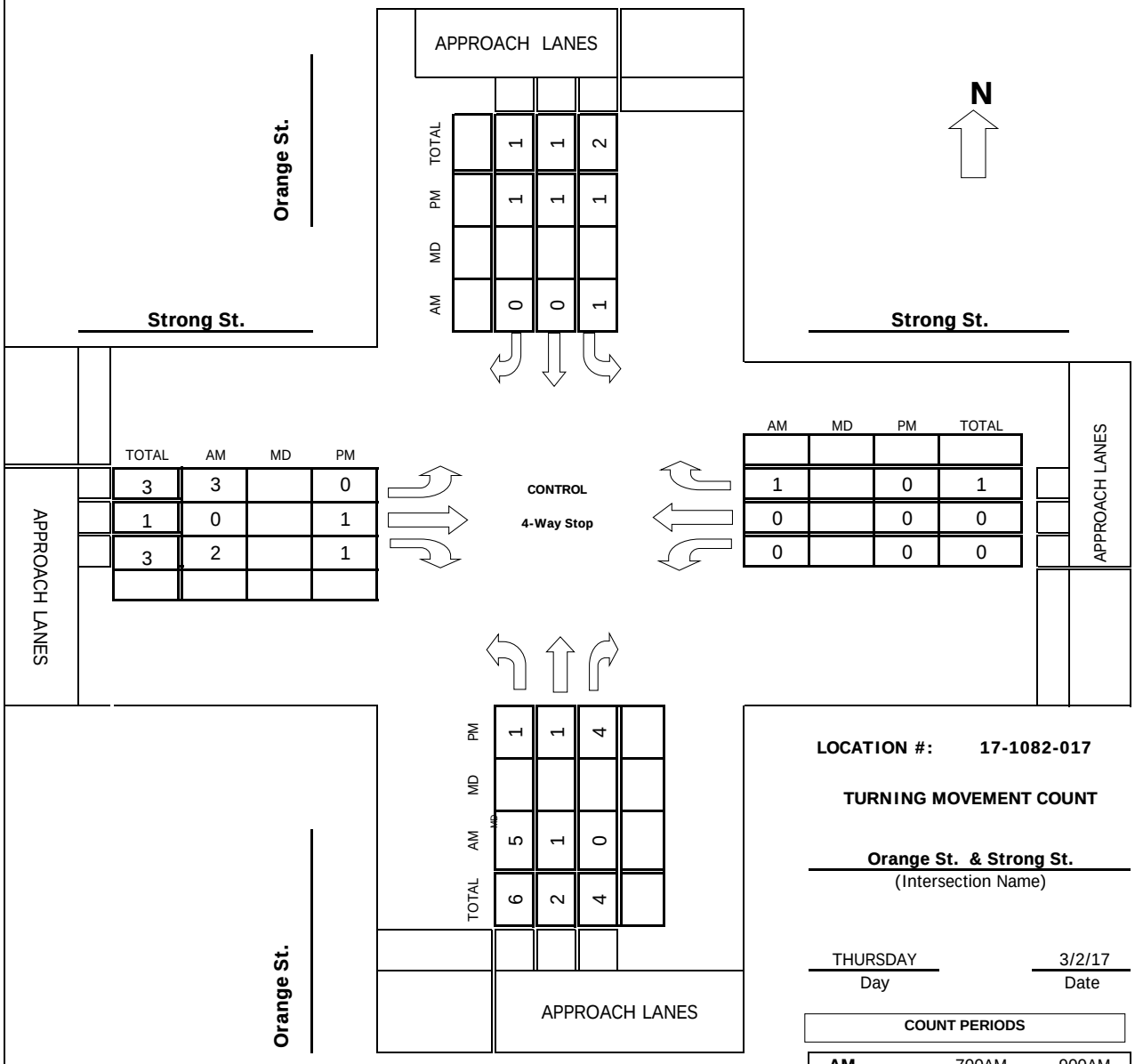
AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Project #: 17-1082-017

TMC SUMMARY OF Orange St. & Strong St.



LOCATION #: 17-1082-017

TURNING MOVEMENT COUNT

Orange St. & Strong St.
(Intersection Name)

THURSDAY (Day) 3/2/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

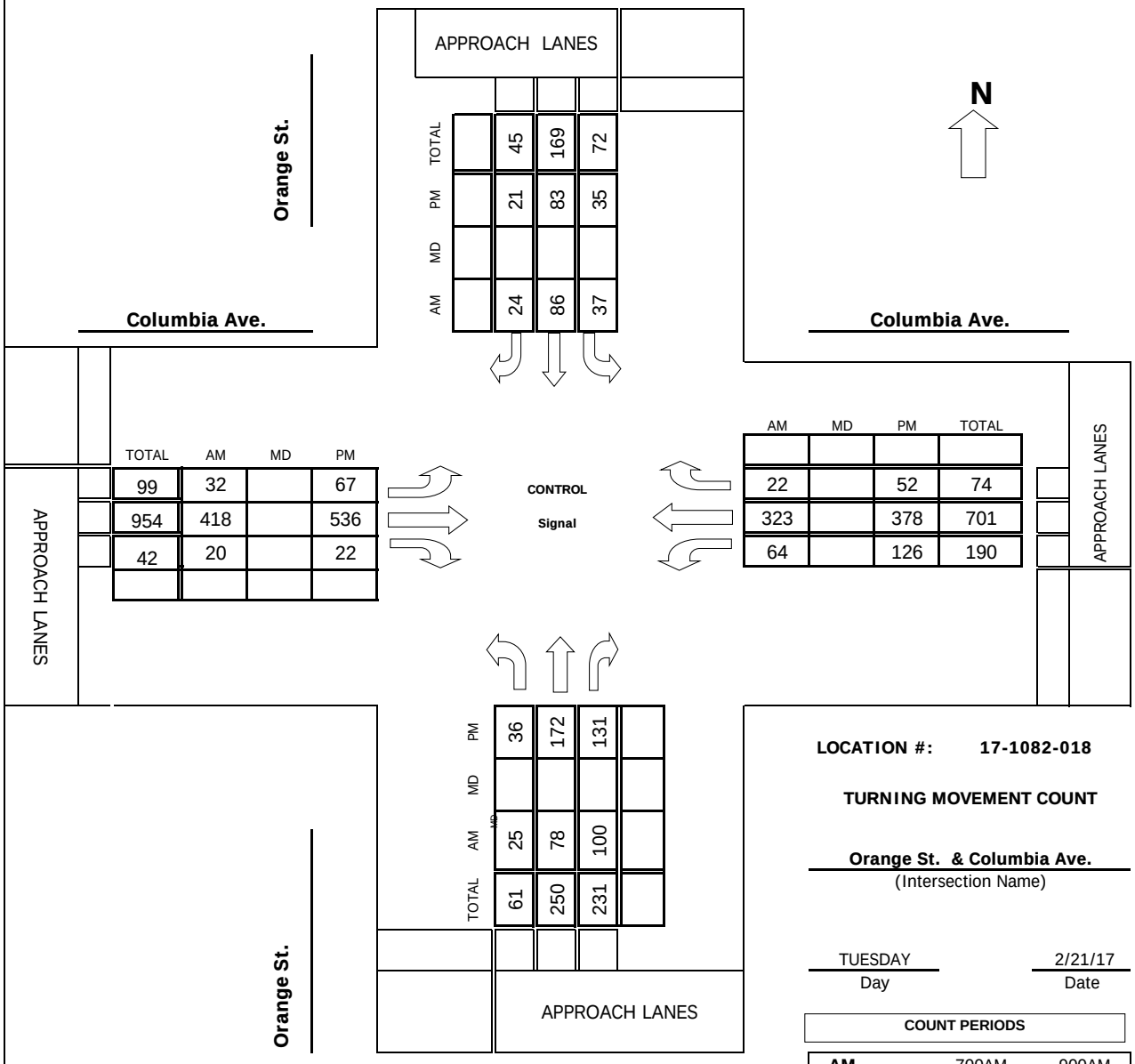
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-018

TMC SUMMARY OF Orange St. & Columbia Ave.



LOCATION #: 17-1082-018

TURNING MOVEMENT COUNT

Orange St. & Columbia Ave.
(Intersection Name)

TUESDAY (Day) 2/21/17 (Date)

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

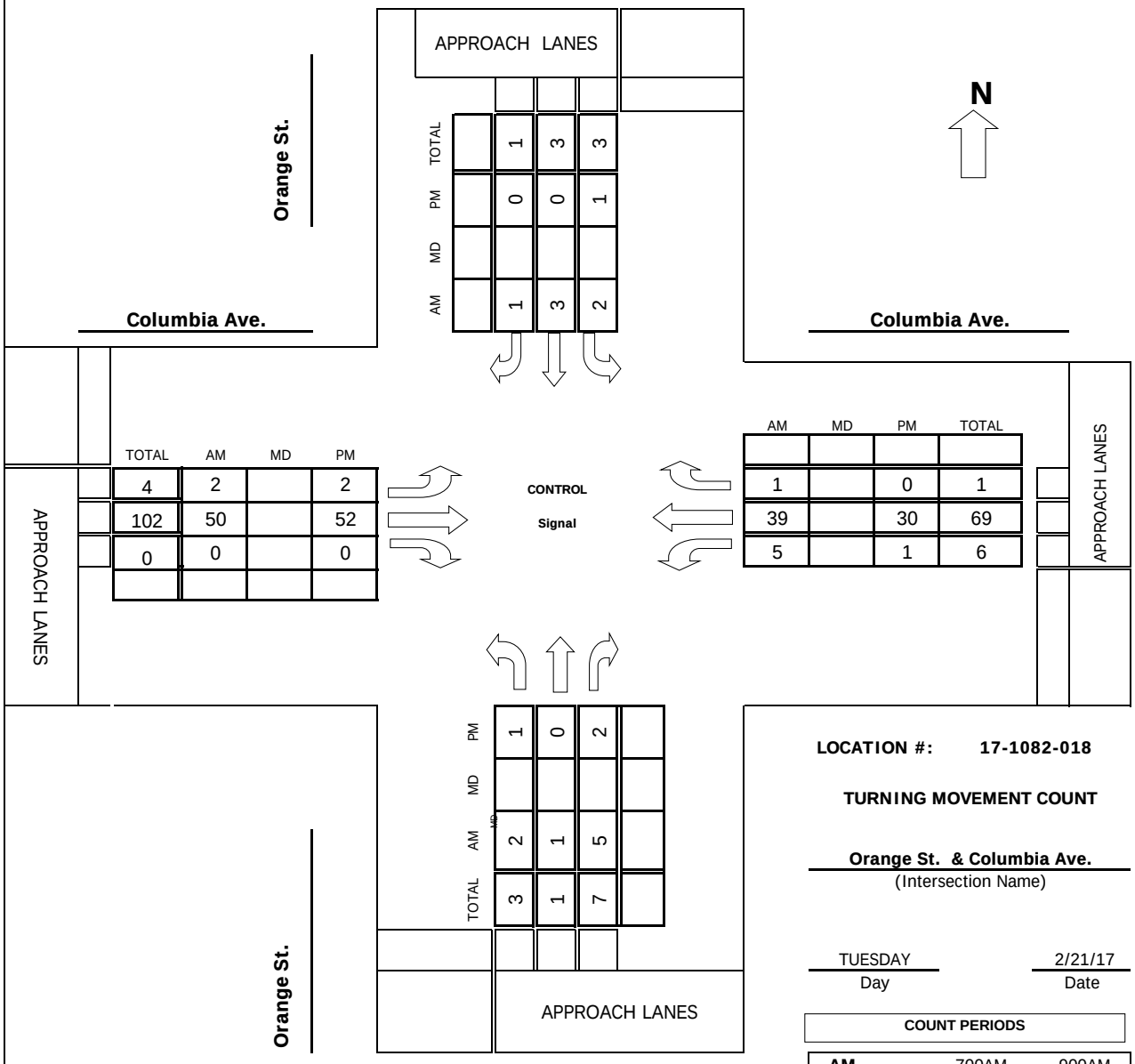
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Project #: 17-1082-018

TMC SUMMARY OF Orange St. & Columbia Ave.



LOCATION #: 17-1082-018

TURNING MOVEMENT COUNT

Orange St. & Columbia Ave.
(Intersection Name)

TUESDAY
Day

2/21/17
Date

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

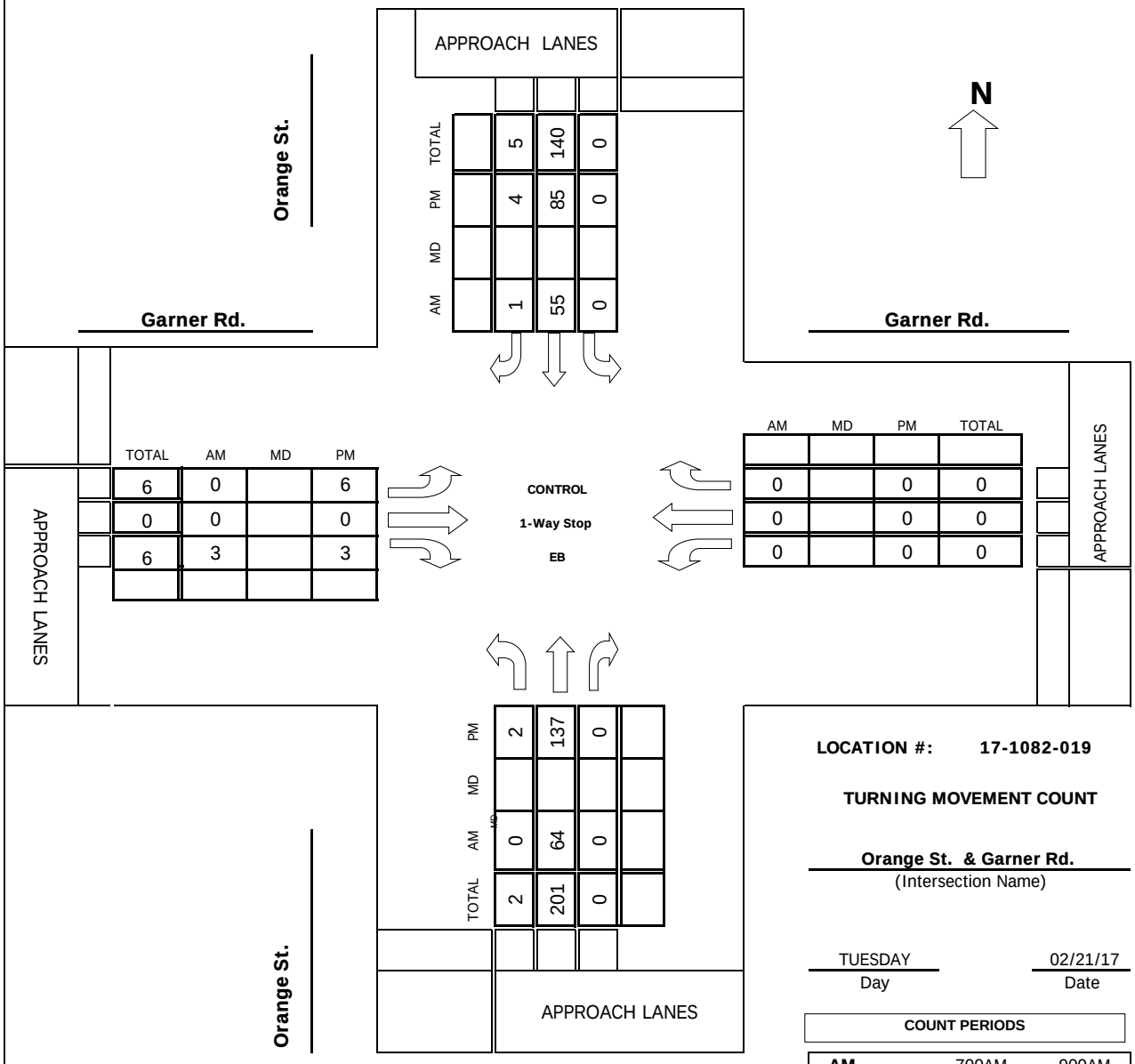
AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-019

TMC SUMMARY OF Orange St. & Garner Rd.



LOCATION #: 17-1082-019

TURNING MOVEMENT COUNT

Orange St. & Garner Rd.
(Intersection Name)

TUESDAY (Day) 02/21/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

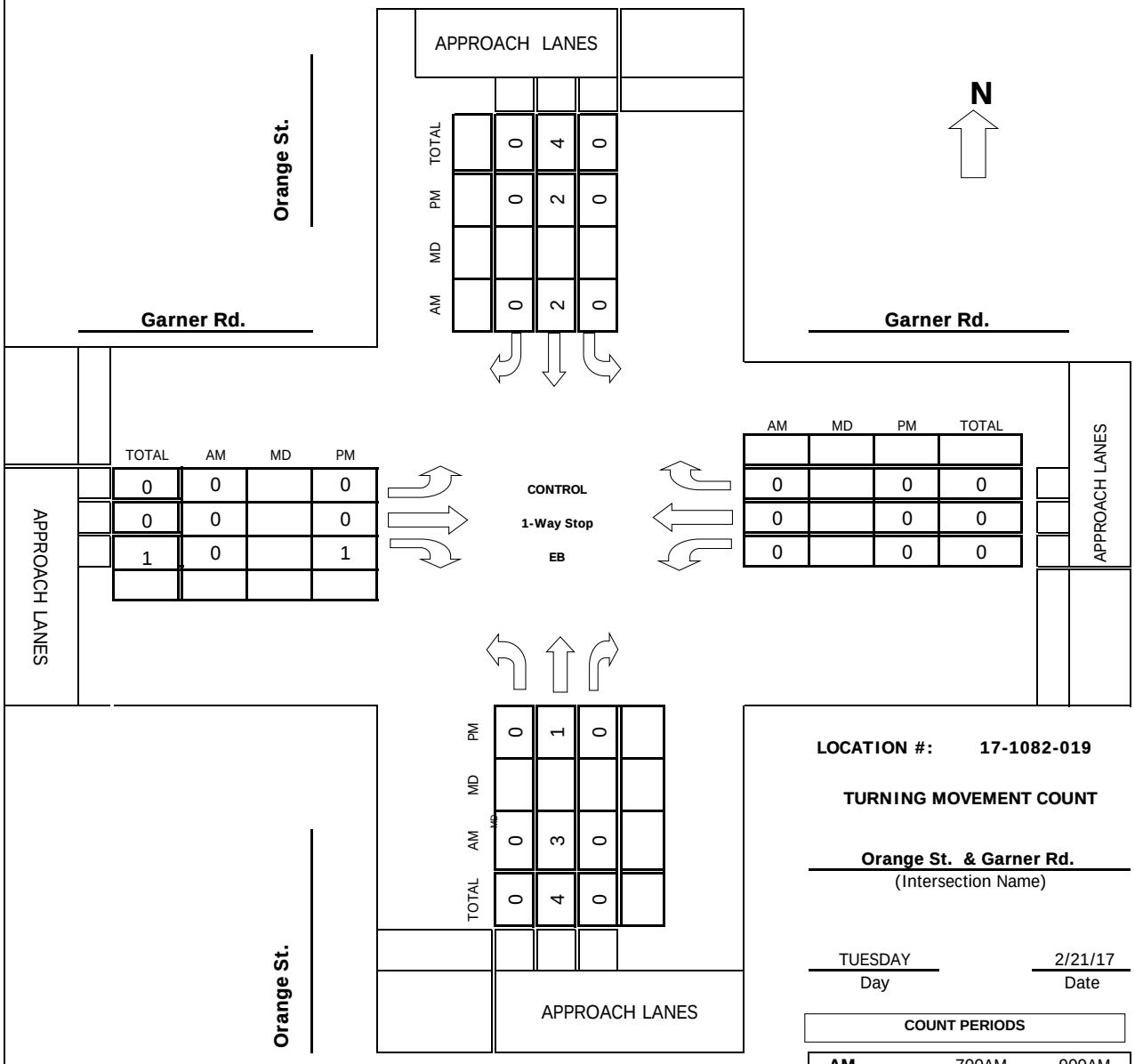
AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Project #: 17-1082-019

TMC SUMMARY OF Orange St. & Garner Rd.



LOCATION #: 17-1082-019

TURNING MOVEMENT COUNT

Orange St. & Garner Rd.
(Intersection Name)

TUESDAY
Day

2/21/17
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

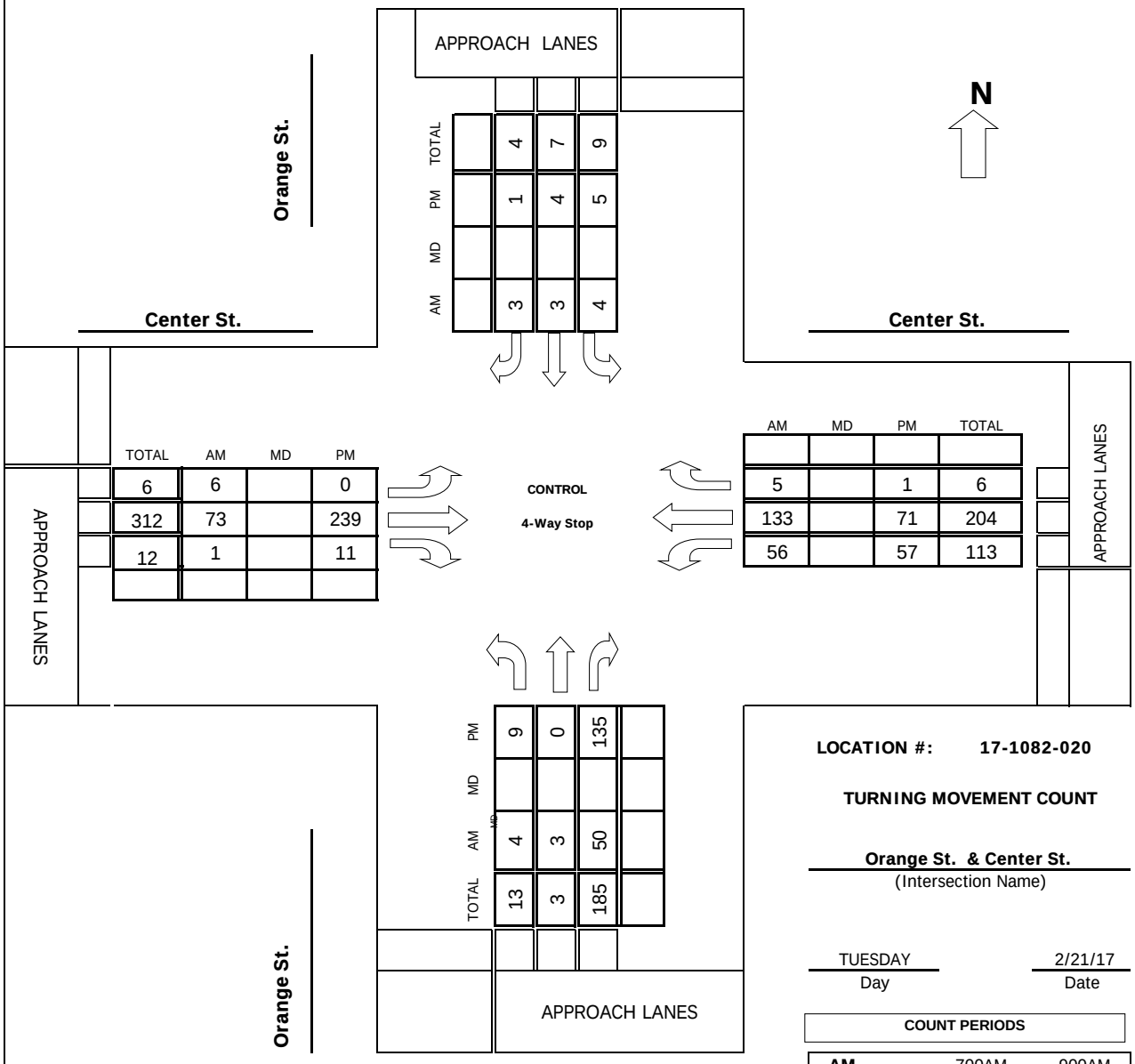
AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 500 PM

Project #: 17-1082-020

TMC SUMMARY OF Orange St. & Center St.



LOCATION #: 17-1082-020

TURNING MOVEMENT COUNT

Orange St. & Center St.
(Intersection Name)

TUESDAY
Day

2/21/17
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

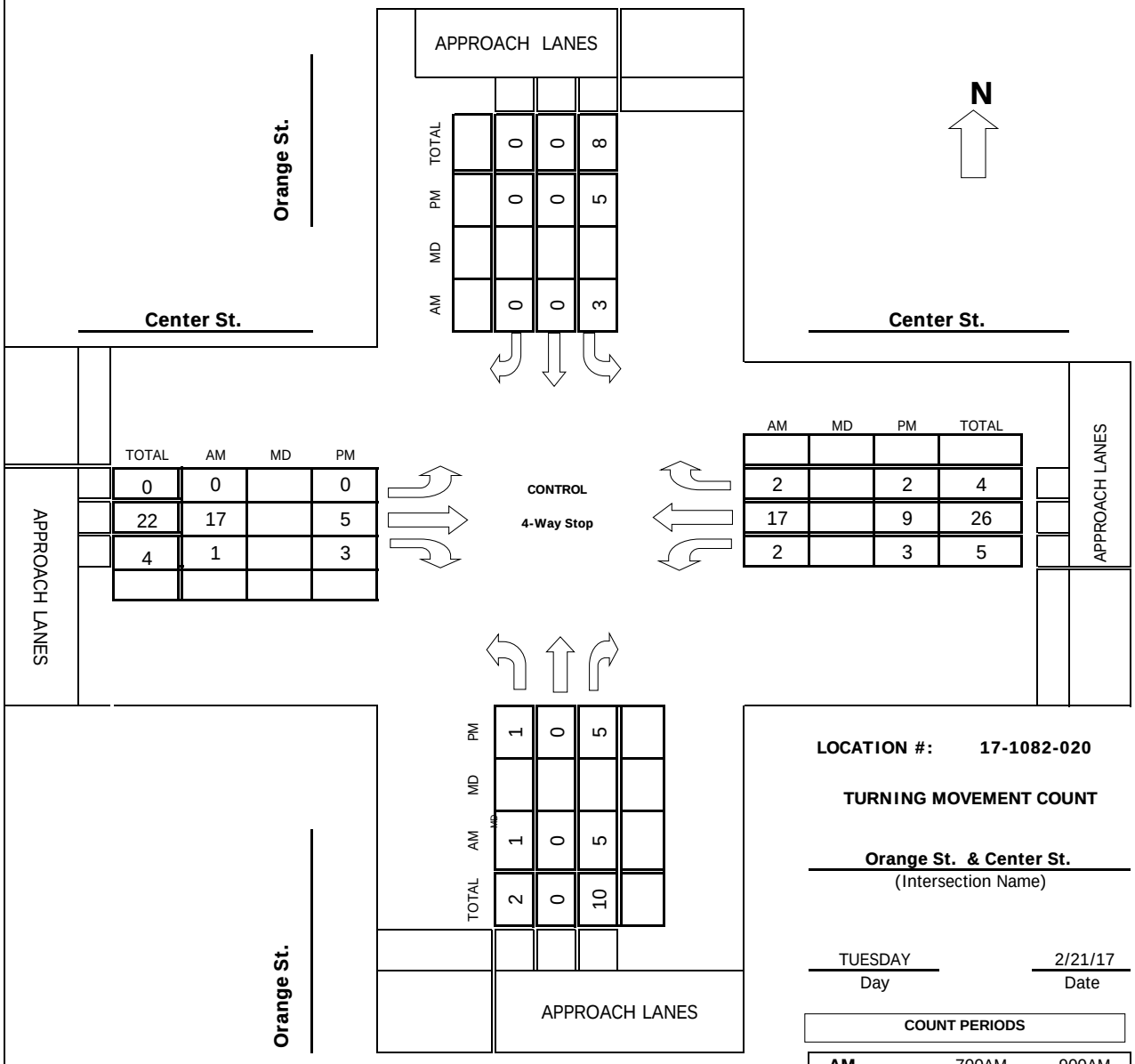
AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Project #: 17-1082-020

TMC SUMMARY OF Orange St. & Center St.



LOCATION #: 17-1082-020

TURNING MOVEMENT COUNT

Orange St. & Center St.
(Intersection Name)

TUESDAY (Day) 2/21/17 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

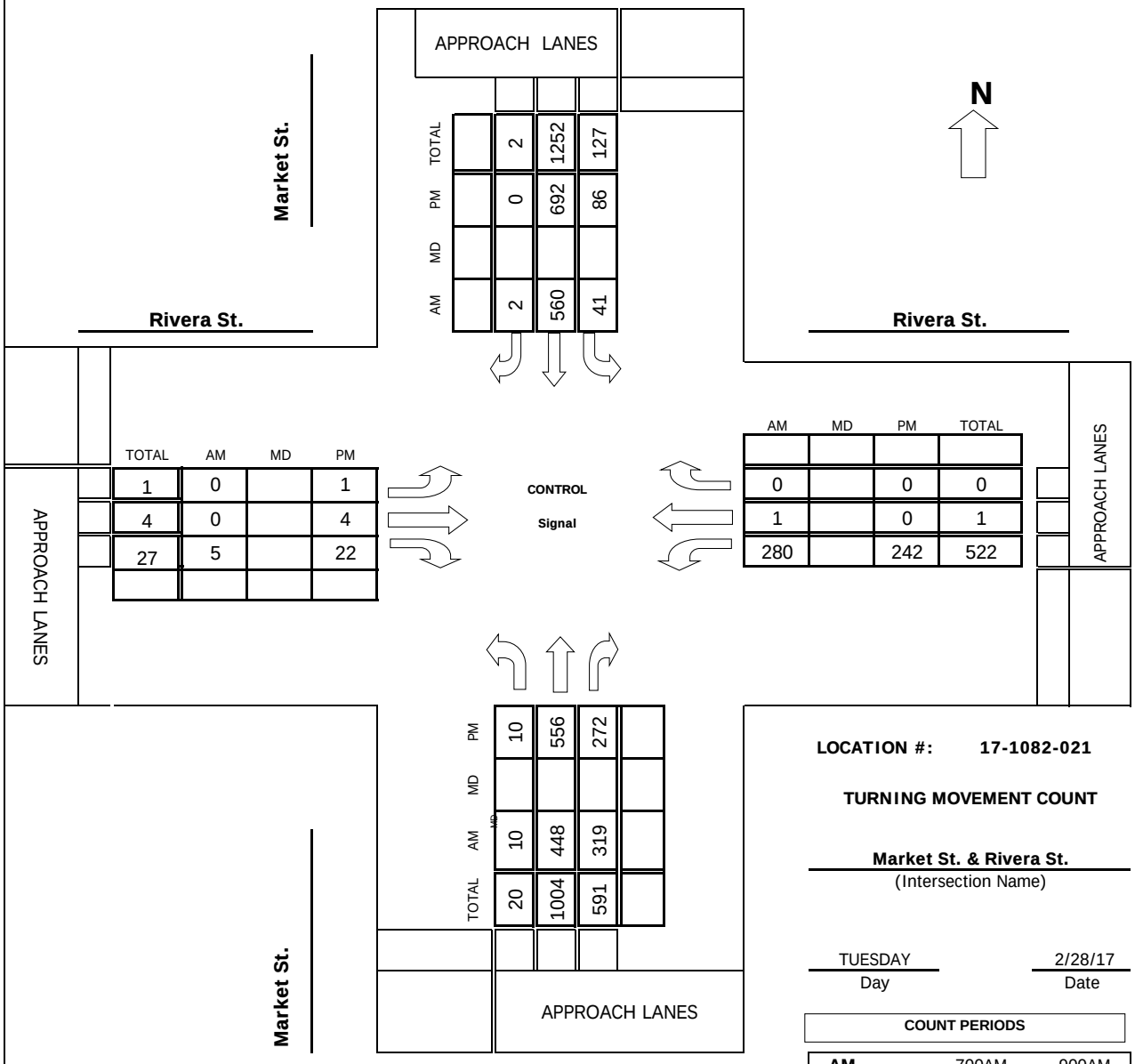
AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 500 PM

Project #: 17-1082-021

TMC SUMMARY OF Market St. & Rivera St.



LOCATION #: 17-1082-021

TURNING MOVEMENT COUNT

Market St. & Rivera St.
(Intersection Name)

TUESDAY
Day

2/28/17
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

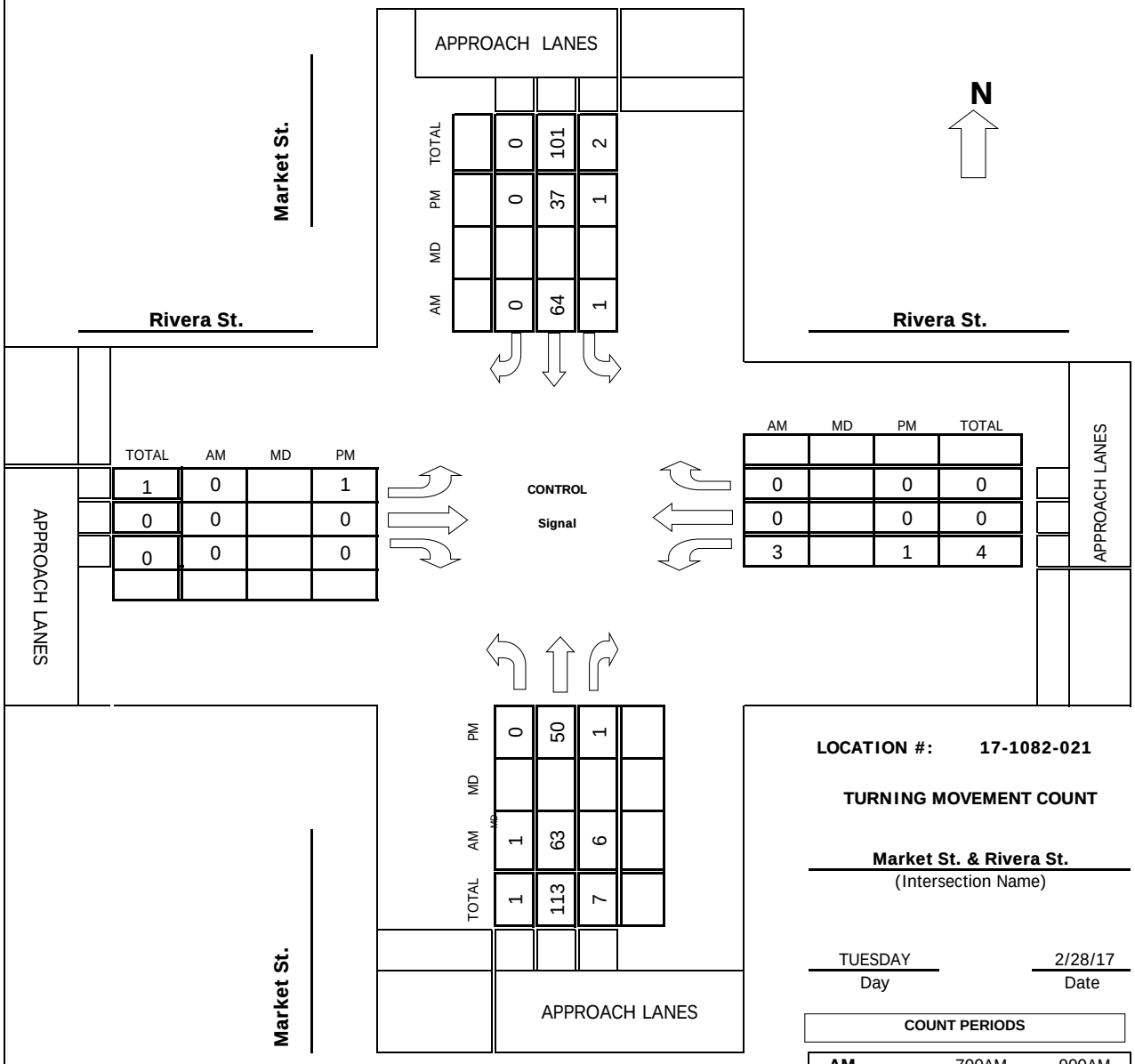
AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Project #: 17-1082-021

TMC SUMMARY OF Market St. & Rivera St.



LOCATION #: 17-1082-021

TURNING MOVEMENT COUNT

Market St. & Rivera St.
(Intersection Name)

TUESDAY
Day

2/28/17
Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

ROADWAY SEGMENTS

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-022
Station ID: Tues 2/21/17
Main St. btwn Placentia Ln. & Garner Rd.
34.0165, -117.3626
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	54	7	1	6	4	0	1	3	0	7	3	0	86
01:00	0	54	9	3	5	6	**3**	0	8	0	5	1	0	94
02:00	0	46	14	0	4	6	0	0	5	0	3	1	0	79
03:00	2	138	33	2	6	7	1	2	8	**1**	9	**4**	0	213
04:00	1	177	41	9	12	3	0	1	3	0	6	1	0	254
05:00	1	287	73	4	42	11	0	1	5	0	4	0	**3**	431
06:00	3	348	102	3	52	11	1	7	6	0	2	1	2	538
07:00	**4**	**548**	**108**	4	44	11	2	4	**25**	0	5	3	2	**760**
08:00	4	385	94	4	**77**	15	2	1	21	0	8	2	2	615
09:00	1	262	83	4	57	20	1	2	15	0	3	1	0	449
10:00	3	219	64	5	40	**24**	0	6	20	0	4	1	1	387
11:00	2	296	62	**10**	51	15	3	**9**	20	1	**12**	0	3	484
12 PM	3	319	63	7	52	18	1	4	19	0	8	0	1	495
13:00	4	379	79	9	58	17	3	8	9	0	5	0	2	573
14:00	5	392	69	10	46	**22**	1	**17**	16	0	6	**3**	1	588
15:00	3	444	105	8	**63**	16	1	8	**24**	0	3	0	1	676
16:00	**7**	545	**111**	**14**	56	13	4	9	23	1	3	3	3	**792**
17:00	4	**558**	91	7	33	15	**6**	8	22	1	3	3	**4**	755
18:00	3	310	55	10	39	9	0	10	10	0	5	0	2	453
19:00	0	224	43	5	18	3	1	5	7	0	6	0	0	312
20:00	3	189	19	4	8	3	0	6	9	**2**	6	1	1	251
21:00	1	181	31	1	8	6	0	6	11	0	4	0	1	250
22:00	0	128	19	0	5	5	0	6	12	0	4	1	0	180
23:00	0	105	12	0	6	2	0	1	5	1	**9**	2	1	144
Day Total	54	6588	1387	124	788	262	30	122	306	7	130	31	30	9859
Percent	0.5%	66.8%	14.1%	1.3%	8.0%	2.7%	0.3%	1.2%	3.1%	0.1%	1.3%	0.3%	0.3%	
AM Peak	07:00	07:00	07:00	11:00	08:00	10:00	01:00	11:00	07:00	03:00	11:00	03:00	05:00	07:00
Vol.	4	548	108	10	77	24	3	9	25	1	12	4	3	760
PM Peak	16:00	17:00	16:00	16:00	15:00	14:00	17:00	14:00	15:00	20:00	23:00	14:00	17:00	16:00
Vol.	7	558	111	14	63	22	6	17	24	2	9	3	4	792
Grand Total	54	6588	1387	124	788	262	30	122	306	7	130	31	30	9859
Percent	0.5%	66.8%	14.1%	1.3%	8.0%	2.7%	0.3%	1.2%	3.1%	0.1%	1.3%	0.3%	0.3%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-022
Station ID: Tues 2/21/17
Main St. btwn Placentia Ln. & Garner Rd.
34.0165, -117.3626
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	3	75	5	0	2	7	0	0	2	0	1	0	0	95
01:00	1	49	6	0	2	3	0	0	0	0	3	1	0	65
02:00	0	46	6	0	5	3	0	2	5	0	6	1	0	74
03:00	0	101	22	3	15	3	0	4	5	0	3	2	0	158
04:00	2	139	29	4	20	2	0	3	16	0	**9**	**3**	0	227
05:00	**6**	174	39	3	30	7	0	7	10	1	3	0	1	281
06:00	3	304	70	19	40	8	0	5	13	0	6	1	2	471
07:00	4	**545**	**75**	**25**	47	11	2	**34**	25	**8**	3	2	0	**781**
08:00	5	341	64	10	48	12	**3**	30	**30**	3	2	2	2	552
09:00	4	229	70	6	**90**	17	0	13	16	0	4	1	**4**	454
10:00	5	214	71	8	47	15	2	7	15	0	2	3	1	390
11:00	5	240	55	10	40	**18**	2	15	12	1	6	2	1	407
12 PM	8	290	84	**10**	49	**14**	3	8	16	0	4	**2**	**3**	491
13:00	4	327	77	9	63	13	**6**	12	13	**2**	3	2	3	534
14:00	6	440	114	5	63	13	4	12	14	0	2	1	3	677
15:00	3	507	**147**	6	65	12	1	14	**19**	1	3	1	1	780
16:00	**9**	679	107	7	**79**	14	1	**18**	18	1	6	1	1	**941**
17:00	7	**681**	99	7	56	12	0	17	14	0	6	0	1	900
18:00	2	443	73	7	32	12	0	6	5	0	6	0	1	587
19:00	5	276	46	4	15	6	0	6	10	0	**7**	1	2	378
20:00	5	165	32	1	11	4	0	6	9	0	1	1	1	236
21:00	4	152	18	1	8	3	0	4	5	0	1	1	1	198
22:00	4	152	13	1	8	7	1	0	1	0	2	0	0	189
23:00	0	115	8	0	3	0	0	1	1	1	6	1	0	136
Day Total	95	6684	1330	146	838	216	25	224	274	18	95	29	28	10002
Percent	0.9%	66.8%	13.3%	1.5%	8.4%	2.2%	0.2%	2.2%	2.7%	0.2%	0.9%	0.3%	0.3%	
AM Peak	05:00	07:00	07:00	07:00	09:00	11:00	08:00	07:00	08:00	07:00	04:00	04:00	09:00	07:00
Vol.	6	545	75	25	90	18	3	34	30	8	9	3	4	781
PM Peak	16:00	17:00	15:00	12:00	16:00	12:00	13:00	16:00	15:00	13:00	19:00	12:00	12:00	16:00
Vol.	9	681	147	10	79	14	6	18	19	2	7	2	3	941
Grand Total	95	6684	1330	146	838	216	25	224	274	18	95	29	28	10002
Percent	0.9%	66.8%	13.3%	1.5%	8.4%	2.2%	0.2%	2.2%	2.7%	0.2%	0.9%	0.3%	0.3%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-022
Station ID: Tues 2/21/17
Main St. btwn Placentia Ln. & Garner Rd.
34.0165, -117.3626
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	3	129	12	1	8	11	0	1	5	0	8	3	0	181
01:00	1	103	15	3	7	9	3	0	8	0	8	2	0	159
02:00	0	92	20	0	9	9	0	2	10	0	9	2	0	153
03:00	2	239	55	5	21	10	1	6	13	1	12	**6**	0	371
04:00	3	316	70	13	32	5	0	4	19	0	15	4	0	481
05:00	7	461	112	7	72	18	0	8	15	1	7	0	**4**	712
06:00	6	652	172	22	92	19	1	12	19	0	8	2	4	1009
07:00	8	**1093**	**183**	**29**	91	22	4	**38**	50	**8**	8	5	2	**1541**
08:00	**9**	726	158	14	125	27	**5**	31	**51**	3	10	4	4	1167
09:00	5	491	153	10	**147**	37	1	15	31	0	7	2	4	903
10:00	8	433	135	13	87	**39**	2	13	35	0	6	4	2	777
11:00	7	536	117	20	91	33	5	24	32	2	**18**	2	4	891
12 PM	11	609	147	17	101	32	4	12	35	0	12	2	4	986
13:00	8	706	156	18	121	30	**9**	20	22	**2**	8	2	**5**	1107
14:00	11	832	183	15	109	**35**	5	**29**	30	0	8	**4**	4	1265
15:00	6	951	**252**	14	128	28	2	22	**43**	1	6	1	2	1456
16:00	**16**	1224	218	**21**	**135**	27	5	27	41	2	9	4	4	**1733**
17:00	11	**1239**	190	14	89	27	6	25	36	1	9	3	5	1655
18:00	5	753	128	17	71	21	0	16	15	0	11	0	3	1040
19:00	5	500	89	9	33	9	1	11	17	0	13	1	2	690
20:00	8	354	51	5	19	7	0	12	18	2	7	2	2	487
21:00	5	333	49	2	16	9	0	10	16	0	5	1	2	448
22:00	4	280	32	1	13	12	1	6	13	0	6	1	0	369
23:00	0	220	20	0	9	2	0	2	6	2	**15**	3	1	280
Day Total	149	13272	2717	270	1626	478	55	346	580	25	225	60	58	19861
Percent	0.8%	66.8%	13.7%	1.4%	8.2%	2.4%	0.3%	1.7%	2.9%	0.1%	1.1%	0.3%	0.3%	
AM Peak	08:00	07:00	07:00	07:00	09:00	10:00	08:00	07:00	08:00	07:00	11:00	03:00	05:00	07:00
Vol.	9	1093	183	29	147	39	5	38	51	8	18	6	4	1541
PM Peak	16:00	17:00	15:00	16:00	16:00	14:00	13:00	14:00	15:00	13:00	23:00	14:00	13:00	16:00
Vol.	16	1239	252	21	135	35	9	29	43	2	15	4	5	1733
Grand Total	149	13272	2717	270	1626	478	55	346	580	25	225	60	58	19861
Percent	0.8%	66.8%	13.7%	1.4%	8.2%	2.4%	0.3%	1.7%	2.9%	0.1%	1.1%	0.3%	0.3%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-23
Station ID: 2/21/17
Main St. Btwn Garner Rd. & Columbia Ave.
34.0103, -117.3635
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	122	15	4	15	4	1	3	6	0	3	3	0	176
01:00	0	61	7	3	8	6	0	0	2	1	3	**4**	1	96
02:00	2	53	5	3	7	6	0	0	3	1	6	1	1	88
03:00	1	47	12	0	4	8	0	0	3	1	2	1	0	79
04:00	1	129	26	2	15	9	2	1	5	0	**7**	3	0	200
05:00	2	215	40	5	26	4	0	1	3	2	5	2	1	306
06:00	7	328	80	6	55	9	0	2	4	1	6	0	**2**	500
07:00	7	436	112	3	73	**19**	2	2	**20**	3	2	1	1	681
08:00	**17**	**607**	**113**	3	87	17	1	3	20	2	7	3	1	**881**
09:00	9	430	79	**8**	**104**	14	**7**	3	9	1	4	3	2	673
10:00	2	288	78	8	77	18	0	3	9	2	2	0	1	488
11:00	12	258	66	3	72	17	5	**5**	14	**5**	5	4	0	466
12 PM	13	304	71	**13**	73	19	4	5	10	2	**7**	0	**5**	526
13:00	23	332	69	9	66	18	6	5	10	2	6	4	3	553
14:00	23	356	74	9	58	**27**	4	8	8	2	5	3	1	578
15:00	19	373	67	9	75	15	**10**	6	**14**	2	5	**7**	3	605
16:00	21	450	84	11	**94**	20	8	14	5	**7**	2	7	0	723
17:00	**25**	**520**	**89**	11	82	18	2	**20**	8	1	6	1	2	**785**
18:00	7	515	81	4	51	17	3	7	11	0	3	3	1	703
19:00	3	305	50	12	46	14	0	10	8	1	3	0	0	452
20:00	1	248	41	8	28	6	1	4	2	1	4	0	1	345
21:00	3	200	24	2	10	3	1	4	5	3	7	1	0	263
22:00	1	189	32	2	13	9	0	8	8	3	5	0	2	272
23:00	1	127	19	0	7	4	2	3	9	0	4	2	0	178
Day Total	200	6893	1334	138	1146	301	59	117	196	43	109	53	28	10617
Percent	1.9%	64.9%	12.6%	1.3%	10.8%	2.8%	0.6%	1.1%	1.8%	0.4%	1.0%	0.5%	0.3%	
AM Peak	08:00	08:00	08:00	09:00	09:00	07:00	09:00	11:00	07:00	11:00	04:00	01:00	06:00	08:00
Vol.	17	607	113	8	104	19	7	5	20	5	7	4	2	881
PM Peak	17:00	17:00	17:00	12:00	16:00	14:00	15:00	17:00	15:00	16:00	12:00	15:00	12:00	17:00
Vol.	25	520	89	13	94	27	10	20	14	7	7	7	5	785
Grand Total	200	6893	1334	138	1146	301	59	117	196	43	109	53	28	10617
Percent	1.9%	64.9%	12.6%	1.3%	10.8%	2.8%	0.6%	1.1%	1.8%	0.4%	1.0%	0.5%	0.3%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-23
Station ID: 2/21/17
Main St. Btwn Garner Rd. & Columbia Ave.
34.0103, -117.3635
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	1	131	10	0	10	5	0	1	9	0	5	3	0	175
01:00	0	71	8	0	9	5	0	0	2	0	12	**4**	0	111
02:00	0	47	7	0	6	1	0	0	5	0	9	1	1	77
03:00	1	92	12	2	19	7	0	4	8	0	3	0	0	148
04:00	1	108	19	5	27	6	0	1	18	0	5	2	0	192
05:00	0	170	46	4	70	7	0	7	12	0	9	2	2	329
06:00	2	260	49	22	48	8	0	9	12	**1**	9	1	3	424
07:00	**9**	**448**	90	15	44	7	**3**	**29**	**37**	0	7	2	3	**694**
08:00	2	386	**100**	**31**	45	**18**	3	26	36	0	8	1	**4**	660
09:00	4	289	99	22	**88**	18	3	9	17	0	8	4	2	563
10:00	4	259	77	6	45	17	1	13	21	1	4	3	0	451
11:00	4	304	77	13	42	18	1	21	25	0	**13**	0	4	522
12 PM	6	362	79	**14**	44	12	2	10	**24**	0	7	2	3	565
13:00	7	354	99	13	38	19	**4**	**12**	20	**1**	7	1	**4**	579
14:00	6	456	111	5	74	10	3	9	17	0	2	**4**	3	700
15:00	**13**	557	**148**	10	**97**	**25**	2	8	14	0	2	1	4	881
16:00	8	**726**	135	9	79	23	1	8	12	0	7	0	4	**1012**
17:00	7	646	118	9	77	20	4	8	19	0	2	1	1	912
18:00	8	500	85	5	58	5	0	5	7	0	8	2	3	686
19:00	5	313	52	2	34	4	0	3	9	0	5	4	1	432
20:00	3	189	26	2	42	5	0	5	9	0	3	2	0	286
21:00	3	198	23	1	17	4	0	4	8	0	4	1	0	263
22:00	1	195	25	1	15	3	0	4	7	0	3	0	0	254
23:00	0	154	22	0	9	3	0	1	1	0	**9**	1	1	201
Day Total	95	7215	1517	191	1037	250	27	197	349	3	151	42	43	11117
Percent	0.9%	64.9%	13.6%	1.7%	9.3%	2.2%	0.2%	1.8%	3.1%	0.0%	1.4%	0.4%	0.4%	
AM Peak	07:00	07:00	08:00	08:00	09:00	08:00	07:00	07:00	07:00	06:00	11:00	01:00	08:00	07:00
Vol.	9	448	100	31	88	18	3	29	37	1	13	4	4	694
PM Peak	15:00	16:00	15:00	12:00	15:00	15:00	13:00	13:00	12:00	13:00	23:00	14:00	13:00	16:00
Vol.	13	726	148	14	97	25	4	12	24	1	9	4	4	1012
Grand Total	95	7215	1517	191	1037	250	27	197	349	3	151	42	43	11117
Percent	0.9%	64.9%	13.6%	1.7%	9.3%	2.2%	0.2%	1.8%	3.1%	0.0%	1.4%	0.4%	0.4%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-23
Station ID: 2/21/17
Main St. Btwn Garner Rd. & Columbia Ave.
34.0103, -117.3635
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	1	253	25	4	25	9	1	4	15	0	8	6	0	351
01:00	0	132	15	3	17	11	0	0	4	1	15	**8**	1	207
02:00	2	100	12	3	13	7	0	0	8	1	15	2	2	165
03:00	2	139	24	2	23	15	0	4	11	1	5	1	0	227
04:00	2	237	45	7	42	15	2	2	23	0	12	5	0	392
05:00	2	385	86	9	96	11	0	8	15	2	14	4	3	635
06:00	9	588	129	28	103	17	0	11	16	2	15	1	**5**	924
07:00	16	884	202	18	117	26	5	**31**	**57**	3	9	3	4	1375
08:00	**19**	**993**	**213**	**34**	132	**35**	4	29	56	2	15	4	5	**1541**
09:00	13	719	178	30	**192**	32	**10**	12	26	1	12	7	4	1236
10:00	6	547	155	14	122	35	1	16	30	3	6	3	1	939
11:00	16	562	143	16	114	35	6	26	39	**5**	**18**	4	4	988
12 PM	19	666	150	**27**	117	31	6	15	**34**	2	**14**	2	**8**	1091
13:00	30	686	168	22	104	37	10	17	30	3	13	5	7	1132
14:00	29	812	185	14	132	37	7	17	25	2	7	7	4	1278
15:00	**32**	930	215	19	172	40	**12**	14	28	2	7	**8**	7	1486
16:00	29	**1176**	**219**	20	**173**	**43**	9	22	17	**7**	9	7	4	**1735**
17:00	32	1166	207	20	159	38	6	**28**	27	1	8	2	3	1697
18:00	15	1015	166	9	109	22	3	12	18	0	11	5	4	1389
19:00	8	618	102	14	80	18	0	13	17	1	8	4	1	884
20:00	4	437	67	10	70	11	1	9	11	1	7	2	1	631
21:00	6	398	47	3	27	7	1	8	13	3	11	2	0	526
22:00	2	384	57	3	28	12	0	12	15	3	8	0	2	526
23:00	1	281	41	0	16	7	2	4	10	0	13	3	1	379
Day Total	295	14108	2851	329	2183	551	86	314	545	46	260	95	71	21734
Percent	1.4%	64.9%	13.1%	1.5%	10.0%	2.5%	0.4%	1.4%	2.5%	0.2%	1.2%	0.4%	0.3%	
AM Peak	08:00	08:00	08:00	08:00	09:00	08:00	09:00	07:00	07:00	11:00	11:00	01:00	06:00	08:00
Vol.	19	993	213	34	192	35	10	31	57	5	18	8	5	1541
PM Peak	15:00	16:00	16:00	12:00	16:00	16:00	15:00	17:00	12:00	16:00	12:00	15:00	12:00	16:00
Vol.	32	1176	219	27	173	43	12	28	34	7	14	8	8	1735
Grand Total	295	14108	2851	329	2183	551	86	314	545	46	260	95	71	21734
Percent	1.4%	64.9%	13.1%	1.5%	10.0%	2.5%	0.4%	1.4%	2.5%	0.2%	1.2%	0.4%	0.3%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-24
Station ID: Tues 2/21/17
Main St. Btwn Columbia Ave. & Strong St.
34.0038, -117.3640
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	62	7	2	11	1	0	0	0	0	0	0	0	83
01:00	0	45	5	3	12	1	0	0	0	0	0	0	0	66
02:00	0	57	13	0	4	0	0	0	1	0	0	0	0	75
03:00	1	95	21	2	25	0	0	0	0	0	0	0	0	144
04:00	3	181	38	4	40	3	0	0	0	0	0	0	0	269
05:00	**6**	243	70	4	59	6	0	0	0	0	0	0	0	388
06:00	4	330	108	1	96	7	1	1	2	0	**3**	1	0	554
07:00	1	**494**	**119**	7	**117**	11	**5**	3	2	**4**	0	**2**	0	**765**
08:00	3	445	107	7	77	11	5	**4**	**4**	2	2	0	**1**	668
09:00	1	247	78	7	95	8	0	1	1	0	0	1	0	439
10:00	2	226	78	6	68	**13**	1	4	1	0	0	1	1	401
11:00	3	288	68	**8**	80	12	0	2	1	0	1	0	0	463
12 PM	2	328	90	5	72	5	2	3	0	0	0	0	**1**	508
13:00	4	332	103	8	70	15	2	5	**4**	0	**2**	0	0	545
14:00	3	355	91	6	79	12	**4**	9	2	0	2	0	0	563
15:00	**12**	409	116	2	101	15	2	7	1	0	0	1	1	667
16:00	8	467	**146**	**11**	**107**	**24**	1	**15**	2	0	1	**2**	1	**785**
17:00	8	**553**	95	5	86	18	0	11	1	0	0	0	0	777
18:00	1	394	89	4	48	9	4	6	0	0	0	0	0	555
19:00	1	267	64	3	40	5	3	0	0	0	0	0	0	383
20:00	1	234	42	5	26	1	0	2	0	0	0	0	0	311
21:00	4	206	31	3	26	3	0	3	0	0	0	0	0	276
22:00	2	142	34	0	20	4	0	4	0	0	0	0	0	206
23:00	0	110	17	0	12	1	0	0	0	0	0	0	0	140
Day Total	70	6510	1630	103	1371	185	30	80	22	6	11	8	5	10031
Percent	0.7%	64.9%	16.2%	1.0%	13.7%	1.8%	0.3%	0.8%	0.2%	0.1%	0.1%	0.1%	0.0%	
AM Peak	05:00	07:00	07:00	11:00	07:00	10:00	07:00	08:00	08:00	07:00	06:00	07:00	08:00	07:00
Vol.	6	494	119	8	117	13	5	4	4	4	3	2	1	765
PM Peak	15:00	17:00	16:00	16:00	16:00	16:00	14:00	16:00	13:00		13:00	16:00	12:00	16:00
Vol.	12	553	146	11	107	24	4	15	4		2	2	1	785
Grand Total	70	6510	1630	103	1371	185	30	80	22	6	11	8	5	10031
Percent	0.7%	64.9%	16.2%	1.0%	13.7%	1.8%	0.3%	0.8%	0.2%	0.1%	0.1%	0.1%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-24
Station ID: Tues 2/21/17
Main St. Btwn Columbia Ave. & Strong St.
34.0038, -117.3640
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	1	127	11	0	3	1	0	0	0	0	0	0	0	143
01:00	0	84	7	0	4	1	0	0	0	0	0	0	0	96
02:00	0	55	7	0	3	0	0	0	1	0	0	0	0	66
03:00	0	94	12	2	7	5	0	0	1	0	0	0	0	121
04:00	1	134	24	4	13	6	0	0	3	0	0	0	0	185
05:00	0	199	54	5	45	7	0	0	0	0	0	0	1	311
06:00	0	295	66	**19**	49	9	0	1	2	0	0	0	0	441
07:00	1	**515**	97	15	27	**34**	**3**	4	2	**4**	0	0	**2**	**704**
08:00	2	424	**112**	16	31	32	2	**6**	2	1	**2**	0	0	630
09:00	1	337	102	17	**66**	10	2	2	**5**	0	0	0	0	542
10:00	**3**	304	91	6	15	12	2	1	1	0	2	0	0	437
11:00	2	359	86	7	18	13	2	5	4	0	0	0	1	497
12 PM	3	377	87	**12**	16	13	0	3	**6**	0	1	1	0	519
13:00	6	398	120	6	44	**19**	0	3	2	0	**2**	0	0	600
14:00	6	495	126	7	**59**	15	**4**	**4**	3	0	2	0	0	721
15:00	6	568	**137**	6	53	14	1	3	2	0	0	0	1	791
16:00	4	610	124	8	42	16	1	2	0	0	0	0	1	808
17:00	**15**	**628**	102	6	49	11	0	3	0	0	1	0	**2**	**817**
18:00	3	460	62	7	35	4	1	1	1	0	1	**2**	0	577
19:00	3	308	45	3	14	3	0	2	1	0	0	0	0	379
20:00	0	251	45	1	18	1	0	4	0	0	0	0	0	320
21:00	0	217	28	0	7	5	1	1	1	0	0	0	0	260
22:00	0	227	20	0	5	2	0	0	2	0	0	0	0	256
23:00	2	176	11	0	6	1	0	1	0	0	0	0	0	197
Day Total	59	7642	1576	147	629	234	19	46	39	5	11	3	8	10418
Percent	0.6%	73.4%	15.1%	1.4%	6.0%	2.2%	0.2%	0.4%	0.4%	0.0%	0.1%	0.0%	0.1%	
AM Peak	10:00	07:00	08:00	06:00	09:00	07:00	07:00	08:00	09:00	07:00	08:00		07:00	07:00
Vol.	3	515	112	19	66	34	3	6	5	4	2		2	704
PM Peak	17:00	17:00	15:00	12:00	14:00	13:00	14:00	14:00	12:00		13:00	18:00	17:00	17:00
Vol.	15	628	137	12	59	19	4	4	6		2	2	2	817
Grand Total	59	7642	1576	147	629	234	19	46	39	5	11	3	8	10418
Percent	0.6%	73.4%	15.1%	1.4%	6.0%	2.2%	0.2%	0.4%	0.4%	0.0%	0.1%	0.0%	0.1%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-24
Station ID: Tues 2/21/17
Main St. Btwn Columbia Ave. & Strong St.
34.0038, -117.3640
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	1	189	18	2	14	2	0	0	0	0	0	0	0	226
01:00	0	129	12	3	16	2	0	0	0	0	0	0	0	162
02:00	0	112	20	0	7	0	0	0	2	0	0	0	0	141
03:00	1	189	33	4	32	5	0	0	1	0	0	0	0	265
04:00	4	315	62	8	53	9	0	0	3	0	0	0	0	454
05:00	**6**	442	124	9	104	13	0	0	0	0	0	0	1	699
06:00	4	625	174	20	145	16	1	2	4	0	3	1	0	995
07:00	2	**1009**	216	22	144	**45**	**8**	7	4	**8**	0	**2**	**2**	**1469**
08:00	5	869	**219**	23	108	43	7	**10**	**6**	3	**4**	0	1	1298
09:00	2	584	180	**24**	**161**	18	2	3	6	0	0	1	0	981
10:00	5	530	169	12	83	25	3	5	2	0	2	1	1	838
11:00	5	647	154	15	98	25	2	7	5	0	1	0	1	960
12 PM	5	705	177	17	88	18	2	6	**6**	0	1	1	1	1027
13:00	10	730	223	14	114	34	2	8	6	0	**4**	0	0	1145
14:00	9	850	217	13	138	27	**8**	13	5	0	4	0	0	1284
15:00	18	977	253	8	**154**	29	3	10	3	0	0	1	**2**	1458
16:00	12	1077	**270**	**19**	149	**40**	2	**17**	2	0	1	**2**	2	1593
17:00	**23**	**1181**	197	11	135	29	0	14	1	0	1	0	2	**1594**
18:00	4	854	151	11	83	13	5	7	1	0	1	2	0	1132
19:00	4	575	109	6	54	8	3	2	1	0	0	0	0	762
20:00	1	485	87	6	44	2	0	6	0	0	0	0	0	631
21:00	4	423	59	3	33	8	1	4	1	0	0	0	0	536
22:00	2	369	54	0	25	6	0	4	2	0	0	0	0	462
23:00	2	286	28	0	18	2	0	1	0	0	0	0	0	337
Day Total	129	14152	3206	250	2000	419	49	126	61	11	22	11	13	20449
Percent	0.6%	69.2%	15.7%	1.2%	9.8%	2.0%	0.2%	0.6%	0.3%	0.1%	0.1%	0.1%	0.1%	
AM Peak	05:00	07:00	08:00	09:00	09:00	07:00	07:00	08:00	08:00	07:00	08:00	07:00	07:00	07:00
Vol.	6	1009	219	24	161	45	8	10	6	8	4	2	2	1469
PM Peak	17:00	17:00	16:00	16:00	15:00	16:00	14:00	16:00	12:00		13:00	16:00	15:00	17:00
Vol.	23	1181	270	19	154	40	8	17	6		4	2	2	1594
Grand Total	129	14152	3206	250	2000	419	49	126	61	11	22	11	13	20449
Percent	0.6%	69.2%	15.7%	1.2%	9.8%	2.0%	0.2%	0.6%	0.3%	0.1%	0.1%	0.1%	0.1%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-25
Station ID: Thurs 2/23/17
Main St. Btwn Strong St. & Oakley Ave.
33.9987, -117.3644
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/23/17	0	107	9	2	8	0	0	0	0	0	0	0	0	126
01:00	0	52	10	2	6	3	0	1	1	0	0	0	0	75
02:00	0	66	8	0	3	3	0	0	0	0	0	0	0	80
03:00	0	90	27	2	12	1	0	0	0	0	0	0	0	132
04:00	0	178	31	2	24	3	0	2	0	0	0	0	0	240
05:00	1	258	54	6	29	10	0	2	0	0	**1**	0	0	361
06:00	2	335	74	8	80	2	1	2	0	0	0	0	1	505
07:00	5	**457**	**81**	4	**85**	12	**4**	**3**	**2**	**1**	0	0	1	**655**
08:00	3	417	56	3	61	**20**	1	3	1	1	1	**2**	0	569
09:00	5	267	65	3	66	6	1	1	0	0	0	1	0	415
10:00	6	256	77	6	71	8	3	2	1	0	0	0	0	430
11:00	**9**	305	60	**10**	81	9	0	0	2	1	0	1	**2**	480
12 PM	8	345	76	5	71	11	2	3	1	0	1	0	0	523
13:00	8	383	66	5	66	10	1	5	1	0	0	1	2	548
14:00	13	414	79	**12**	75	12	1	**7**	0	0	0	1	**4**	618
15:00	**23**	351	70	7	58	15	**3**	7	**2**	0	0	**2**	1	539
16:00	18	638	**89**	6	**78**	34	3	5	0	**1**	**2**	1	0	875
17:00	16	**694**	62	8	62	**36**	0	2	2	1	0	2	0	**885**
18:00	6	427	61	9	61	13	3	3	0	0	0	0	0	583
19:00	2	343	54	7	50	4	1	5	0	0	0	0	1	467
20:00	0	271	32	6	22	2	0	0	0	0	0	0	0	333
21:00	2	269	29	6	15	1	0	3	2	0	1	0	0	328
22:00	1	193	14	2	12	1	0	2	2	0	0	0	1	228
23:00	1	123	10	2	10	4	0	2	1	0	0	0	0	153
Day Total	129	7239	1194	123	1106	220	24	60	18	5	6	11	13	10148
Percent	1.3%	71.3%	11.8%	1.2%	10.9%	2.2%	0.2%	0.6%	0.2%	0.0%	0.1%	0.1%	0.1%	
AM Peak	11:00	07:00	07:00	11:00	07:00	08:00	07:00	07:00	07:00	07:00	05:00	08:00	11:00	07:00
Vol.	9	457	81	10	85	20	4	3	2	1	1	2	2	655
PM Peak	15:00	17:00	16:00	14:00	16:00	17:00	15:00	14:00	15:00	16:00	16:00	15:00	14:00	17:00
Vol.	23	694	89	12	78	36	3	7	2	1	2	2	4	885
Grand Total	129	7239	1194	123	1106	220	24	60	18	5	6	11	13	10148
Percent	1.3%	71.3%	11.8%	1.2%	10.9%	2.2%	0.2%	0.6%	0.2%	0.0%	0.1%	0.1%	0.1%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-25
Station ID: Thurs 2/23/17
Main St. Btwn Strong St. & Oakley Ave.
33.9987, -117.3644
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/23/17	0	124	13	0	13	0	1	0	0	0	0	0	0	151
01:00	0	92	18	0	10	1	0	0	0	0	0	0	0	121
02:00	1	65	17	2	13	2	0	0	1	0	0	0	0	101
03:00	5	97	9	1	13	4	0	1	**3**	0	1	0	0	134
04:00	0	149	29	6	24	3	0	1	1	**1**	0	1	0	215
05:00	2	215	57	8	69	5	0	2	2	0	1	1	0	362
06:00	2	255	45	10	**97**	4	0	7	1	0	0	1	0	422
07:00	**17**	**428**	**94**	12	82	34	3	8	2	0	**2**	0	1	**683**
08:00	12	344	76	**18**	97	**39**	**8**	6	2	1	1	**2**	**4**	610
09:00	7	354	74	12	78	30	2	4	1	0	2	0	2	566
10:00	10	291	56	5	93	12	4	**9**	2	0	1	1	2	486
11:00	14	333	78	10	94	15	1	3	0	0	1	0	2	551
12 PM	7	343	65	4	**90**	11	1	**9**	1	0	3	0	1	535
13:00	17	334	**77**	1	65	14	7	7	3	1	2	1	3	532
14:00	21	348	65	7	75	14	11	7	2	1	0	2	0	553
15:00	**38**	547	24	8	23	**19**	**16**	6	**6**	**3**	**5**	5	**5**	705
16:00	30	665	55	7	40	8	2	2	4	3	1	**6**	3	826
17:00	27	**678**	44	7	45	10	4	6	3	1	1	4	5	**835**
18:00	27	400	74	**9**	43	15	5	1	2	0	1	1	1	579
19:00	7	353	62	3	46	8	2	2	0	1	1	0	1	486
20:00	2	305	46	3	35	7	0	5	0	0	0	0	0	403
21:00	0	208	31	2	17	3	1	0	0	0	0	0	0	262
22:00	1	192	24	3	15	3	0	2	1	0	0	0	0	241
23:00	1	148	19	1	9	0	0	0	2	0	0	0	0	180
Day Total	248	7268	1152	139	1186	261	68	88	39	12	23	25	30	10539
Percent	2.4%	69.0%	10.9%	1.3%	11.3%	2.5%	0.6%	0.8%	0.4%	0.1%	0.2%	0.2%	0.3%	
AM Peak	07:00	07:00	07:00	08:00	06:00	08:00	08:00	10:00	03:00	04:00	07:00	08:00	08:00	07:00
Vol.	17	428	94	18	97	39	8	9	3	1	2	2	4	683
PM Peak	15:00	17:00	13:00	18:00	12:00	15:00	15:00	12:00	15:00	15:00	15:00	16:00	15:00	17:00
Vol.	38	678	77	9	90	19	16	9	6	3	5	6	5	835
Grand Total	248	7268	1152	139	1186	261	68	88	39	12	23	25	30	10539
Percent	2.4%	69.0%	10.9%	1.3%	11.3%	2.5%	0.6%	0.8%	0.4%	0.1%	0.2%	0.2%	0.3%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-25
Station ID: Thurs 2/23/17
Main St. Btwn Strong St. & Oakley Ave.
33.9987, -117.3644
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/23/17	0	231	22	2	21	0	1	0	0	0	0	0	0	277
01:00	0	144	28	2	16	4	0	1	1	0	0	0	0	196
02:00	1	131	25	2	16	5	0	0	1	0	0	0	0	181
03:00	5	187	36	3	25	5	0	1	3	0	1	0	0	266
04:00	0	327	60	8	48	6	0	3	1	1	0	1	0	455
05:00	3	473	111	14	98	15	0	4	2	0	**2**	1	0	723
06:00	4	590	119	18	**177**	6	1	9	1	0	0	1	1	927
07:00	22	**885**	**175**	16	167	46	7	**11**	**4**	1	2	0	2	**1338**
08:00	15	761	132	**21**	158	**59**	**9**	9	3	**2**	2	**4**	**4**	1179
09:00	12	621	139	15	144	36	3	5	1	0	2	1	2	981
10:00	16	547	133	11	164	20	7	11	3	0	1	1	2	916
11:00	**23**	638	138	20	175	24	1	3	2	1	1	1	4	1031
12 PM	15	688	141	9	**161**	22	3	12	2	0	4	0	1	1058
13:00	25	717	143	6	131	24	8	12	4	1	2	2	5	1080
14:00	34	762	**144**	**19**	150	26	12	**14**	2	1	0	3	4	1171
15:00	**61**	898	94	15	81	34	**19**	13	**8**	3	**5**	**7**	**6**	1244
16:00	48	1303	144	13	118	42	5	7	4	**4**	3	7	3	1701
17:00	43	**1372**	106	15	107	**46**	4	8	5	2	1	6	5	**1720**
18:00	33	827	135	18	104	28	8	4	2	0	1	1	1	1162
19:00	9	696	116	10	96	12	3	7	0	1	1	0	2	953
20:00	2	576	78	9	57	9	0	5	0	0	0	0	0	736
21:00	2	477	60	8	32	4	1	3	2	0	1	0	0	590
22:00	2	385	38	5	27	4	0	4	3	0	0	0	1	469
23:00	2	271	29	3	19	4	0	2	3	0	0	0	0	333
Day Total	377	14507	2346	262	2292	481	92	148	57	17	29	36	43	20687
Percent	1.8%	70.1%	11.3%	1.3%	11.1%	2.3%	0.4%	0.7%	0.3%	0.1%	0.1%	0.2%	0.2%	
AM Peak	11:00	07:00	07:00	08:00	06:00	08:00	08:00	07:00	07:00	08:00	05:00	08:00	08:00	07:00
Vol.	23	885	175	21	177	59	9	11	4	2	2	4	4	1338
PM Peak	15:00	17:00	14:00	14:00	12:00	17:00	15:00	14:00	15:00	16:00	15:00	15:00	15:00	17:00
Vol.	61	1372	144	19	161	46	19	14	8	4	5	7	6	1720
Grand Total	377	14507	2346	262	2292	481	92	148	57	17	29	36	43	20687
Percent	1.8%	70.1%	11.3%	1.3%	11.1%	2.3%	0.4%	0.7%	0.3%	0.1%	0.1%	0.2%	0.2%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-26
Station ID: Thurs 2/23/17
Main St. Btwn SR 60 EB & Spruce St.
33.9948, -117.3658
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/23/17	0	44	7	0	1	0	0	0	0	0	0	0	0	52
01:00	0	31	8	0	4	0	0	0	0	0	0	0	0	43
02:00	0	23	6	0	2	0	0	0	0	0	0	0	0	31
03:00	2	37	7	0	6	0	0	0	0	0	0	0	0	52
04:00	0	69	13	1	10	0	0	0	0	0	0	0	0	93
05:00	2	115	23	1	18	0	**1**	1	0	0	0	0	0	161
06:00	1	174	33	1	30	1	1	0	0	0	0	0	0	241
07:00	5	**328**	50	0	44	9	1	2	0	0	0	0	0	**439**
08:00	5	303	**58**	**3**	39	4	1	2	0	0	**1**	**1**	0	417
09:00	**8**	233	58	3	31	2	0	3	**1**	0	1	1	0	341
10:00	1	212	57	3	**60**	5	1	2	1	0	1	0	0	343
11:00	4	244	52	1	46	**12**	1	**4**	0	0	1	1	0	366
12 PM	2	300	60	1	46	4	0	1	1	0	1	0	0	416
13:00	4	289	62	2	**52**	7	**2**	3	0	0	1	0	0	422
14:00	5	277	63	**4**	48	**8**	1	**4**	1	0	0	0	0	411
15:00	6	283	61	1	38	4	0	2	0	0	0	0	0	395
16:00	15	446	**75**	0	41	3	0	0	**2**	0	0	0	**3**	585
17:00	**17**	**497**	49	1	39	1	0	2	0	0	**2**	0	0	**608**
18:00	6	319	46	1	22	3	1	1	0	**1**	2	0	0	402
19:00	0	183	33	1	11	3	0	0	0	0	0	0	0	231
20:00	2	151	19	0	4	0	0	0	0	0	0	0	0	176
21:00	0	146	19	0	10	1	1	0	0	0	0	0	0	177
22:00	0	86	7	0	4	0	0	0	0	0	0	0	0	97
23:00	0	60	10	0	4	0	0	0	0	0	0	0	0	74
Day Total	85	4850	876	24	610	67	11	27	6	1	10	3	3	6573
Percent	1.3%	73.8%	13.3%	0.4%	9.3%	1.0%	0.2%	0.4%	0.1%	0.0%	0.2%	0.0%	0.0%	
AM Peak	09:00	07:00	08:00	08:00	10:00	11:00	05:00	11:00	09:00		08:00	08:00		07:00
Vol.	8	328	58	3	60	12	1	4	1		1	1		439
PM Peak	17:00	17:00	16:00	14:00	13:00	14:00	13:00	14:00	16:00	18:00	17:00		16:00	17:00
Vol.	17	497	75	4	52	8	2	4	2	1	2		3	608
Grand Total	85	4850	876	24	610	67	11	27	6	1	10	3	3	6573
Percent	1.3%	73.8%	13.3%	0.4%	9.3%	1.0%	0.2%	0.4%	0.1%	0.0%	0.2%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-26
Station ID: Thurs 2/23/17
Main St. Btwn SR 60 EB & Spruce St.
33.9948, -117.3658
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/23/17	0	37	8	0	6	0	0	0	0	0	0	0	0	51
01:00	0	35	4	0	1	0	0	0	0	0	0	0	0	40
02:00	0	17	4	0	2	0	0	0	0	0	0	0	0	23
03:00	0	20	4	0	1	0	1	0	0	0	0	0	0	26
04:00	0	37	8	1	2	1	0	0	0	0	0	0	0	49
05:00	2	83	25	0	12	1	0	0	0	0	0	0	0	123
06:00	0	125	13	0	18	3	1	2	0	0	0	0	0	162
07:00	**8**	**332**	57	1	**49**	5	2	2	1	0	0	**1**	**1**	**459**
08:00	6	310	57	**2**	40	**9**	**3**	0	1	0	0	1	1	430
09:00	4	229	53	0	37	4	2	0	0	**1**	0	0	0	330
10:00	5	211	51	2	46	6	1	2	0	0	**1**	1	1	327
11:00	6	256	**59**	2	47	8	2	**3**	**2**	0	0	0	0	385
12 PM	3	250	60	0	**53**	**4**	1	**2**	1	0	0	1	0	375
13:00	10	280	53	1	50	3	1	0	**2**	0	0	0	**1**	401
14:00	2	293	**76**	**3**	37	3	**2**	0	1	0	0	**2**	0	419
15:00	6	336	75	1	50	4	0	1	0	0	0	1	0	474
16:00	**12**	366	65	2	42	2	1	0	0	0	**1**	0	0	491
17:00	6	**403**	50	0	38	1	1	1	0	0	0	0	0	**500**
18:00	3	363	55	1	28	2	2	1	1	0	1	0	0	457
19:00	2	267	39	0	23	1	0	1	0	0	0	0	0	333
20:00	0	151	25	0	12	0	0	0	0	0	0	0	0	188
21:00	2	114	14	0	10	0	0	0	0	0	0	0	0	140
22:00	0	90	7	0	7	0	0	0	0	0	0	0	0	104
23:00	0	47	9	0	5	0	0	0	0	0	0	0	0	61
Day Total	77	4652	871	16	616	57	20	15	9	1	3	7	4	6348
Percent	1.2%	73.3%	13.7%	0.3%	9.7%	0.9%	0.3%	0.2%	0.1%	0.0%	0.0%	0.1%	0.1%	
AM Peak	07:00	07:00	11:00	08:00	07:00	08:00	08:00	11:00	11:00	09:00	10:00	07:00	07:00	07:00
Vol.	8	332	59	2	49	9	3	3	2	1	1	1	1	459
PM Peak	16:00	17:00	14:00	14:00	12:00	12:00	14:00	12:00	13:00		16:00	14:00	13:00	17:00
Vol.	12	403	76	3	53	4	2	2	2		1	2	1	500
Grand Total	77	4652	871	16	616	57	20	15	9	1	3	7	4	6348
Percent	1.2%	73.3%	13.7%	0.3%	9.7%	0.9%	0.3%	0.2%	0.1%	0.0%	0.0%	0.1%	0.1%	

Field Data Services of Arizona
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Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-26
Station ID: Thurs 2/23/17
Main St. Btwn SR 60 EB & Spruce St.
33.9948, -117.3658
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/23/17	0	81	15	0	7	0	0	0	0	0	0	0	0	103
01:00	0	66	12	0	5	0	0	0	0	0	0	0	0	83
02:00	0	40	10	0	4	0	0	0	0	0	0	0	0	54
03:00	2	57	11	0	7	0	1	0	0	0	0	0	0	78
04:00	0	106	21	2	12	1	0	0	0	0	0	0	0	142
05:00	4	198	48	1	30	1	1	1	0	0	0	0	0	284
06:00	1	299	46	1	48	4	2	2	0	0	0	0	0	403
07:00	**13**	**660**	107	1	93	14	3	4	1	0	0	1	**1**	**898**
08:00	11	613	**115**	**5**	79	13	**4**	2	1	0	1	**2**	1	847
09:00	12	462	111	3	68	6	2	3	1	**1**	1	1	0	671
10:00	6	423	108	5	**106**	11	2	4	1	0	**2**	1	1	670
11:00	10	500	111	3	93	**20**	3	**7**	**2**	0	1	1	0	751
12 PM	5	550	120	1	99	8	1	3	**2**	0	1	1	0	791
13:00	14	569	115	3	**102**	10	**3**	3	2	0	1	0	1	823
14:00	7	570	139	**7**	85	**11**	3	**4**	2	0	0	**2**	0	830
15:00	12	619	136	2	88	8	0	3	0	0	0	1	0	869
16:00	**27**	812	**140**	2	83	5	1	0	2	0	1	0	**3**	1076
17:00	23	**900**	99	1	77	2	1	3	0	0	2	0	0	**1108**
18:00	9	682	101	2	50	5	3	2	1	**1**	**3**	0	0	859
19:00	2	450	72	1	34	4	0	1	0	0	0	0	0	564
20:00	2	302	44	0	16	0	0	0	0	0	0	0	0	364
21:00	2	260	33	0	20	1	1	0	0	0	0	0	0	317
22:00	0	176	14	0	11	0	0	0	0	0	0	0	0	201
23:00	0	107	19	0	9	0	0	0	0	0	0	0	0	135
Day Total	162	9502	1747	40	1226	124	31	42	15	2	13	10	7	12921
Percent	1.3%	73.5%	13.5%	0.3%	9.5%	1.0%	0.2%	0.3%	0.1%	0.0%	0.1%	0.1%	0.1%	
AM Peak	07:00	07:00	08:00	08:00	10:00	11:00	08:00	11:00	11:00	09:00	10:00	08:00	07:00	07:00
Vol.	13	660	115	5	106	20	4	7	2	1	2	2	1	898
PM Peak	16:00	17:00	16:00	14:00	13:00	14:00	13:00	14:00	12:00	18:00	18:00	14:00	16:00	17:00
Vol.	27	900	140	7	102	11	3	4	2	1	3	2	3	1108
Grand Total	162	9502	1747	40	1226	124	31	42	15	2	13	10	7	12921
Percent	1.3%	73.5%	13.5%	0.3%	9.5%	1.0%	0.2%	0.3%	0.1%	0.0%	0.1%	0.1%	0.1%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-27
Station ID: Thurs 3/2/17
Main St. Btwn Spruce St. & Poplar St.
33.9931, -117.3669
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	0	15	1	0	0	0	0	0	0	0	0	0	0	16
01:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
02:00	0	14	1	0	0	0	0	0	0	0	0	0	0	15
03:00	0	11	4	0	0	0	0	0	0	0	0	0	0	15
04:00	0	37	0	0	0	0	0	0	0	0	0	0	0	37
05:00	0	85	5	1	0	0	0	0	**1**	0	0	0	0	92
06:00	2	208	16	0	2	0	0	0	0	0	0	0	0	228
07:00	4	284	8	1	4	**8**	**1**	**1**	0	**2**	0	0	0	313
08:00	7	**299**	**20**	**2**	8	3	0	1	0	1	0	0	0	**341**
09:00	6	283	15	2	4	1	0	0	0	0	0	0	0	311
10:00	2	276	13	0	**9**	3	0	0	1	0	0	0	0	304
11:00	**12**	266	10	1	1	0	0	0	0	1	0	0	0	291
12 PM	13	267	12	**2**	3	0	0	0	0	0	0	0	0	297
13:00	7	281	7	1	5	1	0	0	**1**	0	0	**1**	0	304
14:00	6	260	14	2	2	1	0	**1**	0	0	0	0	0	286
15:00	**16**	343	15	1	1	1	0	0	0	0	0	0	0	377
16:00	14	444	**19**	0	**7**	**4**	**1**	1	0	0	0	0	0	490
17:00	10	**489**	14	2	0	2	0	0	0	0	0	0	0	**517**
18:00	5	385	6	0	2	2	0	0	0	0	0	0	0	400
19:00	4	272	8	0	0	0	0	0	0	0	0	0	0	284
20:00	1	254	11	1	0	0	0	0	0	0	0	0	0	267
21:00	8	55	8	0	0	0	0	0	0	0	0	0	0	71
22:00	0	41	4	0	0	0	0	0	0	0	0	0	0	45
23:00	0	23	4	0	0	0	0	0	0	0	0	0	0	27
Day Total	117	4900	216	16	48	26	2	4	3	4	0	1	0	5337
Percent	2.2%	91.8%	4.0%	0.3%	0.9%	0.5%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	08:00	08:00	10:00	07:00	07:00	07:00	05:00	07:00				08:00
Vol.	12	299	20	2	9	8	1	1	1	2				341
PM Peak	15:00	17:00	16:00	12:00	16:00	16:00	16:00	14:00	13:00			13:00		17:00
Vol.	16	489	19	2	7	4	1	1	1			1		517
Grand Total	117	4900	216	16	48	26	2	4	3	4	0	1	0	5337
Percent	2.2%	91.8%	4.0%	0.3%	0.9%	0.5%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-27
Station ID: Thurs 3/2/17
Main St. Btwn Spruce St. & Poplar St.
33.9931, -117.3669
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	0	13	4	0	0	0	0	0	0	0	0	0	0	17
01:00	0	9	1	0	1	0	0	0	0	0	0	0	0	11
02:00	0	5	5	0	0	0	0	0	0	0	0	0	0	10
03:00	0	23	3	0	0	0	0	0	0	0	0	0	0	26
04:00	0	48	0	0	0	0	0	0	0	0	0	0	0	48
05:00	0	83	3	0	4	0	0	**1**	0	0	0	0	0	91
06:00	0	232	3	0	4	0	0	0	0	0	0	0	0	239
07:00	0	**356**	17	**1**	8	**8**	0	1	0	0	1	0	0	**392**
08:00	0	347	13	0	10	2	0	1	**1**	**2**	**2**	0	0	378
09:00	0	303	16	0	**13**	0	0	0	0	0	0	0	0	332
10:00	0	273	**23**	0	12	0	0	0	0	0	0	0	0	308
11:00	**1**	292	20	0	13	0	0	0	0	0	0	0	0	326
12 PM	0	303	20	0	9	1	0	0	0	0	0	0	0	333
13:00	0	282	22	0	**18**	0	0	0	0	0	0	0	0	322
14:00	0	315	27	0	8	0	0	0	0	0	0	0	0	350
15:00	0	360	**29**	**1**	14	**2**	0	**1**	0	0	0	0	0	407
16:00	0	370	21	1	9	1	**1**	0	0	**1**	0	0	0	404
17:00	**1**	**417**	21	0	5	1	0	1	**1**	0	0	0	0	**447**
18:00	0	309	17	0	5	0	0	0	0	0	0	0	0	331
19:00	0	190	8	1	1	0	0	0	0	0	0	0	0	200
20:00	0	93	5	0	1	0	0	0	0	0	0	0	0	99
21:00	0	44	4	0	3	1	0	0	0	0	0	0	0	52
22:00	0	44	6	0	0	0	0	0	0	0	0	0	0	50
23:00	0	16	1	1	0	0	0	0	0	0	0	0	0	18
Day Total	2	4727	289	5	138	16	1	5	2	3	3	0	0	5191
Percent	0.0%	91.1%	5.6%	0.1%	2.7%	0.3%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	
AM Peak	11:00	07:00	10:00	07:00	09:00	07:00		05:00	08:00	08:00	08:00			07:00
Vol.	1	356	23	1	13	8		1	1	2	2			392
PM Peak	17:00	17:00	15:00	15:00	13:00	15:00	16:00	15:00	17:00	16:00				17:00
Vol.	1	417	29	1	18	2	1	1	1	1				447
Grand Total	2	4727	289	5	138	16	1	5	2	3	3	0	0	5191
Percent	0.0%	91.1%	5.6%	0.1%	2.7%	0.3%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-27
Station ID: Thurs 3/2/17
Main St. Btwn Spruce St. & Poplar St.
33.9931, -117.3669
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	0	28	5	0	0	0	0	0	0	0	0	0	0	33
01:00	0	17	2	0	1	0	0	0	0	0	0	0	0	20
02:00	0	19	6	0	0	0	0	0	0	0	0	0	0	25
03:00	0	34	7	0	0	0	0	0	0	0	0	0	0	41
04:00	0	85	0	0	0	0	0	0	0	0	0	0	0	85
05:00	0	168	8	1	4	0	0	1	**1**	0	0	0	0	183
06:00	2	440	19	0	6	0	0	0	0	0	0	0	0	467
07:00	4	640	25	**2**	12	**16**	**1**	**2**	0	2	1	0	0	705
08:00	7	**646**	33	2	18	5	0	2	1	**3**	**2**	0	0	**719**
09:00	6	586	31	2	17	1	0	0	0	0	0	0	0	643
10:00	2	549	**36**	0	**21**	3	0	0	1	0	0	0	0	612
11:00	**13**	558	30	1	14	0	0	0	0	1	0	0	0	617
12 PM	13	570	32	**2**	12	1	0	0	0	0	0	0	0	630
13:00	7	563	29	1	**23**	1	0	0	**1**	0	0	**1**	0	626
14:00	6	575	41	2	10	1	0	**1**	0	0	0	0	0	636
15:00	**16**	703	**44**	2	15	3	0	1	0	0	0	0	0	784
16:00	14	814	40	1	16	**5**	**2**	1	0	**1**	0	0	0	894
17:00	11	**906**	35	2	5	3	0	1	1	0	0	0	0	**964**
18:00	5	694	23	0	7	2	0	0	0	0	0	0	0	731
19:00	4	462	16	1	1	0	0	0	0	0	0	0	0	484
20:00	1	347	16	1	1	0	0	0	0	0	0	0	0	366
21:00	8	99	12	0	3	1	0	0	0	0	0	0	0	123
22:00	0	85	10	0	0	0	0	0	0	0	0	0	0	95
23:00	0	39	5	1	0	0	0	0	0	0	0	0	0	45
Day Total	119	9627	505	21	186	42	3	9	5	7	3	1	0	10528
Percent	1.1%	91.4%	4.8%	0.2%	1.8%	0.4%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	10:00	07:00	10:00	07:00	07:00	07:00	05:00	08:00	08:00			08:00
Vol.	13	646	36	2	21	16	1	2	1	3	2			719
PM Peak	15:00	17:00	15:00	12:00	13:00	16:00	16:00	14:00	13:00	16:00		13:00		17:00
Vol.	16	906	44	2	23	5	2	1	1	1		1		964
Grand Total	119	9627	505	21	186	42	3	9	5	7	3	1	0	10528
Percent	1.1%	91.4%	4.8%	0.2%	1.8%	0.4%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-28
Station ID: Tues 2/21/17
Orange St. Btwn Center St & Garner Rd.
34.017287, -117.350051
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	3	2	0	0	0	0	0	0	0	0	0	0	5
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	5	1	0	0	1	**1**	0	0	0	0	0	0	8
03:00	0	4	2	0	0	0	0	0	**1**	0	0	0	0	7
04:00	0	8	1	0	4	0	0	0	0	0	0	0	0	13
05:00	0	8	5	1	3	0	0	0	0	0	0	0	0	17
06:00	0	15	2	1	1	1	1	0	0	0	0	0	0	21
07:00	0	31	2	**3**	6	**2**	1	0	0	0	0	0	0	45
08:00	0	**42**	7	1	**12**	0	0	0	0	0	0	0	0	**62**
09:00	**1**	24	7	1	10	1	0	0	0	0	0	0	0	44
10:00	0	28	5	1	4	2	0	**1**	0	0	0	0	0	41
11:00	0	26	**12**	1	7	0	0	0	1	0	0	0	0	47
12 PM	0	34	9	**3**	4	0	0	**1**	**1**	0	0	0	0	52
13:00	0	26	10	1	13	**2**	0	1	0	0	0	0	0	53
14:00	**2**	42	7	2	5	2	0	0	0	0	0	0	0	60
15:00	0	54	11	1	8	0	0	0	0	0	0	0	0	74
16:00	0	88	15	1	**16**	1	0	0	0	0	0	0	0	121
17:00	0	**118**	**19**	3	11	0	0	1	0	0	0	0	0	**152**
18:00	1	80	10	1	6	0	0	0	0	0	0	0	0	98
19:00	0	28	5	1	3	0	0	0	0	0	0	0	0	37
20:00	0	34	2	1	4	0	0	0	0	0	0	0	0	41
21:00	1	38	7	1	5	0	0	0	0	0	0	0	0	52
22:00	0	28	5	0	3	0	0	0	1	0	0	0	0	37
23:00	0	5	3	0	1	0	0	0	0	0	0	0	0	9
Day Total	5	771	149	24	126	12	3	4	4	0	0	0	0	1098
Percent	0.5%	70.2%	13.6%	2.2%	11.5%	1.1%	0.3%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	08:00	11:00	07:00	08:00	07:00	02:00	10:00	03:00					08:00
Vol.	1	42	12	3	12	2	1	1	1					62
PM Peak	14:00	17:00	17:00	12:00	16:00	13:00		12:00	12:00					17:00
Vol.	2	118	19	3	16	2		1	1					152
Grand Total	5	771	149	24	126	12	3	4	4	0	0	0	0	1098
Percent	0.5%	70.2%	13.6%	2.2%	11.5%	1.1%	0.3%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-28
Station ID: Tues 2/21/17
Orange St. Btwn Center St & Garner Rd.
34.017287, -117.350051
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	1	0	**1**	0	0	1	0	0	0	0	0	0	3
01:00	0	2	1	0	2	0	0	0	0	0	0	0	0	5
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6
04:00	0	2	0	0	2	0	0	0	0	0	0	0	0	4
05:00	0	8	1	0	1	0	0	0	0	0	0	0	0	10
06:00	**1**	15	1	0	1	0	0	0	0	0	0	0	0	18
07:00	0	**43**	4	1	5	0	**2**	**1**	0	0	0	0	0	**56**
08:00	0	39	3	0	**9**	0	0	1	**1**	0	0	0	0	53
09:00	0	28	6	0	5	0	0	0	0	0	0	0	0	39
10:00	0	29	7	0	2	0	0	0	0	0	0	0	0	38
11:00	0	25	**12**	0	0	**1**	0	0	0	0	0	0	0	38
12 PM	0	32	12	0	2	**2**	0	0	0	0	0	0	0	48
13:00	1	41	11	0	4	0	0	0	0	0	0	0	0	57
14:00	0	45	6	0	4	0	**1**	0	0	0	0	0	0	56
15:00	0	42	10	0	3	0	1	**1**	0	0	0	0	0	57
16:00	**2**	50	7	0	**6**	0	0	0	**1**	0	0	0	0	66
17:00	0	**64**	**17**	**1**	2	0	0	0	1	0	0	0	0	**85**
18:00	1	53	9	0	1	0	0	0	0	0	0	0	0	64
19:00	0	40	4	0	0	0	0	0	0	0	0	0	0	44
20:00	0	36	8	1	0	0	0	0	0	0	0	0	0	45
21:00	1	16	1	0	1	0	0	0	1	0	0	0	0	20
22:00	0	9	3	0	0	1	0	0	0	0	0	0	0	13
23:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
Day Total	6	631	124	4	51	4	5	3	4	0	0	0	0	832
Percent	0.7%	75.8%	14.9%	0.5%	6.1%	0.5%	0.6%	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	11:00	00:00	08:00	11:00	07:00	07:00	08:00					07:00
Vol.	1	43	12	1	9	1	2	1	1					56
PM Peak	16:00	17:00	17:00	17:00	16:00	12:00	14:00	15:00	16:00					17:00
Vol.	2	64	17	1	6	2	1	1	1					85
Grand Total	6	631	124	4	51	4	5	3	4	0	0	0	0	832
Percent	0.7%	75.8%	14.9%	0.5%	6.1%	0.5%	0.6%	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-28
Station ID: Tues 2/21/17
Orange St. Btwn Center St & Garner Rd.
34.017287, -117.350051
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	4	2	1	0	0	1	0	0	0	0	0	0	8
01:00	0	4	1	0	2	0	0	0	0	0	0	0	0	7
02:00	0	8	1	0	0	1	1	0	0	0	0	0	0	11
03:00	0	9	2	0	1	0	0	0	**1**	0	0	0	0	13
04:00	0	10	1	0	6	0	0	0	0	0	0	0	0	17
05:00	0	16	6	1	4	0	0	0	0	0	0	0	0	27
06:00	**1**	30	3	1	2	1	1	0	0	0	0	0	0	39
07:00	0	74	6	**4**	11	**2**	**3**	**1**	0	0	0	0	0	101
08:00	0	**81**	10	1	**21**	0	0	1	1	0	0	0	0	**115**
09:00	1	52	13	1	15	1	0	0	0	0	0	0	0	83
10:00	0	57	12	1	6	2	0	1	0	0	0	0	0	79
11:00	0	51	**24**	1	7	1	0	0	1	0	0	0	0	85
12 PM	0	66	21	3	6	**2**	0	**1**	**1**	0	0	0	0	100
13:00	1	67	21	1	17	2	0	1	0	0	0	0	0	110
14:00	**2**	87	13	2	9	2	**1**	0	0	0	0	0	0	116
15:00	0	96	21	1	11	0	1	1	0	0	0	0	0	131
16:00	2	138	22	1	**22**	1	0	0	1	0	0	0	0	187
17:00	0	**182**	**36**	**4**	13	0	0	1	1	0	0	0	0	**237**
18:00	2	133	19	1	7	0	0	0	0	0	0	0	0	162
19:00	0	68	9	1	3	0	0	0	0	0	0	0	0	81
20:00	0	70	10	2	4	0	0	0	0	0	0	0	0	86
21:00	2	54	8	1	6	0	0	0	1	0	0	0	0	72
22:00	0	37	8	0	3	1	0	0	1	0	0	0	0	50
23:00	0	8	4	0	1	0	0	0	0	0	0	0	0	13
Day Total	11	1402	273	28	177	16	8	7	8	0	0	0	0	1930
Percent	0.6%	72.6%	14.1%	1.5%	9.2%	0.8%	0.4%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	08:00	11:00	07:00	08:00	07:00	07:00	07:00	03:00					08:00
Vol.	1	81	24	4	21	2	3	1	1					115
PM Peak	14:00	17:00	17:00	17:00	16:00	12:00	14:00	12:00	12:00					17:00
Vol.	2	182	36	4	22	2	1	1	1					237
Grand Total	11	1402	273	28	177	16	8	7	8	0	0	0	0	1930
Percent	0.6%	72.6%	14.1%	1.5%	9.2%	0.8%	0.4%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-29
Station ID:
Orange St. Btwn Garner Rd. & Columbia Av
34.0076, -117.3553
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	8	1	0	0	0	0	0	0	0	0	0	0	9
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
03:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
04:00	0	13	2	0	0	0	0	0	0	0	0	0	0	15
05:00	0	11	3	1	1	0	0	0	0	0	0	0	0	16
06:00	0	22	2	1	2	**1**	**1**	0	0	0	0	0	0	29
07:00	0	29	13	**2**	4	1	0	0	**2**	0	0	0	0	51
08:00	0	**48**	**16**	1	**11**	0	0	0	0	0	0	0	0	**76**
09:00	0	38	11	1	5	0	1	0	0	0	0	0	0	56
10:00	0	48	4	1	4	1	0	**1**	0	0	0	0	0	59
11:00	0	44	13	1	4	0	0	0	1	0	0	0	0	63
12 PM	1	63	16	2	2	**1**	0	0	0	0	0	0	0	85
13:00	0	60	17	1	3	0	0	0	0	0	0	0	0	81
14:00	**2**	77	14	2	4	0	0	0	0	0	0	0	0	99
15:00	0	82	27	1	**11**	1	0	0	0	0	0	0	0	122
16:00	0	63	26	1	11	1	0	0	0	0	0	0	0	102
17:00	0	151	**33**	1	3	0	0	0	0	0	0	0	0	188
18:00	2	**163**	31	**3**	3	0	0	0	0	0	0	0	0	**202**
19:00	1	83	23	1	3	0	0	0	0	0	0	0	0	111
20:00	0	68	13	1	2	0	0	0	0	0	0	0	0	84
21:00	0	48	9	1	1	0	0	0	0	0	0	0	0	59
22:00	1	17	2	0	0	0	0	0	0	0	0	0	0	20
23:00	0	10	1	0	1	0	0	0	0	0	0	0	0	12
Day Total	7	1165	280	22	75	6	2	1	3	0	0	0	0	1561
Percent	0.4%	74.6%	17.9%	1.4%	4.8%	0.4%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	08:00	07:00	08:00	06:00	06:00	10:00	07:00					08:00
Vol.		48	16	2	11	1	1	1	2					76
PM Peak	14:00	18:00	17:00	18:00	15:00	12:00								18:00
Vol.	2	163	33	3	11	1								202
Grand Total	7	1165	280	22	75	6	2	1	3	0	0	0	0	1561
Percent	0.4%	74.6%	17.9%	1.4%	4.8%	0.4%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-29
Station ID:
Orange St. Btwn Garner Rd. & Columbia Av
34.0076, -117.3553
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	8	0	0	2	0	0	0	0	0	0	0	0	10
05:00	0	13	3	0	0	0	0	0	0	0	0	0	0	16
06:00	0	19	2	0	1	**2**	0	0	0	0	0	0	0	24
07:00	0	**46**	**10**	0	6	0	0	**1**	0	0	0	0	0	**63**
08:00	0	41	5	0	**7**	1	0	1	**1**	0	0	0	0	56
09:00	0	41	8	**1**	2	1	0	0	0	0	0	0	0	53
10:00	0	26	9	0	2	0	0	0	0	0	0	0	0	37
11:00	0	35	10	0	2	0	0	0	1	0	0	0	0	48
12 PM	0	42	15	0	2	0	0	0	0	0	0	0	0	59
13:00	0	64	17	0	2	0	0	0	0	0	0	0	0	83
14:00	0	58	12	0	4	**2**	0	0	0	0	0	0	0	76
15:00	0	64	11	0	2	0	0	0	0	0	0	0	0	77
16:00	**1**	61	**20**	0	**7**	1	0	0	**1**	0	0	0	0	91
17:00	1	70	19	0	2	1	0	0	0	0	0	0	0	93
18:00	0	77	16	**1**	1	0	0	0	0	0	0	0	0	95
19:00	1	63	15	0	2	0	0	0	0	0	0	0	0	81
20:00	0	**107**	19	0	4	0	0	0	0	0	0	0	0	**130**
21:00	0	66	13	0	2	0	0	0	0	0	0	0	0	81
22:00	0	52	11	0	0	0	0	0	0	0	0	0	0	63
23:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11
Day Total	3	976	219	2	50	8	0	2	3	0	0	0	0	1263
Percent	0.2%	77.3%	17.3%	0.2%	4.0%	0.6%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak		07:00	07:00	09:00	08:00	06:00		07:00	08:00					07:00
Vol.		46	10	1	7	2		1	1					63
PM Peak	16:00	20:00	16:00	18:00	16:00	14:00			16:00					20:00
Vol.	1	107	20	1	7	2			1					130
Grand Total	3	976	219	2	50	8	0	2	3	0	0	0	0	1263
Percent	0.2%	77.3%	17.3%	0.2%	4.0%	0.6%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-29
Station ID:
Orange St. Btwn Garner Rd. & Columbia Av
34.0076, -117.3553
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	12	1	0	0	0	0	0	0	0	0	0	0	13
01:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
02:00	0	10	2	0	0	0	0	0	0	0	0	0	0	12
03:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
04:00	0	21	2	0	2	0	0	0	0	0	0	0	0	25
05:00	0	24	6	1	1	0	0	0	0	0	0	0	0	32
06:00	0	41	4	1	3	**3**	**1**	0	0	0	0	0	0	53
07:00	0	75	**23**	**2**	10	1	0	**1**	**2**	0	0	0	0	114
08:00	0	**89**	21	1	**18**	1	0	1	1	0	0	0	0	**132**
09:00	0	79	19	2	7	1	1	0	0	0	0	0	0	109
10:00	0	74	13	1	6	1	0	1	0	0	0	0	0	96
11:00	0	79	23	1	6	0	0	0	2	0	0	0	0	111
12 PM	1	105	31	2	4	1	0	0	0	0	0	0	0	144
13:00	0	124	34	1	5	0	0	0	0	0	0	0	0	164
14:00	**2**	135	26	2	8	**2**	0	0	0	0	0	0	0	175
15:00	0	146	38	1	13	1	0	0	0	0	0	0	0	199
16:00	1	124	46	1	**18**	2	0	0	**1**	0	0	0	0	193
17:00	1	221	**52**	1	5	1	0	0	0	0	0	0	0	281
18:00	2	**240**	47	**4**	4	0	0	0	0	0	0	0	0	**297**
19:00	2	146	38	1	5	0	0	0	0	0	0	0	0	192
20:00	0	175	32	1	6	0	0	0	0	0	0	0	0	214
21:00	0	114	22	1	3	0	0	0	0	0	0	0	0	140
22:00	1	69	13	0	0	0	0	0	0	0	0	0	0	83
23:00	0	18	4	0	1	0	0	0	0	0	0	0	0	23
Day Total	10	2141	499	24	125	14	2	3	6	0	0	0	0	2824
Percent	0.4%	75.8%	17.7%	0.8%	4.4%	0.5%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	07:00	07:00	08:00	06:00	06:00	07:00	07:00					08:00
Vol.		89	23	2	18	3	1	1	2					132
PM Peak	14:00	18:00	17:00	18:00	16:00	14:00			16:00					18:00
Vol.	2	240	52	4	18	2			1					297
Grand Total	10	2141	499	24	125	14	2	3	6	0	0	0	0	2824
Percent	0.4%	75.8%	17.7%	0.8%	4.4%	0.5%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-30
Station ID: Tues 2/21/17
Orange St. Btwn Columbia Ave. & Strong St. 34.0021, -117.3593
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	10	2	0	0	0	0	0	0	0	0	0	0	12
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
03:00	0	9	0	0	1	0	0	0	0	0	0	0	0	10
04:00	0	17	3	0	0	0	0	0	0	0	0	0	0	20
05:00	0	21	6	0	1	0	0	0	0	0	0	0	0	28
06:00	0	36	4	0	8	0	0	0	0	0	0	0	0	48
07:00	0	**121**	**19**	0	8	**3**	0	0	**1**	0	0	0	0	152
08:00	0	112	17	0	**23**	2	0	**2**	1	**1**	0	0	0	**158**
09:00	0	42	13	0	8	0	0	0	0	0	0	0	0	63
10:00	0	62	18	0	8	1	0	1	0	0	0	0	0	90
11:00	**1**	62	14	0	5	0	0	1	1	0	0	0	0	84
12 PM	0	73	14	1	7	0	0	0	0	0	0	0	0	95
13:00	0	83	17	0	11	0	0	0	0	0	0	0	0	111
14:00	**2**	85	20	1	13	0	0	0	0	0	0	0	0	121
15:00	0	142	29	0	18	0	0	**2**	0	0	0	0	0	191
16:00	0	182	33	**2**	**24**	**2**	0	0	**1**	**1**	0	0	0	245
17:00	0	**289**	**37**	1	24	0	0	1	1	0	0	0	0	**353**
18:00	0	165	21	1	11	0	0	0	0	0	0	0	0	198
19:00	0	62	12	0	4	0	0	0	0	0	0	0	0	78
20:00	0	53	2	0	4	0	0	0	0	0	0	0	0	59
21:00	1	46	4	0	1	0	0	0	0	0	0	0	0	52
22:00	0	26	0	0	1	0	0	0	0	0	0	0	0	27
23:00	0	11	2	0	1	0	0	0	0	0	0	0	0	14
Day Total	4	1718	289	6	181	8	0	7	5	2	0	0	0	2220
Percent	0.2%	77.4%	13.0%	0.3%	8.2%	0.4%	0.0%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	07:00		08:00	07:00		08:00	07:00	08:00				08:00
Vol.	1	121	19		23	3		2	1	1				158
PM Peak	14:00	17:00	17:00	16:00	16:00	16:00		15:00	16:00	16:00				17:00
Vol.	2	289	37	2	24	2		2	1	1				353
Grand Total	4	1718	289	6	181	8	0	7	5	2	0	0	0	2220
Percent	0.2%	77.4%	13.0%	0.3%	8.2%	0.4%	0.0%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-30
Station ID: Tues 2/21/17
Orange St. Btwn Columbia Ave. & Strong St. 34.0021, -117.3593
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	3	1	0	0	0	0	0	0	0	0	0	0	4
01:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
04:00	0	11	5	0	2	0	0	0	0	0	0	0	0	18
05:00	0	21	4	0	2	0	0	0	0	0	0	0	0	27
06:00	1	43	5	0	4	0	0	0	0	0	0	0	0	53
07:00	1	**128**	13	**1**	**10**	**2**	0	**1**	**1**	**2**	0	0	0	**159**
08:00	1	101	12	0	10	1	**1**	0	0	0	0	0	0	126
09:00	**2**	52	8	1	6	0	0	1	0	0	0	0	0	70
10:00	0	48	12	0	5	0	0	0	0	0	0	0	0	65
11:00	0	55	**17**	0	9	0	0	1	0	0	0	0	0	82
12 PM	**2**	62	14	0	8	0	0	0	0	0	0	0	0	86
13:00	1	74	14	0	6	0	0	0	0	0	0	0	0	95
14:00	0	94	13	0	12	**1**	0	0	0	0	0	0	0	120
15:00	2	113	20	0	12	0	0	0	0	0	0	0	0	147
16:00	2	146	20	0	**14**	0	**1**	0	0	0	0	0	0	183
17:00	0	**161**	**34**	0	12	0	0	0	0	0	0	0	0	**207**
18:00	1	78	16	0	1	0	0	0	0	0	0	0	0	96
19:00	0	58	8	0	1	0	0	0	0	0	0	0	0	67
20:00	0	46	4	0	5	0	0	0	0	0	0	0	0	55
21:00	0	37	0	0	5	0	0	0	0	0	0	0	0	42
22:00	0	23	5	0	2	0	0	0	0	0	0	0	0	30
23:00	0	12	3	0	0	0	0	0	0	0	**1**	0	0	16
Day Total	13	1379	229	2	126	4	2	3	1	2	1	0	0	1762
Percent	0.7%	78.3%	13.0%	0.1%	7.2%	0.2%	0.1%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	
AM Peak	09:00	07:00	11:00	07:00	07:00	07:00	08:00	07:00	07:00	07:00				07:00
Vol.	2	128	17	1	10	2	1	1	1	2				159
PM Peak	12:00	17:00	17:00		16:00	14:00	16:00				23:00			17:00
Vol.	2	161	34		14	1	1				1			207
Grand Total	13	1379	229	2	126	4	2	3	1	2	1	0	0	1762
Percent	0.7%	78.3%	13.0%	0.1%	7.2%	0.2%	0.1%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-30
Station ID: Tues 2/21/17
Orange St. Btwn Columbia Ave. & Strong St. 34.0021, -117.3593
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	13	3	0	0	0	0	0	0	0	0	0	0	16
01:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
02:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
03:00	0	13	1	0	1	0	0	0	0	0	0	0	0	15
04:00	0	28	8	0	2	0	0	0	0	0	0	0	0	38
05:00	0	42	10	0	3	0	0	0	0	0	0	0	0	55
06:00	1	79	9	0	12	0	0	0	0	0	0	0	0	101
07:00	1	**249**	**32**	**1**	18	**5**	0	1	**2**	**2**	0	0	0	**311**
08:00	1	213	29	0	**33**	3	**1**	**2**	1	1	0	0	0	284
09:00	**2**	94	21	1	14	0	0	1	0	0	0	0	0	133
10:00	0	110	30	0	13	1	0	1	0	0	0	0	0	155
11:00	1	117	31	0	14	0	0	2	1	0	0	0	0	166
12 PM	**2**	135	28	1	15	0	0	0	0	0	0	0	0	181
13:00	1	157	31	0	17	0	0	0	0	0	0	0	0	206
14:00	2	179	33	1	25	1	0	0	0	0	0	0	0	241
15:00	2	255	49	0	30	0	0	**2**	0	0	0	0	0	338
16:00	2	328	53	**2**	**38**	**2**	**1**	0	**1**	**1**	0	0	0	428
17:00	0	**450**	**71**	1	36	0	0	1	1	0	0	0	0	**560**
18:00	1	243	37	1	12	0	0	0	0	0	0	0	0	294
19:00	0	120	20	0	5	0	0	0	0	0	0	0	0	145
20:00	0	99	6	0	9	0	0	0	0	0	0	0	0	114
21:00	1	83	4	0	6	0	0	0	0	0	0	0	0	94
22:00	0	49	5	0	3	0	0	0	0	0	0	0	0	57
23:00	0	23	5	0	1	0	0	0	0	0	**1**	0	0	30
Day Total	17	3097	518	8	307	12	2	10	6	4	1	0	0	3982
Percent	0.4%	77.8%	13.0%	0.2%	7.7%	0.3%	0.1%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	
AM Peak	09:00	07:00	07:00	07:00	08:00	07:00	08:00	08:00	07:00	07:00				07:00
Vol.	2	249	32	1	33	5	1	2	2	2				311
PM Peak	12:00	17:00	17:00	16:00	16:00	16:00	16:00	15:00	16:00	16:00	23:00			17:00
Vol.	2	450	71	2	38	2	1	2	1	1	1			560
Grand Total	17	3097	518	8	307	12	2	10	6	4	1	0	0	3982
Percent	0.4%	77.8%	13.0%	0.2%	7.7%	0.3%	0.1%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-031
Station ID: Thurs 3/2/17
Orange St. Btwn Strong St. & Oakley Ave.
33.997923, -117.362162
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	0	4	0	0	1	0	0	0	0	0	0	0	0	5
01:00	0	0	1	**1**	0	0	0	0	0	0	0	0	0	2
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	1	0	0	1	0	0	**1**	0	0	0	0	3
04:00	**1**	8	1	0	0	0	0	0	0	0	0	0	0	10
05:00	0	16	8	0	1	0	0	0	0	0	0	0	0	25
06:00	0	41	8	1	4	0	0	**1**	0	0	0	0	0	55
07:00	0	**140**	8	0	10	1	0	0	0	0	0	0	0	**159**
08:00	1	84	**12**	1	**16**	**2**	0	0	0	**1**	0	0	0	117
09:00	0	52	12	0	8	2	0	0	1	0	0	0	0	75
10:00	0	64	10	1	8	0	0	0	0	0	0	0	0	83
11:00	0	59	12	0	4	0	0	0	0	1	0	0	0	76
12 PM	0	73	12	**1**	6	0	0	**1**	0	0	0	0	0	93
13:00	1	101	16	0	8	1	0	0	0	0	0	0	0	127
14:00	0	103	20	0	12	0	0	0	**1**	0	0	0	0	136
15:00	**2**	220	24	1	**20**	0	0	0	0	0	0	0	0	267
16:00	0	338	**36**	0	17	**3**	0	0	1	**1**	0	0	0	**396**
17:00	0	**353**	24	1	13	0	0	1	0	0	0	0	0	392
18:00	0	163	20	0	12	0	0	0	0	0	0	0	0	195
19:00	1	62	15	0	12	0	0	0	0	1	0	0	0	91
20:00	0	56	3	1	1	0	0	0	0	0	0	0	0	61
21:00	0	35	1	0	1	0	0	0	0	0	0	0	0	37
22:00	0	15	1	0	0	0	**1**	0	0	1	0	0	0	18
23:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
Day Total	6	2001	245	8	154	10	1	3	4	5	0	0	0	2437
Percent	0.2%	82.1%	10.1%	0.3%	6.3%	0.4%	0.0%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	
AM Peak	04:00	07:00	08:00	01:00	08:00	08:00		06:00	03:00	08:00				07:00
Vol.	1	140	12	1	16	2		1	1	1				159
PM Peak	15:00	17:00	16:00	12:00	15:00	16:00	22:00	12:00	14:00	16:00				16:00
Vol.	2	353	36	1	20	3	1	1	1	1				396
Grand Total	6	2001	245	8	154	10	1	3	4	5	0	0	0	2437
Percent	0.2%	82.1%	10.1%	0.3%	6.3%	0.4%	0.0%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-031
Station ID: Thurs 3/2/17
Orange St. Btwn Strong St. & Oakley Ave.
33.997923, -117.362162
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	0	0	2	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	**1**	0	0	0	0	0	0	1
02:00	0	1	0	0	1	0	0	**1**	0	0	0	0	0	3
03:00	0	3	1	**1**	0	0	0	0	0	0	0	0	0	5
04:00	**1**	8	3	0	0	**1**	0	0	0	0	0	0	0	13
05:00	0	15	6	0	1	0	0	0	0	0	0	0	0	22
06:00	0	48	6	0	3	0	1	0	**1**	0	0	0	0	59
07:00	0	178	8	0	7	1	0	0	0	0	0	0	0	194
08:00	0	**192**	12	0	**8**	1	0	1	0	0	0	0	0	**214**
09:00	1	108	**15**	0	3	0	0	0	0	0	0	0	0	127
10:00	0	72	11	0	2	1	0	0	0	0	0	0	0	86
11:00	0	61	13	1	4	0	1	0	0	0	0	0	0	80
12 PM	1	50	11	0	4	0	0	0	**1**	0	0	0	0	67
13:00	1	78	11	0	8	0	0	0	0	0	0	0	0	98
14:00	1	115	12	**1**	8	0	0	**1**	0	**1**	0	0	0	139
15:00	0	183	16	0	**10**	1	0	0	0	0	0	0	0	210
16:00	**2**	245	**28**	0	8	**3**	**1**	0	1	0	0	0	0	288
17:00	0	**254**	27	0	7	1	0	1	0	0	0	0	0	**290**
18:00	1	218	9	0	2	0	0	0	0	0	0	0	0	230
19:00	0	60	12	1	1	1	0	0	0	0	0	0	0	75
20:00	0	34	2	0	1	0	1	0	1	0	0	0	0	39
21:00	0	20	1	0	1	0	0	0	0	0	0	0	0	22
22:00	0	20	0	0	1	0	0	0	1	0	0	0	0	22
23:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
Day Total	8	1974	207	4	80	10	5	4	5	1	0	0	0	2298
Percent	0.3%	85.9%	9.0%	0.2%	3.5%	0.4%	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak	04:00	08:00	09:00	03:00	08:00	04:00	01:00	02:00	06:00					08:00
Vol.	1	192	15	1	8	1	1	1	1					214
PM Peak	16:00	17:00	16:00	14:00	15:00	16:00	16:00	14:00	12:00	14:00				17:00
Vol.	2	254	28	1	10	3	1	1	1	1				290
Grand Total	8	1974	207	4	80	10	5	4	5	1	0	0	0	2298
Percent	0.3%	85.9%	9.0%	0.2%	3.5%	0.4%	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-031
Station ID: Thurs 3/2/17
Orange St. Btwn Strong St. & Oakley Ave.
33.997923, -117.362162
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	0	4	2	0	1	0	0	0	0	0	0	0	0	7
01:00	0	0	1	**1**	0	0	**1**	0	0	0	0	0	0	3
02:00	0	3	0	0	1	0	0	**1**	0	0	0	0	0	5
03:00	0	3	2	1	0	1	0	0	**1**	0	0	0	0	8
04:00	**2**	16	4	0	0	1	0	0	0	0	0	0	0	23
05:00	0	31	14	0	2	0	0	0	0	0	0	0	0	47
06:00	0	89	14	1	7	0	1	1	1	0	0	0	0	114
07:00	0	**318**	16	0	17	2	0	0	0	0	0	0	0	**353**
08:00	1	276	24	1	**24**	**3**	0	1	0	**1**	0	0	0	331
09:00	1	160	**27**	0	11	2	0	0	1	0	0	0	0	202
10:00	0	136	21	1	10	1	0	0	0	0	0	0	0	169
11:00	0	120	25	1	8	0	1	0	0	1	0	0	0	156
12 PM	1	123	23	**1**	10	0	0	1	1	0	0	0	0	160
13:00	**2**	179	27	0	16	1	0	0	0	0	0	0	0	225
14:00	1	218	32	1	20	0	0	1	1	**1**	0	0	0	275
15:00	2	403	40	1	**30**	1	0	0	0	0	0	0	0	477
16:00	2	583	**64**	0	25	**6**	**1**	0	**2**	1	0	0	0	**684**
17:00	0	**607**	51	1	20	1	0	**2**	0	0	0	0	0	682
18:00	1	381	29	0	14	0	0	0	0	0	0	0	0	425
19:00	1	122	27	1	13	1	0	0	0	1	0	0	0	166
20:00	0	90	5	1	2	0	1	0	1	0	0	0	0	100
21:00	0	55	2	0	2	0	0	0	0	0	0	0	0	59
22:00	0	35	1	0	1	0	1	0	1	1	0	0	0	40
23:00	0	23	1	0	0	0	0	0	0	0	0	0	0	24
Day Total	14	3975	452	12	234	20	6	7	9	6	0	0	0	4735
Percent	0.3%	83.9%	9.5%	0.3%	4.9%	0.4%	0.1%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	
AM Peak	04:00	07:00	09:00	01:00	08:00	08:00	01:00	02:00	03:00	08:00				07:00
Vol.	2	318	27	1	24	3	1	1	1	1				353
PM Peak	13:00	17:00	16:00	12:00	15:00	16:00	16:00	17:00	16:00	14:00				16:00
Vol.	2	607	64	1	30	6	1	2	2	1				684
Grand Total	14	3975	452	12	234	20	6	7	9	6	0	0	0	4735
Percent	0.3%	83.9%	9.5%	0.3%	4.9%	0.4%	0.1%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-032
Station ID: Wed 2/22/17
W. La Cadena Dr. Btwn Chase Rd. & I-215
SB Ramps 34.0051, -117.3497
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	10	1	0	1	0	0	0	0	0	0	0	0	12
01:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	9	0	0	0	1	1	0	0	0	0	0	0	11
03:00	0	8	1	0	3	0	0	0	0	0	0	0	0	12
04:00	0	11	3	0	3	1	0	0	0	0	0	0	0	18
05:00	0	15	6	0	7	0	1	0	0	0	0	0	0	29
06:00	0	50	**18**	0	12	0	0	0	0	0	0	0	0	80
07:00	0	93	9	0	6	1	0	0	0	0	0	0	0	109
08:00	0	**106**	10	0	5	0	0	0	**1**	0	0	0	0	**122**
09:00	**2**	58	12	0	**13**	**3**	1	**1**	0	0	0	0	0	90
10:00	0	53	10	0	7	0	**2**	0	0	0	0	0	0	72
11:00	0	70	9	**1**	8	1	0	0	0	0	0	0	0	89
12 PM	0	62	8	0	13	0	1	0	0	0	0	0	0	84
13:00	1	80	10	**1**	7	0	1	0	**1**	0	0	**1**	0	102
14:00	**2**	67	18	1	18	0	**2**	0	0	0	0	0	0	108
15:00	1	119	**24**	1	27	1	1	0	0	0	0	0	0	174
16:00	1	158	22	0	**28**	**7**	1	0	0	0	0	0	0	217
17:00	0	**192**	24	0	14	5	0	0	0	0	0	0	0	**235**
18:00	2	107	19	0	9	0	0	0	0	0	0	0	0	137
19:00	0	75	9	0	4	0	0	0	0	0	0	0	0	88
20:00	1	52	7	0	3	0	0	0	0	0	0	0	0	63
21:00	1	40	1	1	2	0	0	0	0	0	0	0	0	45
22:00	0	23	1	0	3	0	0	0	0	0	0	0	0	27
23:00	0	20	1	0	0	0	0	0	0	0	0	0	0	21
Day Total	11	1485	223	5	193	20	11	1	2	0	0	1	0	1952
Percent	0.6%	76.1%	11.4%	0.3%	9.9%	1.0%	0.6%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	
AM Peak	09:00	08:00	06:00	11:00	09:00	09:00	10:00	09:00	08:00					08:00
Vol.	2	106	18	1	13	3	2	1	1					122
PM Peak	14:00	17:00	15:00	13:00	16:00	16:00	14:00		13:00			13:00		17:00
Vol.	2	192	24	1	28	7	2		1			1		235
Grand Total	11	1485	223	5	193	20	11	1	2	0	0	1	0	1952
Percent	0.6%	76.1%	11.4%	0.3%	9.9%	1.0%	0.6%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-032
Station ID: Wed 2/22/17
W. La Cadena Dr. Btwn Chase Rd. & I-215
SB Ramps 34.0051, -117.3497
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	9	1	0	0	0	0	0	0	0	0	0	0	10
01:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
02:00	1	7	2	0	1	0	1	0	0	0	0	0	0	12
03:00	0	13	2	0	2	0	0	0	0	0	0	0	0	17
04:00	0	24	7	0	9	0	0	0	0	0	0	0	0	40
05:00	**3**	30	15	1	16	1	1	0	0	0	0	0	0	67
06:00	1	70	11	1	17	0	1	0	0	0	0	0	0	101
07:00	1	258	**42**	2	23	**3**	0	0	**1**	0	0	0	0	330
08:00	0	**281**	40	1	**28**	2	0	0	0	0	0	0	0	**352**
09:00	1	102	21	**3**	22	0	0	0	0	0	0	0	0	149
10:00	1	100	16	1	18	2	**2**	**1**	0	0	0	0	0	141
11:00	1	96	21	1	9	2	1	1	0	0	0	0	0	132
12 PM	1	99	13	2	16	**2**	**1**	0	0	0	0	0	0	134
13:00	1	126	31	2	10	1	0	0	0	0	0	0	0	171
14:00	1	196	39	2	29	0	1	**1**	0	0	0	0	0	269
15:00	1	265	52	1	33	1	0	1	**1**	0	0	0	0	355
16:00	0	326	**72**	3	**37**	2	0	1	0	0	0	0	0	**441**
17:00	3	**327**	53	1	36	1	0	0	1	0	0	**1**	0	423
18:00	**4**	200	30	**5**	25	2	0	0	0	0	0	0	0	266
19:00	0	76	7	1	7	0	0	0	0	0	0	0	0	91
20:00	0	38	8	1	6	0	0	0	0	0	0	0	0	53
21:00	0	44	4	2	6	0	0	0	0	0	0	0	0	56
22:00	0	30	2	0	2	0	1	0	0	0	0	0	0	35
23:00	0	15	2	0	0	0	0	0	0	0	0	0	0	17
Day Total	20	2738	491	30	352	19	9	5	3	0	0	1	0	3668
Percent	0.5%	74.6%	13.4%	0.8%	9.6%	0.5%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	08:00	07:00	09:00	08:00	07:00	10:00	10:00	07:00					08:00
Vol.	3	281	42	3	28	3	2	1	1					352
PM Peak	18:00	17:00	16:00	18:00	16:00	12:00	12:00	14:00	15:00			17:00		16:00
Vol.	4	327	72	5	37	2	1	1	1			1		441
Grand Total	20	2738	491	30	352	19	9	5	3	0	0	1	0	3668
Percent	0.5%	74.6%	13.4%	0.8%	9.6%	0.5%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-032
Station ID: Wed 2/22/17
W. La Cadena Dr. Btwn Chase Rd. & I-215
SB Ramps 34.0051, -117.3497
Latitude: 0' 0.000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	19	2	0	1	0	0	0	0	0	0	0	0	22
01:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
02:00	1	16	2	0	1	1	2	0	0	0	0	0	0	23
03:00	0	21	3	0	5	0	0	0	0	0	0	0	0	29
04:00	0	35	10	0	12	1	0	0	0	0	0	0	0	58
05:00	**3**	45	21	1	23	1	2	0	0	0	0	0	0	96
06:00	1	120	29	1	29	0	1	0	0	0	0	0	0	181
07:00	1	351	**51**	2	29	**4**	0	0	**1**	0	0	0	0	439
08:00	0	**387**	50	1	33	2	0	0	1	0	0	0	0	**474**
09:00	3	160	33	**3**	**35**	3	1	**1**	0	0	0	0	0	239
10:00	1	153	26	1	25	2	**4**	1	0	0	0	0	0	213
11:00	1	166	30	2	17	3	1	1	0	0	0	0	0	221
12 PM	1	161	21	2	29	2	2	0	0	0	0	0	0	218
13:00	2	206	41	3	17	1	1	0	**1**	0	0	**1**	0	273
14:00	3	263	57	3	47	0	**3**	**1**	0	0	0	0	0	377
15:00	2	384	76	2	60	2	1	1	1	0	0	0	0	529
16:00	1	484	**94**	3	**65**	**9**	1	1	0	0	0	0	0	**658**
17:00	3	**519**	77	1	50	6	0	0	1	0	0	1	0	658
18:00	**6**	307	49	**5**	34	2	0	0	0	0	0	0	0	403
19:00	0	151	16	1	11	0	0	0	0	0	0	0	0	179
20:00	1	90	15	1	9	0	0	0	0	0	0	0	0	116
21:00	1	84	5	3	8	0	0	0	0	0	0	0	0	101
22:00	0	53	3	0	5	0	1	0	0	0	0	0	0	62
23:00	0	35	3	0	0	0	0	0	0	0	0	0	0	38
Day Total	31	4223	714	35	545	39	20	6	5	0	0	2	0	5620
Percent	0.6%	75.1%	12.7%	0.6%	9.7%	0.7%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	08:00	07:00	09:00	09:00	07:00	10:00	09:00	07:00					08:00
Vol.	3	387	51	3	35	4	4	1	1					474
PM Peak	18:00	17:00	16:00	18:00	16:00	16:00	14:00	14:00	13:00			13:00		16:00
Vol.	6	519	94	5	65	9	3	1	1			1		658
Grand Total	31	4223	714	35	545	39	20	6	5	0	0	2	0	5620
Percent	0.6%	75.1%	12.7%	0.6%	9.7%	0.7%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-33
Station ID: Tues 2/21/17
Center St.- Placentia Ln. Btwn Main St. & Orange St. 34.0193, -117.3600
Latitude: 0' 0.000 Undefined

Eastbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	2	0	1	1	0	0	0	0	0	0	0	0	4
02:00	0	3	0	**2**	0	0	0	0	0	0	1	0	0	6
03:00	1	4	4	0	0	1	0	0	2	**1**	0	0	0	13
04:00	0	11	3	0	1	1	0	0	5	0	0	0	0	21
05:00	0	13	3	1	7	**5**	0	1	**6**	0	0	0	0	36
06:00	1	40	**17**	0	12	5	0	0	4	0	1	0	0	80
07:00	0	**81**	9	0	5	3	0	2	1	0	1	0	0	**102**
08:00	0	77	5	1	8	1	0	0	0	0	0	0	0	92
09:00	0	57	4	0	5	1	0	1	0	0	0	0	0	68
10:00	3	59	10	1	**15**	4	0	0	4	0	0	0	0	96
11:00	**4**	55	14	1	13	3	0	**4**	3	0	**2**	0	0	99
12 PM	3	69	16	**3**	11	**5**	0	2	1	0	0	0	0	110
13:00	5	57	25	2	22	3	0	1	6	0	1	0	0	122
14:00	4	66	8	0	14	1	**1**	1	1	0	1	0	0	97
15:00	**7**	110	34	1	22	5	0	1	4	0	0	0	0	184
16:00	4	**185**	**45**	3	**29**	4	0	3	**7**	0	0	0	0	**280**
17:00	1	170	40	0	19	3	0	2	4	0	0	0	0	239
18:00	3	123	23	1	11	2	0	0	3	0	2	**1**	0	169
19:00	0	65	12	1	1	2	0	**4**	1	0	1	0	0	87
20:00	1	37	10	0	4	1	0	1	1	0	2	0	0	57
21:00	3	30	4	0	2	0	0	0	1	0	**3**	0	0	43
22:00	1	18	1	1	1	1	0	2	1	0	1	0	0	27
23:00	0	15	1	0	0	1	0	0	1	0	1	0	0	19
Day Total	41	1349	288	19	203	52	1	25	56	1	17	1	0	2053
Percent	2.0%	65.7%	14.0%	0.9%	9.9%	2.5%	0.0%	1.2%	2.7%	0.0%	0.8%	0.0%	0.0%	
AM Peak	11:00	07:00	06:00	02:00	10:00	05:00		11:00	05:00	03:00	11:00			07:00
Vol.	4	81	17	2	15	5		4	6	1	2			102
PM Peak	15:00	16:00	16:00	12:00	16:00	12:00	14:00	19:00	16:00		21:00	18:00		16:00
Vol.	7	185	45	3	29	5	1	4	7		3	1		280
Grand Total	41	1349	288	19	203	52	1	25	56	1	17	1	0	2053
Percent	2.0%	65.7%	14.0%	0.9%	9.9%	2.5%	0.0%	1.2%	2.7%	0.0%	0.8%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-33
Station ID: Tues 2/21/17
Center St.- Placentia Ln. Btwn Main St. & Orange St. 34.0193, -117.3600
Latitude: 0' 0.000 Undefined

Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	1	1	0	0	0	0	0	1	0	0	0	0	3
01:00	0	4	0	0	1	0	0	0	0	0	0	0	0	5
02:00	**5**	4	4	0	1	0	0	1	1	0	1	0	0	17
03:00	0	14	7	0	0	2	0	0	0	0	0	0	0	23
04:00	0	27	7	1	2	0	0	0	1	0	0	0	0	38
05:00	0	45	14	0	11	2	0	1	0	0	0	0	0	73
06:00	0	74	16	**2**	12	**5**	0	0	2	0	1	0	0	112
07:00	1	68	**23**	0	8	3	**2**	**3**	1	**2**	**2**	**1**	0	**114**
08:00	3	**77**	13	0	5	2	1	3	2	2	1	0	0	109
09:00	4	47	9	0	5	4	0	1	0	0	0	0	0	70
10:00	0	51	13	2	12	4	0	1	**3**	1	0	0	0	87
11:00	2	55	21	2	**18**	3	0	2	3	0	2	0	0	108
12 PM	1	57	15	**4**	16	**8**	0	1	1	0	0	0	0	103
13:00	**5**	**91**	**27**	2	15	5	0	2	2	0	0	0	0	**149**
14:00	2	70	21	0	10	3	0	0	**5**	**1**	0	0	0	112
15:00	1	70	26	4	13	5	0	1	5	0	**2**	0	0	127
16:00	1	87	13	0	15	2	**2**	**4**	3	1	0	0	0	128
17:00	1	73	24	1	6	1	2	1	4	0	0	0	0	113
18:00	1	63	11	1	**20**	2	0	0	0	0	0	0	0	98
19:00	0	37	8	1	4	2	0	3	1	0	0	0	0	56
20:00	0	33	11	0	3	2	0	2	2	0	0	0	0	53
21:00	2	33	9	0	0	1	0	1	0	0	1	0	0	47
22:00	0	34	7	0	3	1	0	0	2	0	1	0	0	48
23:00	0	21	5	0	1	0	0	0	1	0	1	0	0	29
Day Total	29	1136	305	20	181	57	7	27	40	7	12	1	0	1822
Percent	1.6%	62.3%	16.7%	1.1%	9.9%	3.1%	0.4%	1.5%	2.2%	0.4%	0.7%	0.1%	0.0%	
AM Peak	02:00	08:00	07:00	06:00	11:00	06:00	07:00	07:00	10:00	07:00	07:00	07:00		07:00
Vol.	5	77	23	2	18	5	2	3	3	2	2	1		114
PM Peak	13:00	13:00	13:00	12:00	18:00	12:00	16:00	16:00	14:00	14:00	15:00			13:00
Vol.	5	91	27	4	20	8	2	4	5	1	2			149
Grand Total	29	1136	305	20	181	57	7	27	40	7	12	1	0	1822
Percent	1.6%	62.3%	16.7%	1.1%	9.9%	3.1%	0.4%	1.5%	2.2%	0.4%	0.7%	0.1%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-33
Station ID: Tues 2/21/17
Center St.- Placentia Ln. Btwn Main St. & Orange St. 34.0193, -117.3600
Latitude: 0' 0.000 Undefined

Eastbound, Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	3	1	0	0	0	0	0	1	0	0	0	0	5
01:00	0	6	0	1	2	0	0	0	0	0	0	0	0	9
02:00	5	7	4	2	1	0	0	1	1	0	2	0	0	23
03:00	1	18	11	0	0	3	0	0	2	1	0	0	0	36
04:00	0	38	10	1	3	1	0	0	6	0	0	0	0	59
05:00	0	58	17	1	18	7	0	2	6	0	0	0	0	109
06:00	1	114	33	2	24	**10**	0	0	6	0	2	0	0	192
07:00	1	149	32	0	13	6	**2**	5	2	**2**	3	**1**	0	**216**
08:00	3	**154**	18	1	13	3	1	3	2	2	1	0	0	201
09:00	4	104	13	0	10	5	0	2	0	0	0	0	0	138
10:00	3	110	23	**3**	27	8	0	1	**7**	1	0	0	0	183
11:00	**6**	110	**35**	3	**31**	6	0	**6**	6	0	**4**	0	0	207
12 PM	4	126	31	**7**	27	**13**	0	3	2	0	0	0	0	213
13:00	**10**	148	52	4	37	8	0	3	8	0	1	0	0	271
14:00	6	136	29	0	24	4	1	1	6	**1**	1	0	0	209
15:00	8	180	60	5	35	10	0	2	9	0	2	0	0	311
16:00	5	**272**	58	3	**44**	6	**2**	**7**	**10**	1	0	0	0	**408**
17:00	2	243	**64**	1	25	4	2	3	8	0	0	0	0	352
18:00	4	186	34	2	31	4	0	0	3	0	2	**1**	0	267
19:00	0	102	20	2	5	4	0	7	2	0	1	0	0	143
20:00	1	70	21	0	7	3	0	3	3	0	2	0	0	110
21:00	5	63	13	0	2	1	0	1	1	0	**4**	0	0	90
22:00	1	52	8	1	4	2	0	2	3	0	2	0	0	75
23:00	0	36	6	0	1	1	0	0	2	0	2	0	0	48
Day Total	70	2485	593	39	384	109	8	52	96	8	29	2	0	3875
Percent	1.8%	64.1%	15.3%	1.0%	9.9%	2.8%	0.2%	1.3%	2.5%	0.2%	0.7%	0.1%	0.0%	
AM Peak	11:00	08:00	11:00	10:00	11:00	06:00	07:00	11:00	10:00	07:00	11:00	07:00		07:00
Vol.	6	154	35	3	31	10	2	6	7	2	4	1		216
PM Peak	13:00	16:00	17:00	12:00	16:00	12:00	16:00	16:00	16:00	14:00	21:00	18:00		16:00
Vol.	10	272	64	7	44	13	2	7	10	1	4	1		408
Grand Total	70	2485	593	39	384	109	8	52	96	8	29	2	0	3875
Percent	1.8%	64.1%	15.3%	1.0%	9.9%	2.8%	0.2%	1.3%	2.5%	0.2%	0.7%	0.1%	0.0%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-34
Station ID: Wed 2/22/17
Center St. Btwn Orange St. & Stephens Av
34.0180, -117.3476
Latitude: 0' 0.000 Undefined

Eastbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	1	13	5	0	2	0	0	0	2	0	2	0	0	25
01:00	0	11	4	0	1	0	0	0	2	0	**3**	0	0	21
02:00	1	6	3	0	0	2	0	0	3	0	0	0	0	15
03:00	0	10	2	1	4	2	0	0	9	0	0	0	0	28
04:00	2	16	4	2	11	3	0	0	8	**4**	3	0	0	53
05:00	1	23	7	3	17	**8**	0	0	**10**	0	0	0	0	69
06:00	2	53	15	3	13	5	0	1	10	0	3	**1**	0	106
07:00	**3**	89	18	5	19	8	0	0	5	0	0	0	0	147
08:00	3	84	32	**6**	14	4	0	1	6	0	3	1	0	154
09:00	3	**104**	33	4	**28**	5	0	3	8	0	0	0	0	**188**
10:00	2	77	22	3	23	5	**1**	2	9	0	0	0	0	144
11:00	2	83	**49**	3	17	3	0	**4**	8	0	0	0	**1**	170
12 PM	3	106	31	3	17	7	0	**3**	**6**	0	3	0	0	179
13:00	1	96	42	**4**	17	7	0	1	6	0	1	**3**	0	178
14:00	3	107	43	2	**35**	**10**	0	0	4	0	3	1	0	208
15:00	**4**	188	58	4	26	8	0	2	3	0	1	0	0	294
16:00	0	234	63	3	30	5	0	0	3	0	0	0	0	338
17:00	4	**287**	**71**	3	22	2	0	1	4	0	4	3	0	**401**
18:00	1	159	43	1	20	1	0	0	0	**1**	1	0	0	227
19:00	0	102	19	2	3	2	0	2	4	0	2	0	0	136
20:00	0	76	15	3	6	1	0	1	0	0	1	0	0	103
21:00	1	61	13	2	4	0	0	0	2	0	2	0	0	85
22:00	0	50	6	0	4	1	0	0	2	0	**5**	0	0	68
23:00	0	31	5	0	0	1	0	1	2	0	2	0	0	42
Day Total	37	2066	603	57	333	90	1	22	116	5	39	9	1	3379
Percent	1.1%	61.1%	17.8%	1.7%	9.9%	2.7%	0.0%	0.7%	3.4%	0.1%	1.2%	0.3%	0.0%	
AM Peak	07:00	09:00	11:00	08:00	09:00	05:00	10:00	11:00	05:00	04:00	01:00	06:00	11:00	09:00
Vol.	3	104	49	6	28	8	1	4	10	4	3	1	1	188
PM Peak	15:00	17:00	17:00	13:00	14:00	14:00		12:00	12:00	18:00	22:00	13:00		17:00
Vol.	4	287	71	4	35	10		3	6	1	5	3		401
Grand Total	37	2066	603	57	333	90	1	22	116	5	39	9	1	3379
Percent	1.1%	61.1%	17.8%	1.7%	9.9%	2.7%	0.0%	0.7%	3.4%	0.1%	1.2%	0.3%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-34
Station ID: Wed 2/22/17
Center St. Btwn Orange St. & Stephens Av
34.0180, -117.3476
Latitude: 0' 0.000 Undefined

Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	1	16	2	0	2	0	0	0	1	**1**	**3**	0	0	26
01:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
02:00	1	10	4	0	2	0	0	0	1	0	3	0	0	21
03:00	0	27	10	0	4	0	0	0	1	1	1	0	0	44
04:00	0	41	14	2	5	0	0	0	0	0	1	0	0	63
05:00	0	65	13	0	18	1	0	0	1	0	0	0	0	98
06:00	0	69	26	0	24	4	0	0	5	0	0	0	0	128
07:00	1	**132**	**37**	2	29	3	1	**2**	6	1	2	0	0	**216**
08:00	0	98	29	3	**40**	5	1	1	5	0	2	**1**	0	185
09:00	**2**	71	21	1	24	6	**2**	1	**9**	0	1	1	0	139
10:00	1	85	29	4	28	5	1	2	8	0	0	0	0	163
11:00	1	84	29	**6**	22	**12**	1	2	4	0	0	0	0	161
12 PM	**3**	69	28	3	23	4	0	2	7	1	0	0	**1**	141
13:00	2	113	34	2	**29**	**7**	**1**	1	5	1	0	**1**	0	**196**
14:00	1	97	**35**	**4**	22	5	1	1	**10**	1	1	0	0	178
15:00	1	111	33	4	20	2	1	2	7	**2**	0	0	1	184
16:00	2	**119**	27	4	18	5	0	**4**	2	0	0	0	0	181
17:00	2	111	14	2	17	2	0	3	6	1	0	0	0	158
18:00	0	94	20	1	19	1	0	0	3	0	0	0	0	138
19:00	0	56	11	1	11	2	0	1	1	0	1	0	0	84
20:00	2	60	12	0	6	2	0	3	4	0	**2**	0	0	91
21:00	1	39	12	1	9	1	0	1	2	0	2	0	0	68
22:00	0	24	3	1	0	0	0	2	5	0	1	0	0	36
23:00	1	18	4	1	1	3	0	0	1	0	2	0	0	31
Day Total	22	1616	448	42	373	70	9	28	94	9	22	3	2	2738
Percent	0.8%	59.0%	16.4%	1.5%	13.6%	2.6%	0.3%	1.0%	3.4%	0.3%	0.8%	0.1%	0.1%	
AM Peak	09:00	07:00	07:00	11:00	08:00	11:00	09:00	07:00	09:00	00:00	00:00	08:00		07:00
Vol.	2	132	37	6	40	12	2	2	9	1	3	1		216
PM Peak	12:00	16:00	14:00	14:00	13:00	13:00	13:00	16:00	14:00	15:00	20:00	13:00	12:00	13:00
Vol.	3	119	35	4	29	7	1	4	10	2	2	1	1	196
Grand Total	22	1616	448	42	373	70	9	28	94	9	22	3	2	2738
Percent	0.8%	59.0%	16.4%	1.5%	13.6%	2.6%	0.3%	1.0%	3.4%	0.3%	0.8%	0.1%	0.1%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-34
Station ID: Wed 2/22/17
Center St. Btwn Orange St. & Stephens Av
34.0180, -117.3476
Latitude: 0' 0.000 Undefined

Eastbound, Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	2	29	7	0	4	0	0	0	3	1	**5**	0	0	51
01:00	0	18	5	0	1	0	0	0	2	0	3	0	0	29
02:00	2	16	7	0	2	2	0	0	4	0	3	0	0	36
03:00	0	37	12	1	8	2	0	0	10	1	1	0	0	72
04:00	2	57	18	4	16	3	0	0	8	**4**	4	0	0	116
05:00	1	88	20	3	35	9	0	0	11	0	0	0	0	167
06:00	2	122	41	3	37	9	0	1	15	0	3	1	0	234
07:00	4	**221**	55	7	48	11	1	2	11	1	2	0	0	**363**
08:00	3	182	61	**9**	**54**	9	1	2	11	0	5	**2**	0	339
09:00	**5**	175	54	5	52	11	**2**	4	**17**	0	1	1	0	327
10:00	3	162	51	7	51	10	2	4	17	0	0	0	0	307
11:00	3	167	**78**	9	39	**15**	1	**6**	12	0	0	0	**1**	331
12 PM	**6**	175	59	6	40	11	0	**5**	13	1	3	0	**1**	320
13:00	3	209	76	6	46	14	**1**	2	11	1	1	**4**	0	374
14:00	4	204	78	6	**57**	**15**	1	1	**14**	1	4	1	0	386
15:00	5	299	**91**	**8**	46	10	1	4	10	**2**	1	0	1	478
16:00	2	353	90	7	48	10	0	4	5	0	0	0	0	519
17:00	6	**398**	85	5	39	4	0	4	10	1	4	3	0	**559**
18:00	1	253	63	2	39	2	0	0	3	1	1	0	0	365
19:00	0	158	30	3	14	4	0	3	5	0	3	0	0	220
20:00	2	136	27	3	12	3	0	4	4	0	3	0	0	194
21:00	2	100	25	3	13	1	0	1	4	0	4	0	0	153
22:00	0	74	9	1	4	1	0	2	7	0	**6**	0	0	104
23:00	1	49	9	1	1	4	0	1	3	0	4	0	0	73
Day Total	59	3682	1051	99	706	160	10	50	210	14	61	12	3	6117
Percent	1.0%	60.2%	17.2%	1.6%	11.5%	2.6%	0.2%	0.8%	3.4%	0.2%	1.0%	0.2%	0.0%	
AM Peak	09:00	07:00	11:00	08:00	08:00	11:00	09:00	11:00	09:00	04:00	00:00	08:00	11:00	07:00
Vol.	5	221	78	9	54	15	2	6	17	4	5	2	1	363
PM Peak	12:00	17:00	15:00	15:00	14:00	14:00	13:00	12:00	14:00	15:00	22:00	13:00	12:00	17:00
Vol.	6	398	91	8	57	15	1	5	14	2	6	4	1	559
Grand Total	59	3682	1051	99	706	160	10	50	210	14	61	12	3	6117
Percent	1.0%	60.2%	17.2%	1.6%	11.5%	2.6%	0.2%	0.8%	3.4%	0.2%	1.0%	0.2%	0.0%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-35
Station ID: Wed 2/22/17
Center St. Btwn Stephens Ave. & W. La Cadena Ave. 34.0159, -117.3435
Latitude: 0' 0.000 Undefined

Eastbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	14	4	0	1	0	0	0	0	0	0	0	0	19
01:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
02:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
03:00	1	12	2	1	2	2	0	0	1	0	0	0	0	21
04:00	0	40	5	2	4	1	1	0	**3**	1	0	0	0	57
05:00	2	37	11	0	12	0	2	0	3	0	0	0	0	67
06:00	4	86	15	0	10	6	0	0	1	0	0	**1**	1	124
07:00	4	**176**	24	**5**	**20**	6	2	0	0	**2**	0	0	**2**	**241**
08:00	**5**	87	22	1	12	2	0	0	3	2	0	1	0	135
09:00	3	117	25	1	14	**8**	**3**	1	1	0	0	1	0	174
10:00	4	98	21	0	14	7	3	1	2	0	0	0	0	150
11:00	1	94	**35**	0	12	6	1	**2**	1	1	0	0	2	155
12 PM	**7**	125	23	0	14	7	3	2	0	1	0	0	0	182
13:00	4	111	28	2	6	5	1	0	1	0	0	**3**	0	161
14:00	6	116	27	1	**21**	**9**	**5**	0	2	0	0	2	0	189
15:00	3	170	35	**3**	16	5	5	1	2	0	0	1	0	241
16:00	3	234	41	2	10	2	1	1	2	**2**	**3**	0	0	301
17:00	2	**277**	**57**	1	13	1	0	2	**3**	2	1	0	0	**359**
18:00	0	156	37	0	13	0	0	**3**	0	0	0	0	0	209
19:00	0	102	19	0	1	1	0	1	1	0	0	0	0	125
20:00	1	75	17	1	2	0	0	0	0	0	0	0	0	96
21:00	0	69	13	1	1	0	0	0	0	0	0	0	0	84
22:00	1	54	6	2	0	1	0	0	2	0	0	0	0	66
23:00	0	35	3	0	0	0	0	0	1	0	1	0	0	40
Day Total	51	2302	473	23	198	69	27	14	29	11	5	9	5	3216
Percent	1.6%	71.6%	14.7%	0.7%	6.2%	2.1%	0.8%	0.4%	0.9%	0.3%	0.2%	0.3%	0.2%	
AM Peak	08:00	07:00	11:00	07:00	07:00	09:00	09:00	11:00	04:00	07:00		06:00	07:00	07:00
Vol.	5	176	35	5	20	8	3	2	3	2		1	2	241
PM Peak	12:00	17:00	17:00	15:00	14:00	14:00	14:00	18:00	17:00	16:00	16:00	13:00		17:00
Vol.	7	277	57	3	21	9	5	3	3	2	3	3		359
Grand Total	51	2302	473	23	198	69	27	14	29	11	5	9	5	3216
Percent	1.6%	71.6%	14.7%	0.7%	6.2%	2.1%	0.8%	0.4%	0.9%	0.3%	0.2%	0.3%	0.2%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-35
Station ID: Wed 2/22/17
Center St. Btwn Stephens Ave. & W. La Cadena Ave. 34.0159, -117.3435
Latitude: 0' 0.000 Undefined

Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	1	29	3	1	1	1	0	0	3	0	1	0	0	40
01:00	1	22	4	1	1	0	0	0	1	0	0	0	0	30
02:00	1	31	2	1	4	0	0	0	0	0	**3**	0	0	42
03:00	0	35	7	0	6	0	0	0	2	1	1	0	0	52
04:00	1	83	21	0	18	3	0	0	7	0	3	0	0	136
05:00	1	130	34	2	33	6	0	0	6	0	2	0	0	214
06:00	0	130	34	0	45	6	0	3	5	0	2	0	0	225
07:00	5	**291**	40	**7**	**65**	3	0	1	12	**3**	2	**2**	**1**	**432**
08:00	4	249	35	3	58	3	1	1	**16**	3	1	2	0	376
09:00	**10**	199	41	3	46	6	1	**6**	7	0	0	0	0	319
10:00	4	163	**53**	3	48	3	**2**	2	12	0	1	1	0	292
11:00	7	174	40	4	47	**11**	1	4	6	0	0	0	0	294
12 PM	7	165	36	2	**55**	**11**	**1**	**4**	**10**	1	2	0	0	294
13:00	4	213	51	2	54	8	0	4	10	0	1	1	**3**	351
14:00	5	201	**58**	**6**	55	5	1	2	6	0	2	**2**	1	344
15:00	7	199	47	5	34	7	1	3	5	2	0	1	0	311
16:00	6	**241**	40	5	44	7	0	2	6	**3**	2	0	0	**356**
17:00	**10**	213	45	1	32	4	0	3	2	1	1	0	0	312
18:00	1	199	40	3	31	1	0	1	2	0	0	0	0	278
19:00	4	143	16	1	27	4	0	1	1	0	1	0	0	198
20:00	2	132	22	0	17	3	0	3	4	0	2	0	0	185
21:00	0	122	27	0	15	2	0	1	4	0	0	1	1	173
22:00	1	76	14	0	9	1	0	0	4	0	1	0	0	106
23:00	1	55	5	1	6	3	0	0	0	0	**3**	0	0	74
Day Total	83	3495	715	51	751	98	8	41	131	14	31	10	6	5434
Percent	1.5%	64.3%	13.2%	0.9%	13.8%	1.8%	0.1%	0.8%	2.4%	0.3%	0.6%	0.2%	0.1%	
AM Peak	09:00	07:00	10:00	07:00	07:00	11:00	10:00	09:00	08:00	07:00	02:00	07:00	07:00	07:00
Vol.	10	291	53	7	65	11	2	6	16	3	3	2	1	432
PM Peak	17:00	16:00	14:00	14:00	12:00	12:00	12:00	12:00	12:00	16:00	23:00	14:00	13:00	16:00
Vol.	10	241	58	6	55	11	1	4	10	3	3	2	3	356
Grand Total	83	3495	715	51	751	98	8	41	131	14	31	10	6	5434
Percent	1.5%	64.3%	13.2%	0.9%	13.8%	1.8%	0.1%	0.8%	2.4%	0.3%	0.6%	0.2%	0.1%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-35
Station ID: Wed 2/22/17
Center St. Btwn Stephens Ave. & W. La Cadena Ave. 34.0159, -117.3435
Latitude: 0' 0.000 Undefined

Eastbound, Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	1	43	7	1	2	1	0	0	3	0	1	0	0	59
01:00	1	31	5	1	1	0	0	0	1	0	0	0	0	40
02:00	1	39	4	1	4	0	0	0	0	0	**3**	0	0	52
03:00	1	47	9	1	8	2	0	0	3	1	1	0	0	73
04:00	1	123	26	2	22	4	1	0	10	1	3	0	0	193
05:00	3	167	45	2	45	6	2	0	9	0	2	0	0	281
06:00	4	216	49	0	55	12	0	3	6	0	2	1	1	349
07:00	9	**467**	64	**12**	**85**	9	2	1	12	**5**	2	2	**3**	**673**
08:00	9	336	57	4	70	5	1	1	**19**	5	1	**3**	0	511
09:00	**13**	316	66	4	60	14	4	**7**	8	0	0	1	0	493
10:00	8	261	74	3	62	10	**5**	3	14	0	1	1	0	442
11:00	8	268	**75**	4	59	**17**	2	6	7	1	0	0	2	449
12 PM	**14**	290	59	2	69	**18**	4	**6**	10	2	2	0	0	476
13:00	8	324	79	4	60	13	1	4	**11**	0	1	**4**	**3**	512
14:00	11	317	85	7	**76**	14	**6**	2	8	0	2	4	1	533
15:00	10	369	82	**8**	50	12	6	4	7	2	0	2	0	552
16:00	9	475	81	7	54	9	1	3	8	**5**	**5**	0	0	657
17:00	12	**490**	**102**	2	45	5	0	5	5	3	2	0	0	**671**
18:00	1	355	77	3	44	1	0	4	2	0	0	0	0	487
19:00	4	245	35	1	28	5	0	2	2	0	1	0	0	323
20:00	3	207	39	1	19	3	0	3	4	0	2	0	0	281
21:00	0	191	40	1	16	2	0	1	4	0	0	1	1	257
22:00	2	130	20	2	9	2	0	0	6	0	1	0	0	172
23:00	1	90	8	1	6	3	0	0	1	0	4	0	0	114
Day Total	134	5797	1188	74	949	167	35	55	160	25	36	19	11	8650
Percent	1.5%	67.0%	13.7%	0.9%	11.0%	1.9%	0.4%	0.6%	1.8%	0.3%	0.4%	0.2%	0.1%	
AM Peak	09:00	07:00	11:00	07:00	07:00	11:00	10:00	09:00	08:00	07:00	02:00	08:00	07:00	07:00
Vol.	13	467	75	12	85	17	5	7	19	5	3	3	3	673
PM Peak	12:00	17:00	17:00	15:00	14:00	12:00	14:00	12:00	13:00	16:00	16:00	13:00	13:00	17:00
Vol.	14	490	102	8	76	18	6	6	11	5	5	4	3	671
Grand Total	134	5797	1188	74	949	167	35	55	160	25	36	19	11	8650
Percent	1.5%	67.0%	13.7%	0.9%	11.0%	1.9%	0.4%	0.6%	1.8%	0.3%	0.4%	0.2%	0.1%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-036
Station ID: Thurs 3/2/17
Garner Rd. Btwn Orange St. & Main St.
34.0136, -117.3531
Latitude: 0' 0.000 Undefined

Eastbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	0	1	0	0	0	0	0	0	0	0	0	0	0	1
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	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	0	**1**	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
08:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
09:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
10:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
11:00	0	**5**	0	0	0	0	0	0	0	0	0	0	0	**5**
12 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	5
13:00	0	5	2	0	2	0	0	0	0	0	0	0	0	9
14:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
15:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
16:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
17:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
18:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
19:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
20:00	0	20	**3**	0	0	0	0	0	0	0	0	0	0	23
21:00	0	**27**	1	0	**3**	0	0	0	0	0	0	0	0	**31**
22:00	0	10	1	0	2	0	0	0	0	0	0	0	0	13
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Day Total	0	110	10	0	7	0	0	0	0	0	0	0	0	127
Percent	0.0%	86.6%	7.9%	0.0%	5.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	05:00											11:00
Vol.		5	1											5
PM Peak		21:00	20:00		21:00									21:00
Vol.		27	3		3									31
Grand Total	0	110	10	0	7	0	0	0	0	0	0	0	0	127
Percent	0.0%	86.6%	7.9%	0.0%	5.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-036
Station ID: Thurs 3/2/17
Garner Rd. Btwn Orange St. & Main St.
34.0136, -117.3531
Latitude: 0' 0.000 Undefined

Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	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	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
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	2	**1**	0	0	0	0	0	0	0	0	0	0	3
09:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
10:00	0	4	0	0	**1**	0	0	0	0	0	0	0	0	5
11:00	0	**6**	0	0	0	0	0	0	0	0	0	0	0	**6**
12 PM	0	6	0	0	1	0	0	0	0	0	0	0	0	7
13:00	0	4	**2**	0	0	**1**	0	0	0	0	0	0	0	7
14:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
15:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
16:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
17:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
18:00	0	**36**	2	0	**5**	0	0	0	0	0	0	0	0	**43**
19:00	0	18	0	0	0	0	0	0	0	0	0	0	0	18
20:00	0	12	2	0	0	0	0	0	0	0	0	0	0	14
21:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
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
Day Total	0	108	9	0	7	1	0	0	0	0	0	0	0	125
Percent	0.0%	86.4%	7.2%	0.0%	5.6%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	08:00		10:00									11:00
Vol.		6	1		1									6
PM Peak		18:00	13:00		18:00	13:00								18:00
Vol.		36	2		5	1								43
Grand Total	0	108	9	0	7	1	0	0	0	0	0	0	0	125
Percent	0.0%	86.4%	7.2%	0.0%	5.6%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-036
Station ID: Thurs 3/2/17
Garner Rd. Btwn Orange St. & Main St.
34.0136, -117.3531
Latitude: 0' 0.000 Undefined

Eastbound, Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
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	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
08:00	0	3	**2**	0	0	0	0	0	0	0	0	0	0	5
09:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
10:00	0	6	0	0	**1**	0	0	0	0	0	0	0	0	7
11:00	0	**11**	0	0	0	0	0	0	0	0	0	0	0	**11**
12 PM	0	11	0	0	1	0	0	0	0	0	0	0	0	12
13:00	0	9	4	0	2	**1**	0	0	0	0	0	0	0	16
14:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
15:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
16:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
17:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
18:00	0	**43**	2	0	**5**	0	0	0	0	0	0	0	0	**50**
19:00	0	22	0	0	0	0	0	0	0	0	0	0	0	22
20:00	0	32	**5**	0	0	0	0	0	0	0	0	0	0	37
21:00	0	30	1	0	3	0	0	0	0	0	0	0	0	34
22:00	0	10	1	0	2	0	0	0	0	0	0	0	0	13
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Day Total	0	218	19	0	14	1	0	0	0	0	0	0	0	252
Percent	0.0%	86.5%	7.5%	0.0%	5.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	08:00		10:00									11:00
Vol.		11	2		1									11
PM Peak		18:00	20:00		18:00	13:00								18:00
Vol.		43	5		5	1								50
Grand Total	0	218	19	0	14	1	0	0	0	0	0	0	0	252
Percent	0.0%	86.5%	7.5%	0.0%	5.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-37
Station ID: Tues 2/21/83
Columbia Ave. Btwn Main St. & Orange St.
34.0057, -117.3617
Latitude: 0' 0.000 Undefined

Eastbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	0	35	4	1	1	3	0	2	4	0	4	**3**	1	58
01:00	0	19	1	1	2	4	0	0	7	0	8	0	0	42
02:00	1	19	1	0	2	4	0	0	4	0	3	1	0	35
03:00	0	31	5	0	4	8	0	0	8	0	**9**	2	1	68
04:00	0	55	13	1	8	1	0	2	5	0	5	3	0	93
05:00	0	91	25	1	15	2	0	1	6	0	2	1	1	145
06:00	5	153	37	1	30	4	1	1	8	0	4	1	0	245
07:00	**6**	**247**	38	**3**	35	24	0	**6**	9	0	3	1	1	**373**
08:00	4	229	**47**	2	**43**	**30**	0	1	7	**1**	5	1	**3**	373
09:00	1	142	37	3	27	11	**2**	1	15	0	2	0	1	242
10:00	4	123	29	1	28	11	0	1	19	0	4	0	0	220
11:00	5	121	37	3	36	8	2	5	**20**	0	6	1	1	245
12 PM	3	316	34	3	34	13	2	4	**20**	0	**11**	0	1	441
13:00	0	330	37	2	27	6	1	1	13	**1**	2	0	1	421
14:00	5	354	**55**	**6**	**37**	5	0	7	20	0	6	1	**4**	500
15:00	7	405	32	5	35	13	**3**	**11**	13	0	2	1	0	527
16:00	2	537	43	4	31	**15**	1	7	11	0	2	0	0	653
17:00	**9**	**599**	40	4	20	13	0	7	10	0	3	0	4	**709**
18:00	2	300	23	3	23	3	0	3	8	0	2	**2**	0	369
19:00	1	134	20	0	9	3	0	3	8	0	2	0	0	180
20:00	0	128	21	2	12	1	0	3	6	1	7	0	0	181
21:00	0	97	15	3	9	5	0	3	11	0	6	2	0	151
22:00	2	79	9	0	5	3	0	0	7	0	5	1	0	111
23:00	0	54	10	0	3	2	0	2	10	0	7	2	0	90
Day Total	57	4598	613	49	476	192	12	71	249	3	110	23	19	6472
Percent	0.9%	71.0%	9.5%	0.8%	7.4%	3.0%	0.2%	1.1%	3.8%	0.0%	1.7%	0.4%	0.3%	
AM Peak	07:00	07:00	08:00	07:00	08:00	08:00	09:00	07:00	11:00	08:00	03:00	00:00	08:00	07:00
Vol.	6	247	47	3	43	30	2	6	20	1	9	3	3	373
PM Peak	17:00	17:00	14:00	14:00	14:00	16:00	15:00	15:00	12:00	13:00	12:00	18:00	14:00	17:00
Vol.	9	599	55	6	37	15	3	11	20	1	11	2	4	709
Grand Total	57	4598	613	49	476	192	12	71	249	3	110	23	19	6472
Percent	0.9%	71.0%	9.5%	0.8%	7.4%	3.0%	0.2%	1.1%	3.8%	0.0%	1.7%	0.4%	0.3%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-37
Station ID: Tues 2/21/83
Columbia Ave. Btwn Main St. & Orange St.
34.0057, -117.3617
Latitude: 0' 0.000 Undefined

Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	1	13	4	0	1	3	0	0	8	0	3	2	0	35
01:00	5	7	2	0	4	2	0	1	0	0	4	**3**	0	28
02:00	1	7	2	0	1	1	0	0	6	0	**5**	1	0	24
03:00	0	11	1	0	4	2	0	2	8	0	0	0	0	28
04:00	5	19	5	0	7	2	0	0	6	0	5	2	0	51
05:00	2	42	13	0	7	3	0	2	7	0	4	2	**1**	83
06:00	3	76	8	1	21	3	0	4	5	0	4	0	0	125
07:00	11	**204**	**27**	2	**29**	**19**	0	6	3	0	2	1	0	**304**
08:00	7	201	20	**3**	24	16	**1**	7	7	0	1	0	0	287
09:00	1	104	19	2	29	5	0	3	**12**	0	3	0	0	178
10:00	2	63	19	2	27	4	0	**8**	8	0	2	0	0	135
11:00	**16**	57	19	2	22	3	1	6	8	0	4	0	1	139
12 PM	5	88	23	1	30	4	0	3	**11**	0	1	1	0	167
13:00	2	91	18	2	23	3	1	3	6	1	**5**	0	0	155
14:00	4	112	24	**3**	22	2	0	**4**	7	0	1	0	0	179
15:00	**12**	144	39	3	**48**	1	2	0	2	0	1	0	0	252
16:00	9	221	**45**	1	45	**12**	2	2	3	**2**	4	**5**	0	**351**
17:00	12	**241**	34	0	23	9	**3**	4	2	2	3	2	**1**	336
18:00	8	192	42	0	35	0	1	1	1	1	3	0	0	284
19:00	0	75	20	0	10	2	0	2	5	0	3	1	0	118
20:00	6	50	9	1	9	2	0	0	4	0	2	0	0	83
21:00	9	32	5	2	7	1	0	0	3	0	1	1	0	61
22:00	1	29	3	0	2	0	0	3	3	0	0	0	0	41
23:00	1	25	1	0	3	2	0	0	2	0	4	1	0	39
Day Total	123	2104	402	25	433	101	11	61	127	6	65	22	3	3483
Percent	3.5%	60.4%	11.5%	0.7%	12.4%	2.9%	0.3%	1.8%	3.6%	0.2%	1.9%	0.6%	0.1%	
AM Peak	11:00	07:00	07:00	08:00	07:00	07:00	08:00	10:00	09:00		02:00	01:00	05:00	07:00
Vol.	16	204	27	3	29	19	1	8	12		5	3	1	304
PM Peak	15:00	17:00	16:00	14:00	15:00	16:00	17:00	14:00	12:00	16:00	13:00	16:00	17:00	16:00
Vol.	12	241	45	3	48	12	3	4	11	2	5	5	1	351
Grand Total	123	2104	402	25	433	101	11	61	127	6	65	22	3	3483
Percent	3.5%	60.4%	11.5%	0.7%	12.4%	2.9%	0.3%	1.8%	3.6%	0.2%	1.9%	0.6%	0.1%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-37
Station ID: Tues 2/21/83
Columbia Ave. Btwn Main St. & Orange St.
34.0057, -117.3617
Latitude: 0' 0.000 Undefined

Eastbound, Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/21/17	1	48	8	1	2	6	0	2	12	0	7	**5**	1	93
01:00	5	26	3	1	6	6	0	1	7	0	**12**	3	0	70
02:00	2	26	3	0	3	5	0	0	10	0	8	2	0	59
03:00	0	42	6	0	8	10	0	2	16	0	9	2	1	96
04:00	5	74	18	1	15	3	0	2	11	0	10	5	0	144
05:00	2	133	38	1	22	5	0	3	13	0	6	3	2	228
06:00	8	229	45	2	51	7	1	5	13	0	8	1	0	370
07:00	17	**451**	65	**5**	64	43	0	**12**	12	0	5	2	1	**677**
08:00	11	430	**67**	5	**67**	**46**	1	8	14	**1**	6	1	**3**	660
09:00	2	246	56	5	56	16	2	4	27	0	5	0	1	420
10:00	6	186	48	3	55	15	0	9	27	0	6	0	0	355
11:00	**21**	178	56	5	58	11	**3**	11	**28**	0	10	1	2	384
12 PM	8	404	57	4	64	17	2	7	**31**	0	**12**	1	1	608
13:00	2	421	55	4	50	9	2	4	19	**2**	7	0	1	576
14:00	9	466	79	**9**	59	7	0	**11**	27	0	7	1	4	679
15:00	19	549	71	8	**83**	14	**5**	11	15	0	3	1	0	779
16:00	11	758	**88**	5	76	**27**	3	9	14	2	6	**5**	0	1004
17:00	**21**	**840**	74	4	43	22	3	11	12	2	6	2	**5**	**1045**
18:00	10	492	65	3	58	3	1	4	9	1	5	2	0	653
19:00	1	209	40	0	19	5	0	5	13	0	5	1	0	298
20:00	6	178	30	3	21	3	0	3	10	1	9	0	0	264
21:00	9	129	20	5	16	6	0	3	14	0	7	3	0	212
22:00	3	108	12	0	7	3	0	3	10	0	5	1	0	152
23:00	1	79	11	0	6	4	0	2	12	0	11	3	0	129
Day Total	180	6702	1015	74	909	293	23	132	376	9	175	45	22	9955
Percent	1.8%	67.3%	10.2%	0.7%	9.1%	2.9%	0.2%	1.3%	3.8%	0.1%	1.8%	0.5%	0.2%	
AM Peak	11:00	07:00	08:00	07:00	08:00	08:00	11:00	07:00	11:00	08:00	01:00	00:00	08:00	07:00
Vol.	21	451	67	5	67	46	3	12	28	1	12	5	3	677
PM Peak	17:00	17:00	16:00	14:00	15:00	16:00	15:00	14:00	12:00	13:00	12:00	16:00	17:00	17:00
Vol.	21	840	88	9	83	27	5	11	31	2	12	5	5	1045
Grand Total	180	6702	1015	74	909	293	23	132	376	9	175	45	22	9955
Percent	1.8%	67.3%	10.2%	0.7%	9.1%	2.9%	0.2%	1.3%	3.8%	0.1%	1.8%	0.5%	0.2%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-38
Station ID: Wed 2/22/17
Columbia Ave. Btwn Orange St. & Primer St. 34.0026, -117.3550
Latitude: 0' 0.000 Undefined

Eastbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	2	45	3	0	1	2	0	1	5	0	4	2	0	65
01:00	2	27	3	0	1	11	0	0	5	1	7	2	0	59
02:00	0	15	1	0	1	8	0	0	7	0	6	0	2	40
03:00	3	35	6	1	1	4	0	1	15	0	8	0	1	75
04:00	2	82	12	1	4	1	1	1	18	0	**10**	0	0	132
05:00	7	125	18	2	12	3	0	7	9	0	6	2	1	192
06:00	11	178	41	4	13	8	1	2	12	0	0	2	4	276
07:00	**17**	**350**	56	2	3	**29**	0	6	4	**3**	5	1	4	**480**
08:00	16	304	61	3	6	17	1	4	13	0	7	2	**6**	440
09:00	8	213	**63**	**6**	10	4	1	5	6	0	10	**4**	2	332
10:00	4	194	48	1	20	10	**2**	**9**	**22**	2	4	2	2	320
11:00	5	166	31	4	**22**	6	1	5	11	0	4	2	1	258
12 PM	10	205	50	2	17	11	0	4	12	1	7	**4**	3	326
13:00	10	225	42	3	20	8	2	6	9	1	3	2	4	335
14:00	28	301	47	4	28	13	2	5	**13**	0	4	3	4	452
15:00	22	334	69	**7**	**29**	13	**5**	5	11	0	**8**	1	**6**	510
16:00	**34**	509	**86**	3	27	**18**	5	4	6	**2**	4	2	3	**703**
17:00	27	**540**	66	6	20	11	2	5	6	0	3	3	2	691
18:00	22	437	58	3	18	14	2	**8**	8	1	8	1	4	584
19:00	8	201	23	0	4	8	1	3	6	0	5	1	0	260
20:00	9	185	26	1	4	6	0	3	2	1	3	1	1	242
21:00	7	114	12	0	3	3	1	3	6	0	1	1	1	152
22:00	4	101	16	0	5	3	1	1	13	0	1	0	1	146
23:00	1	58	10	0	2	3	0	0	5	0	5	0	0	84
Day Total	259	4944	848	53	271	214	28	88	224	12	123	38	52	7154
Percent	3.6%	69.1%	11.9%	0.7%	3.8%	3.0%	0.4%	1.2%	3.1%	0.2%	1.7%	0.5%	0.7%	
AM Peak	07:00	07:00	09:00	09:00	11:00	07:00	10:00	10:00	10:00	07:00	04:00	09:00	08:00	07:00
Vol.	17	350	63	6	22	29	2	9	22	3	10	4	6	480
PM Peak	16:00	17:00	16:00	15:00	15:00	16:00	15:00	18:00	14:00	16:00	15:00	12:00	15:00	16:00
Vol.	34	540	86	7	29	18	5	8	13	2	8	4	6	703
Grand Total	259	4944	848	53	271	214	28	88	224	12	123	38	52	7154
Percent	3.6%	69.1%	11.9%	0.7%	3.8%	3.0%	0.4%	1.2%	3.1%	0.2%	1.7%	0.5%	0.7%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-38
Station ID: Wed 2/22/17
Columbia Ave. Btwn Orange St. & Primer St. 34.0026, -117.3550
Latitude: 0' 0.000 Undefined

Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	14	4	0	3	5	0	2	4	0	**8**	0	2	42
01:00	0	12	2	1	1	7	0	0	3	0	8	1	0	35
02:00	0	12	0	0	2	4	0	0	9	0	6	1	0	34
03:00	2	22	2	0	2	4	0	3	4	0	4	**3**	0	46
04:00	0	30	2	1	6	0	0	1	8	0	5	0	0	53
05:00	2	41	11	3	8	5	0	0	1	**1**	3	1	0	76
06:00	0	91	13	1	15	4	0	2	7	0	3	0	**4**	140
07:00	5	**277**	30	5	24	**17**	1	**6**	6	0	2	1	1	**375**
08:00	2	263	26	4	23	17	1	1	8	1	2	3	1	352
09:00	8	130	30	**6**	20	5	1	3	8	1	5	2	2	221
10:00	**12**	120	**35**	6	20	9	**2**	6	9	0	3	1	3	226
11:00	6	142	35	5	**26**	7	1	1	**19**	0	5	3	0	250
12 PM	2	164	23	5	26	8	**2**	3	**11**	0	3	1	3	251
13:00	**14**	188	45	6	22	7	0	**6**	9	2	4	0	3	306
14:00	6	285	**48**	2	**31**	7	0	4	10	**3**	**6**	2	**5**	409
15:00	12	275	45	4	25	10	2	5	5	1	3	1	2	390
16:00	13	**390**	30	2	22	**17**	1	4	10	1	0	0	1	**491**
17:00	8	379	29	3	18	17	0	4	4	0	0	2	2	466
18:00	11	266	20	**8**	9	3	1	6	3	0	1	0	0	328
19:00	0	128	17	3	5	5	0	5	8	0	1	1	1	174
20:00	1	105	14	0	11	4	0	1	5	0	4	0	2	147
21:00	2	75	7	3	10	2	1	3	11	0	4	0	0	118
22:00	2	47	4	0	3	8	0	1	3	0	1	0	1	70
23:00	0	29	6	0	6	9	0	4	9	0	5	**4**	0	72
Day Total	108	3485	478	68	338	181	13	71	174	10	86	27	33	5072
Percent	2.1%	68.7%	9.4%	1.3%	6.7%	3.6%	0.3%	1.4%	3.4%	0.2%	1.7%	0.5%	0.7%	
AM Peak	10:00	07:00	10:00	09:00	11:00	07:00	10:00	07:00	11:00	05:00	00:00	03:00	06:00	07:00
Vol.	12	277	35	6	26	17	2	6	19	1	8	3	4	375
PM Peak	13:00	16:00	14:00	18:00	14:00	16:00	12:00	13:00	12:00	14:00	14:00	23:00	14:00	16:00
Vol.	14	390	48	8	31	17	2	6	11	3	6	4	5	491
Grand Total	108	3485	478	68	338	181	13	71	174	10	86	27	33	5072
Percent	2.1%	68.7%	9.4%	1.3%	6.7%	3.6%	0.3%	1.4%	3.4%	0.2%	1.7%	0.5%	0.7%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-38
Station ID: Wed 2/22/17
Columbia Ave. Btwn Orange St. & Primer St. 34.0026, -117.3550
Latitude: 0' 0.000 Undefined

Eastbound, Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	2	59	7	0	4	7	0	3	9	0	12	2	2	107
01:00	2	39	5	1	2	18	0	0	8	1	**15**	3	0	94
02:00	0	27	1	0	3	12	0	0	16	0	12	1	2	74
03:00	5	57	8	1	3	8	0	4	19	0	12	3	1	121
04:00	2	112	14	2	10	1	1	2	26	0	15	0	0	185
05:00	9	166	29	5	20	8	0	7	10	1	9	3	1	268
06:00	11	269	54	5	28	12	1	4	19	0	3	2	**8**	416
07:00	**22**	**627**	86	7	27	**46**	1	12	10	**3**	7	2	5	**855**
08:00	18	567	87	7	29	34	2	5	21	1	9	5	7	792
09:00	16	343	**93**	**12**	30	9	2	8	14	1	15	**6**	4	553
10:00	16	314	83	7	40	19	**4**	**15**	**31**	2	7	3	5	546
11:00	11	308	66	9	**48**	13	2	6	30	0	9	5	1	508
12 PM	12	369	73	7	43	19	2	7	**23**	1	10	**5**	6	577
13:00	24	413	87	9	42	15	2	12	18	**3**	7	2	7	641
14:00	34	586	95	6	**59**	20	2	9	23	3	10	5	**9**	861
15:00	34	609	114	**11**	54	23	**7**	10	16	1	**11**	2	8	900
16:00	**47**	899	**116**	5	49	**35**	6	8	16	3	4	2	4	**1194**
17:00	35	**919**	95	9	38	28	2	9	10	0	3	5	4	1157
18:00	33	703	78	11	27	17	3	**14**	11	1	9	1	4	912
19:00	8	329	40	3	9	13	1	8	14	0	6	2	1	434
20:00	10	290	40	1	15	10	0	4	7	1	7	1	3	389
21:00	9	189	19	3	13	5	2	6	17	0	5	1	1	270
22:00	6	148	20	0	8	11	1	2	16	0	2	0	2	216
23:00	1	87	16	0	8	12	0	4	14	0	10	4	0	156
Day Total	367	8429	1326	121	609	395	41	159	398	22	209	65	85	12226
Percent	3.0%	68.9%	10.8%	1.0%	5.0%	3.2%	0.3%	1.3%	3.3%	0.2%	1.7%	0.5%	0.7%	
AM Peak	07:00	07:00	09:00	09:00	11:00	07:00	10:00	10:00	10:00	07:00	01:00	09:00	06:00	07:00
Vol.	22	627	93	12	48	46	4	15	31	3	15	6	8	855
PM Peak	16:00	17:00	16:00	15:00	14:00	16:00	15:00	18:00	12:00	13:00	15:00	12:00	14:00	16:00
Vol.	47	919	116	11	59	35	7	14	23	3	11	5	9	1194
Grand Total	367	8429	1326	121	609	395	41	159	398	22	209	65	85	12226
Percent	3.0%	68.9%	10.8%	1.0%	5.0%	3.2%	0.3%	1.3%	3.3%	0.2%	1.7%	0.5%	0.7%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-39
Station ID: Wed 2/22/17
Columbia St. Btwn Primer St. & W. La
Cadena Dr. 34.0015, -117.3528
Latitude: 0' 0.000 Undefined

Eastbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	50	5	0	2	2	0	0	1	0	0	0	0	60
01:00	0	31	4	0	2	11	0	0	0	0	0	1	0	49
02:00	1	21	2	0	0	4	4	0	0	1	0	0	1	34
03:00	3	56	8	1	4	5	0	0	1	1	0	1	1	81
04:00	0	98	16	1	5	1	0	0	2	**3**	0	0	0	126
05:00	4	174	42	4	23	6	1	0	2	0	0	0	0	256
06:00	9	262	55	0	48	7	1	2	2	0	0	0	0	386
07:00	6	**475**	**96**	2	**67**	**28**	1	2	2	1	1	**2**	0	**683**
08:00	**11**	434	80	0	55	23	1	3	**5**	1	**2**	1	1	617
09:00	11	275	60	**5**	52	9	**6**	0	3	0	1	0	1	423
10:00	5	234	63	4	47	11	4	**4**	5	1	0	1	**2**	381
11:00	5	191	40	3	39	10	2	1	2	0	1	1	0	295
12 PM	6	264	63	5	46	19	0	4	2	1	0	1	1	412
13:00	13	291	70	4	47	13	2	4	3	0	0	0	2	449
14:00	10	295	52	2	41	16	4	2	**5**	**4**	**1**	1	2	435
15:00	15	404	69	**7**	49	17	**6**	4	3	2	0	2	2	580
16:00	7	636	**83**	3	**64**	21	1	5	3	0	1	0	**3**	827
17:00	14	**720**	74	4	59	**25**	3	**7**	0	0	1	2	1	**910**
18:00	**16**	480	71	4	54	11	3	4	3	0	0	**5**	2	653
19:00	3	238	35	1	22	9	1	0	1	0	0	0	0	310
20:00	2	192	21	1	8	5	0	0	1	1	0	0	0	231
21:00	2	125	19	1	6	5	2	0	0	0	0	0	0	160
22:00	2	91	13	0	8	5	0	0	5	1	0	0	0	125
23:00	0	68	3	0	10	3	0	0	2	0	0	0	0	86
Day Total	145	6105	1044	52	758	266	42	42	53	17	8	18	19	8569
Percent	1.7%	71.2%	12.2%	0.6%	8.8%	3.1%	0.5%	0.5%	0.6%	0.2%	0.1%	0.2%	0.2%	
AM Peak	08:00	07:00	07:00	09:00	07:00	07:00	09:00	10:00	08:00	04:00	08:00	07:00	10:00	07:00
Vol.	11	475	96	5	67	28	6	4	5	3	2	2	2	683
PM Peak	18:00	17:00	16:00	15:00	16:00	17:00	15:00	17:00	14:00	14:00	14:00	18:00	16:00	17:00
Vol.	16	720	83	7	64	25	6	7	5	4	1	5	3	910
Grand Total	145	6105	1044	52	758	266	42	42	53	17	8	18	19	8569
Percent	1.7%	71.2%	12.2%	0.6%	8.8%	3.1%	0.5%	0.5%	0.6%	0.2%	0.1%	0.2%	0.2%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-39
Station ID: Wed 2/22/17
Columbia St. Btwn Primer St. & W. La
Cadena Dr. 34.0015, -117.3528
Latitude: 0' 0.000 Undefined

Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	2	80	7	1	5	4	0	2	11	0	7	1	2	122
01:00	0	48	4	3	2	9	0	1	8	0	**9**	1	3	88
02:00	0	44	3	0	2	5	0	1	17	0	5	1	0	78
03:00	3	37	7	0	2	6	0	5	17	0	4	5	0	86
04:00	5	43	12	3	8	6	1	5	14	1	4	0	0	102
05:00	11	101	15	3	19	16	2	3	10	0	0	1	0	181
06:00	14	219	21	4	21	6	2	4	18	1	3	1	2	316
07:00	27	**453**	32	**13**	37	**41**	3	20	**36**	0	1	3	4	**670**
08:00	26	445	31	9	32	37	**12**	**21**	30	2	0	**6**	**7**	658
09:00	**34**	313	34	5	**48**	27	4	6	31	2	5	3	5	517
10:00	13	351	48	7	31	21	7	11	20	0	6	2	4	521
11:00	24	359	**49**	13	40	32	6	8	27	**3**	3	2	5	571
12 PM	24	378	42	7	34	14	5	**13**	**27**	3	4	3	5	559
13:00	34	410	41	**12**	38	28	7	10	18	3	4	2	7	614
14:00	22	465	**57**	2	**40**	**29**	8	10	18	**4**	6	**4**	**9**	674
15:00	**36**	494	49	6	33	21	9	10	22	2	**8**	3	8	701
16:00	28	739	41	7	19	26	**14**	6	9	1	6	3	5	**904**
17:00	33	**746**	44	9	23	15	4	10	8	1	4	2	5	904
18:00	19	558	24	2	6	15	5	5	6	2	1	2	5	650
19:00	14	286	21	2	7	14	6	6	10	0	1	0	1	368
20:00	8	187	22	0	10	10	4	6	13	3	3	0	0	266
21:00	9	85	18	2	8	5	0	4	13	1	6	1	1	153
22:00	6	83	14	0	3	6	1	3	8	0	2	0	0	126
23:00	6	41	4	0	6	12	2	4	11	0	5	2	1	94
Day Total	398	6965	640	110	474	405	102	174	402	29	97	48	79	9923
Percent	4.0%	70.2%	6.4%	1.1%	4.8%	4.1%	1.0%	1.8%	4.1%	0.3%	1.0%	0.5%	0.8%	
AM Peak	09:00	07:00	11:00	07:00	09:00	07:00	08:00	08:00	07:00	11:00	01:00	08:00	08:00	07:00
Vol.	34	453	49	13	48	41	12	21	36	3	9	6	7	670
PM Peak	15:00	17:00	14:00	13:00	14:00	14:00	16:00	12:00	12:00	14:00	15:00	14:00	14:00	16:00
Vol.	36	746	57	12	40	29	14	13	27	4	8	4	9	904
Grand Total	398	6965	640	110	474	405	102	174	402	29	97	48	79	9923
Percent	4.0%	70.2%	6.4%	1.1%	4.8%	4.1%	1.0%	1.8%	4.1%	0.3%	1.0%	0.5%	0.8%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-39
Station ID: Wed 2/22/17
Columbia St. Btwn Primer St. & W. La
Cadena Dr. 34.0015, -117.3528
Latitude: 0' 0.000 Undefined

Eastbound, Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	2	130	12	1	7	6	0	2	12	0	7	1	2	182
01:00	0	79	8	3	4	20	0	1	8	0	**9**	2	3	137
02:00	1	65	5	0	2	9	4	1	17	1	5	1	1	112
03:00	6	93	15	1	6	11	0	5	18	1	4	6	1	167
04:00	5	141	28	4	13	7	1	5	16	**4**	4	0	0	228
05:00	15	275	57	7	42	22	3	3	12	0	0	1	0	437
06:00	23	481	76	4	69	13	3	6	20	1	3	1	2	702
07:00	33	**928**	**128**	15	**104**	**69**	4	22	**38**	1	2	5	4	**1353**
08:00	37	879	111	9	87	60	**13**	**24**	35	3	2	**7**	**8**	1275
09:00	**45**	588	94	10	100	36	10	6	34	2	6	3	6	940
10:00	18	585	111	11	78	32	11	15	25	1	6	3	6	902
11:00	29	550	89	**16**	79	42	8	9	29	3	4	3	5	866
12 PM	30	642	105	12	80	33	5	**17**	**29**	4	4	4	6	971
13:00	47	701	111	**16**	**85**	41	9	14	21	3	4	2	9	1063
14:00	32	760	109	4	81	45	12	12	23	**8**	7	5	**11**	1109
15:00	**51**	898	118	13	82	38	**15**	14	25	4	**8**	5	10	1281
16:00	35	1375	**124**	10	83	**47**	15	11	12	1	7	3	8	1731
17:00	47	**1466**	118	13	82	40	7	17	8	1	5	4	6	**1814**
18:00	35	1038	95	6	60	26	8	9	9	2	1	**7**	7	1303
19:00	17	524	56	3	29	23	7	6	11	0	1	0	1	678
20:00	10	379	43	1	18	15	4	6	14	4	3	0	0	497
21:00	11	210	37	3	14	10	2	4	13	1	6	1	1	313
22:00	8	174	27	0	11	11	1	3	13	1	2	0	0	251
23:00	6	109	7	0	16	15	2	4	13	0	5	2	1	180
Day Total	543	13070	1684	162	1232	671	144	216	455	46	105	66	98	18492
Percent	2.9%	70.7%	9.1%	0.9%	6.7%	3.6%	0.8%	1.2%	2.5%	0.2%	0.6%	0.4%	0.5%	
AM Peak	09:00	07:00	07:00	11:00	07:00	07:00	08:00	08:00	07:00	04:00	01:00	08:00	08:00	07:00
Vol.	45	928	128	16	104	69	13	24	38	4	9	7	8	1353
PM Peak	15:00	17:00	16:00	13:00	13:00	16:00	15:00	12:00	12:00	14:00	15:00	18:00	14:00	17:00
Vol.	51	1466	124	16	85	47	15	17	29	8	8	7	11	1814
Grand Total	543	13070	1684	162	1232	671	144	216	455	46	105	66	98	18492
Percent	2.9%	70.7%	9.1%	0.9%	6.7%	3.6%	0.8%	1.2%	2.5%	0.2%	0.6%	0.4%	0.5%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-40
Station ID: Wed 2/22/17
Strong St. Btwn Main St. & Orange St.
33.9998, -117.3622
Latitude: 0' 0.000 Undefined

Eastbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	10	0	0	0	0	0	0	0	0	0	0	0	10
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
05:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
06:00	0	26	4	**1**	2	1	0	0	0	0	0	0	0	34
07:00	3	62	**10**	0	4	**4**	0	0	0	0	0	0	0	83
08:00	0	**98**	10	0	**6**	2	0	**1**	0	0	0	0	0	**117**
09:00	1	39	5	0	3	0	0	0	0	0	0	0	0	48
10:00	1	49	6	0	3	0	0	1	0	0	0	0	0	60
11:00	**5**	49	7	0	0	1	0	0	0	0	0	0	0	62
12 PM	3	71	8	0	0	0	0	0	0	0	0	0	0	82
13:00	4	94	16	0	**8**	0	0	0	0	0	0	0	0	122
14:00	4	88	16	**2**	2	**1**	0	0	0	0	0	0	0	113
15:00	7	113	11	1	4	0	0	0	0	0	0	0	0	136
16:00	8	176	24	0	7	0	0	0	0	0	0	0	0	215
17:00	2	**218**	**31**	0	3	1	0	0	**1**	0	0	0	0	**256**
18:00	**9**	120	12	0	5	0	0	0	0	0	0	0	0	146
19:00	3	66	4	0	0	0	0	0	0	0	0	0	0	73
20:00	3	57	4	0	0	1	0	0	0	0	0	0	0	65
21:00	3	38	2	0	0	0	0	0	0	0	0	0	0	43
22:00	4	17	3	0	0	0	0	0	0	0	0	0	0	24
23:00	1	9	0	0	0	0	0	0	0	0	0	0	0	10
Day Total	61	1428	173	4	47	11	0	2	1	0	0	0	0	1727
Percent	3.5%	82.7%	10.0%	0.2%	2.7%	0.6%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	07:00	06:00	08:00	07:00		08:00						08:00
Vol.	5	98	10	1	6	4		1						117
PM Peak	18:00	17:00	17:00	14:00	13:00	14:00			17:00					17:00
Vol.	9	218	31	2	8	1			1					256
Grand Total	61	1428	173	4	47	11	0	2	1	0	0	0	0	1727
Percent	3.5%	82.7%	10.0%	0.2%	2.7%	0.6%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-40
Station ID: Wed 2/22/17
Strong St. Btwn Main St. & Orange St.
33.9998, -117.3622
Latitude: 0' 0.000 Undefined

Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	2	6	0	2	0	0	0	0	0	0	0	0	10
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2
03:00	**1**	0	0	0	1	**1**	0	0	0	0	0	0	0	3
04:00	0	3	5	0	3	0	0	0	0	0	0	0	0	11
05:00	0	7	9	0	5	0	0	0	0	0	0	0	0	21
06:00	0	5	13	0	10	1	0	0	0	0	0	0	0	29
07:00	0	22	27	0	15	0	0	0	0	0	0	0	0	**64**
08:00	0	23	24	0	10	1	0	0	0	0	0	0	0	58
09:00	1	6	**32**	**2**	**16**	0	0	0	0	0	0	0	0	57
10:00	1	**24**	19	0	15	0	0	0	0	0	0	0	0	59
11:00	0	22	23	0	12	1	0	0	0	0	0	0	0	58
12 PM	0	16	22	0	12	1	0	0	0	0	0	0	0	51
13:00	0	34	39	0	11	0	0	0	0	0	0	0	0	84
14:00	**1**	26	**42**	0	15	0	0	0	0	0	0	0	0	84
15:00	1	48	39	**1**	**17**	0	0	0	0	0	0	0	0	106
16:00	0	39	37	0	10	0	0	0	0	0	0	0	0	86
17:00	1	**67**	33	0	11	0	0	0	0	0	0	0	0	**112**
18:00	0	39	24	0	10	**2**	0	0	0	0	0	**1**	0	76
19:00	0	18	24	1	8	0	0	0	0	0	0	0	0	51
20:00	0	20	22	0	6	0	**1**	0	0	0	0	0	0	49
21:00	1	14	22	0	6	1	0	0	0	0	0	0	0	44
22:00	0	5	10	0	3	0	0	0	0	0	0	0	0	18
23:00	0	4	6	0	0	0	0	0	0	0	0	0	0	10
Day Total	7	447	478	5	199	8	1	0	0	0	0	1	0	1146
Percent	0.6%	39.0%	41.7%	0.4%	17.4%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	
AM Peak	03:00	10:00	09:00	09:00	09:00	03:00								07:00
Vol.	1	24	32	2	16	1								64
PM Peak	14:00	17:00	14:00	15:00	15:00	18:00	20:00					18:00		17:00
Vol.	1	67	42	1	17	2	1					1		112
Grand Total	7	447	478	5	199	8	1	0	0	0	0	1	0	1146
Percent	0.6%	39.0%	41.7%	0.4%	17.4%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-40
Station ID: Wed 2/22/17
Strong St. Btwn Main St. & Orange St.
33.9998, -117.3622
Latitude: 0' 0.000 Undefined

Eastbound, Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	12	6	0	2	0	0	0	0	0	0	0	0	20
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	1	0	1	1	0	0	0	0	0	0	0	0	3
03:00	1	3	0	0	1	1	0	0	0	0	0	0	0	6
04:00	0	12	5	0	3	0	0	0	0	0	0	0	0	20
05:00	0	20	9	0	5	0	0	0	0	0	0	0	0	34
06:00	0	31	17	1	12	2	0	0	0	0	0	0	0	63
07:00	3	84	**37**	0	**19**	**4**	0	0	0	0	0	0	0	147
08:00	0	**121**	34	0	16	3	0	**1**	0	0	0	0	0	**175**
09:00	2	45	37	**2**	19	0	0	0	0	0	0	0	0	105
10:00	2	73	25	0	18	0	0	1	0	0	0	0	0	119
11:00	**5**	71	30	0	12	2	0	0	0	0	0	0	0	120
12 PM	3	87	30	0	12	1	0	0	0	0	0	0	0	133
13:00	4	128	55	0	19	0	0	0	0	0	0	0	0	206
14:00	5	114	58	**2**	17	1	0	0	0	0	0	0	0	197
15:00	8	161	50	2	**21**	0	0	0	0	0	0	0	0	242
16:00	8	215	61	0	17	0	0	0	0	0	0	0	0	301
17:00	3	**285**	**64**	0	14	1	0	0	**1**	0	0	0	0	**368**
18:00	**9**	159	36	0	15	**2**	0	0	0	0	0	**1**	0	222
19:00	3	84	28	1	8	0	0	0	0	0	0	0	0	124
20:00	3	77	26	0	6	1	**1**	0	0	0	0	0	0	114
21:00	4	52	24	0	6	1	0	0	0	0	0	0	0	87
22:00	4	22	13	0	3	0	0	0	0	0	0	0	0	42
23:00	1	13	6	0	0	0	0	0	0	0	0	0	0	20
Day Total	68	1875	651	9	246	19	1	2	1	0	0	1	0	2873
Percent	2.4%	65.3%	22.7%	0.3%	8.6%	0.7%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	07:00	09:00	07:00	07:00		08:00						08:00
Vol.	5	121	37	2	19	4		1						175
PM Peak	18:00	17:00	17:00	14:00	15:00	18:00	20:00		17:00			18:00		17:00
Vol.	9	285	64	2	21	2	1		1			1		368
Grand Total	68	1875	651	9	246	19	1	2	1	0	0	1	0	2873
Percent	2.4%	65.3%	22.7%	0.3%	8.6%	0.7%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-41
Station ID: Wed 2/22/17
Strong St. Btwn Orange St. & W. La Candena Dr. 33.9982, -117.3589
Latitude: 0' 0.000 Undefined

Eastbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
04:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
05:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
06:00	0	12	1	0	**2**	0	0	0	0	0	0	0	0	15
07:00	0	39	11	0	0	0	0	0	0	0	0	0	0	50
08:00	0	**47**	5	0	2	**2**	0	0	0	0	0	0	0	**56**
09:00	0	24	5	0	0	0	0	0	0	0	0	0	0	29
10:00	0	22	**12**	0	0	0	0	0	0	0	0	0	0	34
11:00	**1**	26	6	0	1	0	0	0	0	0	0	0	0	34
12 PM	2	29	5	0	0	0	0	0	0	0	0	0	0	36
13:00	**6**	52	13	0	3	0	0	0	0	0	0	0	0	74
14:00	2	56	8	0	7	0	0	0	0	0	0	0	0	73
15:00	1	75	8	0	3	0	0	0	0	0	0	0	0	87
16:00	1	78	21	0	8	**3**	0	0	0	0	0	0	0	111
17:00	0	**189**	**22**	0	**9**	2	**1**	0	0	0	0	0	0	**223**
18:00	0	85	20	**1**	1	1	0	0	0	0	0	0	0	108
19:00	1	39	5	0	0	0	0	0	0	0	0	0	0	45
20:00	0	27	4	0	1	0	1	0	0	0	0	0	0	33
21:00	0	20	1	0	0	0	0	0	0	0	0	0	0	21
22:00	0	11	0	0	1	0	0	0	0	0	0	0	0	12
23:00	0	11	1	0	1	0	0	0	0	0	0	0	0	13
Day Total	14	865	153	1	39	8	2	0	0	0	0	0	0	1082
Percent	1.3%	79.9%	14.1%	0.1%	3.6%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	10:00		06:00	08:00								08:00
Vol.	1	47	12		2	2								56
PM Peak	13:00	17:00	17:00	18:00	17:00	16:00	17:00							17:00
Vol.	6	189	22	1	9	3	1							223
Grand Total	14	865	153	1	39	8	2	0	0	0	0	0	0	1082
Percent	1.3%	79.9%	14.1%	0.1%	3.6%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-41
Station ID: Wed 2/22/17
Strong St. Btwn Orange St. & W. La Candena Dr. 33.9982, -117.3589
Latitude: 0' 0.000 Undefined

Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	2	1	0	0	0	0	0	0	0	0	0	0	3
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
04:00	0	2	2	0	1	0	0	0	0	0	0	0	0	5
05:00	1	12	0	0	0	1	0	0	0	0	0	0	0	14
06:00	0	16	2	0	1	1	0	0	0	0	0	0	0	20
07:00	0	53	**10**	0	2	**2**	0	0	0	0	0	0	0	67
08:00	0	**57**	5	0	**8**	0	0	0	0	0	0	0	0	**70**
09:00	0	23	4	0	3	1	**1**	0	0	0	0	0	0	32
10:00	**2**	22	2	0	1	0	0	0	0	0	0	0	0	27
11:00	1	27	8	0	3	0	0	0	0	0	0	0	0	39
12 PM	0	32	4	0	3	0	0	0	0	0	0	0	0	39
13:00	0	46	9	0	3	0	0	0	0	0	0	0	0	58
14:00	0	41	9	0	5	0	0	0	0	0	0	0	0	55
15:00	0	57	5	0	4	**1**	0	0	0	0	0	0	0	67
16:00	**1**	76	8	0	**6**	0	**1**	0	0	0	0	0	0	92
17:00	1	**85**	**10**	0	6	0	0	**1**	0	0	0	0	0	**103**
18:00	0	53	4	**2**	3	0	0	0	0	0	0	0	0	62
19:00	1	21	5	0	1	0	0	0	0	0	0	0	0	28
20:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
21:00	0	12	3	0	1	0	0	0	0	0	0	0	0	16
22:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Day Total	7	656	92	2	52	6	2	1	0	0	0	0	0	818
Percent	0.9%	80.2%	11.2%	0.2%	6.4%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	08:00	07:00		08:00	07:00	09:00							08:00
Vol.	2	57	10		8	2	1							70
PM Peak	16:00	17:00	17:00	18:00	16:00	15:00	16:00	17:00						17:00
Vol.	1	85	10	2	6	1	1	1						103
Grand Total	7	656	92	2	52	6	2	1	0	0	0	0	0	818
Percent	0.9%	80.2%	11.2%	0.2%	6.4%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-41
Station ID: Wed 2/22/17
Strong St. Btwn Orange St. & W. La Candena Dr. 33.9982, -117.3589
Latitude: 0' 0.000 Undefined

Eastbound, Westbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
2/22/17	0	6	1	0	0	0	0	0	0	0	0	0	0	7
01:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8
04:00	0	4	4	0	1	0	0	0	0	0	0	0	0	9
05:00	1	20	2	0	0	1	0	0	0	0	0	0	0	24
06:00	0	28	3	0	3	1	0	0	0	0	0	0	0	35
07:00	0	92	**21**	0	2	**2**	0	0	0	0	0	0	0	117
08:00	0	**104**	10	0	**10**	2	0	0	0	0	0	0	0	**126**
09:00	0	47	9	0	3	1	**1**	0	0	0	0	0	0	61
10:00	**2**	44	14	0	1	0	0	0	0	0	0	0	0	61
11:00	2	53	14	0	4	0	0	0	0	0	0	0	0	73
12 PM	2	61	9	0	3	0	0	0	0	0	0	0	0	75
13:00	**6**	98	22	0	6	0	0	0	0	0	0	0	0	132
14:00	2	97	17	0	12	0	0	0	0	0	0	0	0	128
15:00	1	132	13	0	7	1	0	0	0	0	0	0	0	154
16:00	2	154	29	0	14	**3**	**1**	0	0	0	0	0	0	203
17:00	1	**274**	**32**	0	**15**	2	1	**1**	0	0	0	0	0	**326**
18:00	0	138	24	**3**	4	1	0	0	0	0	0	0	0	170
19:00	2	60	10	0	1	0	0	0	0	0	0	0	0	73
20:00	0	35	4	0	1	0	1	0	0	0	0	0	0	41
21:00	0	32	4	0	1	0	0	0	0	0	0	0	0	37
22:00	0	16	1	0	1	0	0	0	0	0	0	0	0	18
23:00	0	14	1	0	1	0	0	0	0	0	0	0	0	16
Day Total	21	1521	245	3	91	14	4	1	0	0	0	0	0	1900
Percent	1.1%	80.1%	12.9%	0.2%	4.8%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	08:00	07:00		08:00	07:00	09:00							08:00
Vol.	2	104	21		10	2	1							126
PM Peak	13:00	17:00	17:00	18:00	17:00	16:00	16:00	17:00						17:00
Vol.	6	274	32	3	15	3	1	1						326
Grand Total	21	1521	245	3	91	14	4	1	0	0	0	0	0	1900
Percent	1.1%	80.1%	12.9%	0.2%	4.8%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

Field Data Services of Arizona

21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-042
Station ID: Thurs 3/2/17
Market St. Btwn Rivera St. & SR 60 WB
Ramps 34.0018, -117.3755
Latitude: 0' 0.000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	1	40	0	0	1	1	0	0	0	0	0	0	0	43
01:00	4	21	7	0	0	2	0	0	1	0	0	0	0	35
02:00	5	24	1	0	1	5	0	0	1	0	0	0	0	37
03:00	5	36	4	1	2	4	0	**1**	0	0	0	0	0	53
04:00	6	84	15	0	3	6	0	1	1	0	0	0	0	116
05:00	7	187	23	0	5	7	0	0	0	0	0	0	0	229
06:00	10	392	22	0	6	9	0	0	1	0	0	0	0	440
07:00	7	598	27	1	7	**32**	1	1	0	**2**	2	**1**	0	679
08:00	9	**615**	21	1	10	30	**7**	1	**5**	0	**3**	1	0	**703**
09:00	5	495	18	**4**	10	19	0	0	0	1	0	0	0	552
10:00	**12**	498	**30**	2	4	9	1	0	0	0	0	0	0	556
11:00	3	498	24	2	**13**	5	0	0	0	0	0	1	0	546
12 PM	10	510	22	**3**	17	8	0	0	0	1	0	1	0	572
13:00	1	491	23	1	1	10	0	0	0	0	0	0	0	527
14:00	9	528	25	1	2	11	0	0	0	0	0	0	1	577
15:00	11	586	**27**	2	**19**	10	0	0	1	2	1	0	0	659
16:00	**12**	694	22	1	19	**25**	1	0	**3**	**5**	**2**	**4**	0	788
17:00	7	**715**	26	1	8	21	**2**	**2**	2	1	1	3	**2**	**791**
18:00	4	591	14	0	7	13	1	0	1	0	0	2	1	634
19:00	3	369	15	1	3	2	0	0	0	0	0	0	1	394
20:00	4	244	14	0	5	2	0	0	1	0	0	0	0	270
21:00	5	252	9	0	1	6	0	0	0	0	0	0	0	273
22:00	2	187	2	0	2	0	0	0	0	0	0	0	0	193
23:00	1	79	0	0	0	1	0	0	1	0	0	0	0	82
Day Total	143	8734	391	21	146	238	13	6	18	12	9	13	5	9749
Percent	1.5%	89.6%	4.0%	0.2%	1.5%	2.4%	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	
AM Peak	10:00	08:00	10:00	09:00	11:00	07:00	08:00	03:00	08:00	07:00	08:00	07:00		08:00
Vol.	12	615	30	4	13	32	7	1	5	2	3	1		703
PM Peak	16:00	17:00	15:00	12:00	15:00	16:00	17:00	17:00	16:00	16:00	16:00	16:00	17:00	17:00
Vol.	12	715	27	3	19	25	2	2	3	5	2	4	2	791
Grand Total	143	8734	391	21	146	238	13	6	18	12	9	13	5	9749
Percent	1.5%	89.6%	4.0%	0.2%	1.5%	2.4%	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-042
Station ID: Thurs 3/2/17
Market St. Btwn Rivera St. & SR 60 WB
Ramps 34.0018, -117.3755
Latitude: 0' 0.000 Undefined

Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	0	14	1	0	0	0	1	0	1	0	0	0	0	17
01:00	2	11	1	0	1	1	0	0	3	0	0	0	0	19
02:00	1	11	1	0	4	0	0	0	3	0	0	0	0	20
03:00	0	8	4	0	2	1	0	1	3	0	0	0	0	19
04:00	7	60	17	1	9	6	0	0	5	0	0	0	0	105
05:00	6	180	23	1	9	8	0	1	3	0	0	0	1	232
06:00	12	384	19	4	25	19	1	1	3	0	0	0	1	469
07:00	12	**677**	27	**8**	18	31	1	4	3	1	1	**2**	**3**	788
08:00	11	676	41	5	15	30	2	4	9	0	**4**	0	2	**799**
09:00	9	604	34	4	20	**33**	3	4	10	1	2	1	2	727
10:00	15	566	25	5	23	24	1	**7**	**13**	**3**	4	2	2	690
11:00	**16**	596	**50**	2	**38**	20	**6**	5	11	1	0	2	1	748
12 PM	**13**	596	51	5	28	**21**	5	6	10	0	3	**5**	2	745
13:00	10	617	39	8	29	19	3	**12**	**15**	2	2	5	2	763
14:00	10	622	37	9	34	17	4	9	8	2	2	4	5	763
15:00	8	731	50	**12**	**37**	10	**8**	7	4	2	2	4	2	877
16:00	13	**853**	**61**	7	26	17	5	6	3	**3**	**6**	2	3	**1005**
17:00	12	824	51	5	22	8	0	10	4	2	2	1	**6**	947
18:00	7	681	51	4	24	1	4	6	1	0	1	1	1	782
19:00	6	463	23	2	8	4	0	1	4	0	1	0	0	512
20:00	1	258	15	3	2	3	0	0	4	0	0	0	0	286
21:00	2	141	7	0	3	2	0	0	4	0	0	0	0	159
22:00	2	52	3	0	2	2	1	0	1	0	0	0	0	63
23:00	5	38	1	0	0	3	1	0	3	0	0	1	0	52
Day Total	180	9663	632	85	379	280	46	84	128	17	30	30	33	11587
Percent	1.6%	83.4%	5.5%	0.7%	3.3%	2.4%	0.4%	0.7%	1.1%	0.1%	0.3%	0.3%	0.3%	
AM Peak	11:00	07:00	11:00	07:00	11:00	09:00	11:00	10:00	10:00	10:00	08:00	07:00	07:00	08:00
Vol.	16	677	50	8	38	33	6	7	13	3	4	2	3	799
PM Peak	12:00	16:00	16:00	15:00	15:00	12:00	15:00	13:00	13:00	16:00	16:00	12:00	17:00	16:00
Vol.	13	853	61	12	37	21	8	12	15	3	6	5	6	1005
Grand Total	180	9663	632	85	379	280	46	84	128	17	30	30	33	11587
Percent	1.6%	83.4%	5.5%	0.7%	3.3%	2.4%	0.4%	0.7%	1.1%	0.1%	0.3%	0.3%	0.3%	

Field Data Services of Arizona
21636 N. Dietz Dr.
Maricopa, AZ 85138
520.316.6745

Site Code: 17-1082-042
Station ID: Thurs 3/2/17
Market St. Btwn Rivera St. & SR 60 WB
Ramps 34.0018, -117.3755
Latitude: 0' 0.000 Undefined

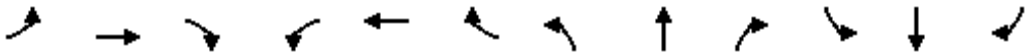
Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
3/2/17	1	54	1	0	1	1	1	0	1	0	0	0	0	60
01:00	6	32	8	0	1	3	0	0	4	0	0	0	0	54
02:00	6	35	2	0	5	5	0	0	4	0	0	0	0	57
03:00	5	44	8	1	4	5	0	2	3	0	0	0	0	72
04:00	13	144	32	1	12	12	0	1	6	0	0	0	0	221
05:00	13	367	46	1	14	15	0	1	3	0	0	0	1	461
06:00	22	776	41	4	31	28	1	1	4	0	0	0	1	909
07:00	19	1275	54	**9**	25	**63**	2	5	3	**3**	3	**3**	**3**	1467
08:00	20	**1291**	62	6	25	60	**9**	5	**14**	0	**7**	1	2	**1502**
09:00	14	1099	52	8	30	52	3	4	10	2	2	1	2	1279
10:00	**27**	1064	55	7	27	33	2	**7**	13	3	4	2	2	1246
11:00	19	1094	**74**	4	**51**	25	6	5	11	1	0	3	1	1294
12 PM	23	1106	73	8	45	29	5	6	10	1	3	**6**	2	1317
13:00	11	1108	62	9	30	29	3	**12**	**15**	2	2	5	2	1290
14:00	19	1150	62	10	36	28	4	9	8	2	2	4	6	1340
15:00	19	1317	77	**14**	**56**	20	**8**	7	5	4	3	4	2	1536
16:00	**25**	**1547**	**83**	8	45	**42**	6	6	6	**8**	**8**	6	3	**1793**
17:00	19	1539	77	6	30	29	2	12	6	3	3	4	**8**	1738
18:00	11	1272	65	4	31	14	5	6	2	0	1	3	2	1416
19:00	9	832	38	3	11	6	0	1	4	0	1	0	1	906
20:00	5	502	29	3	7	5	0	0	5	0	0	0	0	556
21:00	7	393	16	0	4	8	0	0	4	0	0	0	0	432
22:00	4	239	5	0	4	2	1	0	1	0	0	0	0	256
23:00	6	117	1	0	0	4	1	0	4	0	0	1	0	134
Day Total	323	18397	1023	106	525	518	59	90	146	29	39	43	38	21336
Percent	1.5%	86.2%	4.8%	0.5%	2.5%	2.4%	0.3%	0.4%	0.7%	0.1%	0.2%	0.2%	0.2%	
AM Peak	10:00	08:00	11:00	07:00	11:00	07:00	08:00	10:00	08:00	07:00	08:00	07:00	07:00	08:00
Vol.	27	1291	74	9	51	63	9	7	14	3	7	3	3	1502
PM Peak	16:00	16:00	16:00	15:00	15:00	16:00	15:00	13:00	13:00	16:00	16:00	12:00	17:00	16:00
Vol.	25	1547	83	14	56	42	8	12	15	8	8	6	8	1793
Grand Total	323	18397	1023	106	525	518	59	90	146	29	39	43	38	21336
Percent	1.5%	86.2%	4.8%	0.5%	2.5%	2.4%	0.3%	0.4%	0.7%	0.1%	0.2%	0.2%	0.2%	

APPENDIX E

INTERSECTION OPERATIONS REPORTS

EXISTING 2017



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	146	72	316	160	11	66	2	87	16	13	3
Future Volume (veh/h)	0	146	72	316	160	11	66	2	87	16	13	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1722	1722	1791	1796	1868	1796	1856	1930	1856	1870	1945	1870
Adj Flow Rate, veh/h	0	178	88	363	184	13	74	2	98	28	23	5
Peak Hour Factor	0.82	0.82	0.82	0.87	0.87	0.87	0.89	0.89	0.89	0.57	0.57	0.57
Percent Heavy Veh, %	12	12	12	7	7	7	3	3	3	2	2	2
Cap, veh/h	0	262	228	360	182	13	267	44	273	323	246	46
Arrive On Green	0.00	0.15	0.15	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	0	1722	1498	1168	592	42	545	142	887	709	800	148
Grp Volume(v), veh/h	0	178	88	560	0	0	174	0	0	56	0	0
Grp Sat Flow(s),veh/h/ln	0	1722	1498	1802	0	0	1575	0	0	1657	0	0
Q Serve(g_s), s	0.0	5.1	2.7	16.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.1	2.7	16.0	0.0	0.0	4.2	0.0	0.0	1.1	0.0	0.0
Prop In Lane	0.00		1.00	0.65		0.02	0.43		0.56	0.50		0.09
Lane Grp Cap(c), veh/h	0	262	228	555	0	0	584	0	0	615	0	0
V/C Ratio(X)	0.00	0.68	0.39	1.01	0.00	0.00	0.30	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	0	531	462	555	0	0	584	0	0	615	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)	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	20.8	19.8	18.0	0.0	0.0	13.8	0.0	0.0	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.1	1.1	40.3	0.0	0.0	1.3	0.0	0.0	0.3	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	2.0	0.9	11.5	0.0	0.0	1.6	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.9	20.9	58.2	0.0	0.0	15.1	0.0	0.0	13.1	0.0	0.0
LnGrp LOS	A	C	C	F	A	A	B	A	A	B	A	A
Approach Vol, veh/h		266			560			174			56	
Approach Delay, s/veh		22.9			58.2			15.1			13.1	
Approach LOS		C			E			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		11.9		20.0		20.0		20.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0				
Max Q Clear Time (g_c+I1), s		7.1		3.1		18.0		6.2				
Green Ext Time (p_c), s		0.8		0.2		0.0		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			39.8									
HCM 6th LOS			D									

Intersection	
Intersection Delay, s/veh	37.1
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	312	60	47	94	4	31	64	21	103	270	0
Future Vol, veh/h	1	312	60	47	94	4	31	64	21	103	270	0
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	8	8	8	2	2	2	3	3	3	2	2	2
Mvmt Flow	1	359	69	57	113	5	37	77	25	124	325	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	41.9	15.7	13.4	48.1
HCM LOS	E	C	B	E

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	33%	0%	0%	33%	0%	28%
Vol Thru, %	67%	0%	84%	67%	0%	72%
Vol Right, %	0%	100%	16%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	21	373	141	4	373
LT Vol	31	0	1	47	0	103
Through Vol	64	0	312	94	0	270
RT Vol	0	21	60	0	4	0
Lane Flow Rate	114	25	429	170	5	449
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.265	0.052	0.867	0.386	0.01	0.907
Departure Headway (Hd)	8.339	7.445	7.282	8.175	7.28	7.268
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	433	483	493	443	494	494
Service Time	6.049	5.156	5.377	5.881	4.986	5.358
HCM Lane V/C Ratio	0.263	0.052	0.87	0.384	0.01	0.909
HCM Control Delay	14	10.6	41.9	15.9	10.1	48.1
HCM Lane LOS	B	B	E	C	B	E
HCM 95th-tile Q	1.1	0.2	9.2	1.8	0	10.4

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	169	43	26	0	0	0	33	43	1	70	0
Future Vol, veh/h	28	169	43	26	0	0	0	33	43	1	70	0
Peak Hour Factor	0.78	0.78	0.78	0.64	0.64	0.64	0.88	0.88	0.88	0.63	0.63	0.63
Heavy Vehicles, %	11	11	11	12	12	12	3	3	3	2	2	2
Mvmt Flow	36	217	55	41	0	0	0	38	49	2	111	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.4	8.5	8.2	8.8
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	12%	100%	1%
Vol Thru, %	43%	70%	0%	99%
Vol Right, %	57%	18%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	76	240	26	71
LT Vol	0	28	26	1
Through Vol	33	169	0	70
RT Vol	43	43	0	0
Lane Flow Rate	86	308	41	113
Geometry Grp	1	1	1	1
Degree of Util (X)	0.11	0.387	0.058	0.152
Departure Headway (Hd)	4.585	4.53	5.138	4.871
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	780	794	696	735
Service Time	2.625	2.561	3.182	2.909
HCM Lane V/C Ratio	0.11	0.388	0.059	0.154
HCM Control Delay	8.2	10.4	8.5	8.8
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.4	1.8	0.2	0.5

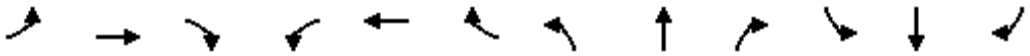
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	0	238	11	15	413	4	54	1	158	3	0	20
Future Vol, veh/h	0	238	11	15	413	4	54	1	158	3	0	20
Conflicting Peds, #/hr	5	0	1	1	0	5	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	115	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	87	87	87	89	89	89	92	92	92
Heavy Vehicles, %	4	4	4	6	6	6	11	11	11	4	4	4
Mvmt Flow	0	290	13	17	475	5	61	1	178	3	0	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	485	0	-	291	0	0	814	810	292	898	808	483
Stage 1	-	-	-	-	-	-	291	291	-	517	517	-
Stage 2	-	-	-	-	-	-	523	519	-	381	291	-
Critical Hdwy	4.14	-	-	4.16	-	-	7.21	6.61	6.31	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.61	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.61	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.254	-	-	3.599	4.099	3.399	3.536	4.036	3.336
Pot Cap-1 Maneuver	1068	-	0	1248	-	-	286	304	726	258	312	580
Stage 1	-	-	0	-	-	-	698	656	-	538	530	-
Stage 2	-	-	0	-	-	-	521	518	-	637	668	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1063	-	-	1247	-	-	271	296	725	190	304	577
Mov Cap-2 Maneuver	-	-	-	-	-	-	271	296	-	190	304	-
Stage 1	-	-	-	-	-	-	697	655	-	535	517	-
Stage 2	-	-	-	-	-	-	492	506	-	480	667	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	14.3	13.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	271	725	1063	-	1247	-	-	456
HCM Lane V/C Ratio	0.228	0.245	-	-	0.014	-	-	0.055
HCM Control Delay (s)	22.2	11.6	0	-	7.9	0	-	13.4
HCM Lane LOS	C	B	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.9	1	0	-	0	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	500	0	0	362	357	0	0	0	275	0	103
Future Volume (veh/h)	155	500	0	0	362	357	0	0	0	275	0	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1722	1722	1722	1678	1678	1678	1900	1900	1900	1826	1826	1826
Adj Flow Rate, veh/h	185	595	0	0	441	0	0	0	0	212	135	116
Peak Hour Factor	0.84	0.84	0.84	0.82	0.82	0.82	0.92	0.92	0.92	0.89	0.89	0.89
Percent Heavy Veh, %	12	12	12	15	15	15	0	0	0	5	5	5
Cap, veh/h	267	1736	0	4	777		0	447	0	608	212	182
Arrive On Green	0.16	0.53	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.24	0.24	0.24
Sat Flow, veh/h	1640	3358	0	1598	3272	0	0	1900	0	1739	901	774
Grp Volume(v), veh/h	185	595	0	0	441	0	0	0	0	212	0	251
Grp Sat Flow(s),veh/h/ln	1640	1636	0	1598	1594	0	0	1900	0	1739	0	1675
Q Serve(g_s), s	3.9	3.8	0.0	0.0	4.4	0.0	0.0	0.0	0.0	3.9	0.0	4.9
Cycle Q Clear(g_c), s	3.9	3.8	0.0	0.0	4.4	0.0	0.0	0.0	0.0	3.9	0.0	4.9
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.46
Lane Grp Cap(c), veh/h	267	1736	0	4	777		0	447	0	608	0	394
V/C Ratio(X)	0.69	0.34	0.00	0.00	0.57		0.00	0.00	0.00	0.35	0.00	0.64
Avail Cap(c_a), veh/h	474	1983	0	308	1624		0	942	0	1060	0	830
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	4.9	0.0	0.0	12.1	0.0	0.0	0.0	0.0	12.1	0.0	12.5
Incr Delay (d2), s/veh	3.2	0.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.3	0.0	1.7
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	1.3	0.5	0.0	0.0	1.1	0.0	0.0	0.0	0.0	1.2	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5	5.0	0.0	0.0	12.7	0.0	0.0	0.0	0.0	12.4	0.0	14.2
LnGrp LOS	B	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		780			441	A		0			463	
Approach Delay, s/veh		8.0			12.7			0.0			13.4	
Approach LOS		A			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	23.3		13.0	10.4	12.8		13.0				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	22.0		18.0	10.5	18.5		18.0				
Max Q Clear Time (g_c+I1), s	0.0	5.8		6.9	5.9	6.4		0.0				
Green Ext Time (p_c), s	0.0	3.4		1.7	0.2	2.1		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			10.7									
HCM 6th LOS			B									

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	23.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	88	417	5	11	252	2	5	22	13	246	31	149
Future Vol, veh/h	88	417	5	11	252	2	5	22	13	246	31	149
Peak Hour Factor	0.95	0.95	0.95	0.77	0.77	0.77	0.77	0.77	0.77	0.82	0.82	0.82
Heavy Vehicles, %	20	20	20	5	5	5	0	0	0	2	2	2
Mvmt Flow	93	439	5	14	327	3	6	29	17	300	38	182
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	21.5	27.8	11.9	24
HCM LOS	C	D	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	19%	0%	30%	0%	4%	0%	89%	0%
Vol Thru, %	81%	0%	70%	98%	96%	0%	11%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	13	297	214	263	2	277	149
LT Vol	5	0	88	0	11	0	246	0
Through Vol	22	0	209	209	252	0	31	0
RT Vol	0	13	0	5	0	2	0	149
Lane Flow Rate	35	17	312	225	342	3	338	182
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.085	0.037	0.67	0.472	0.723	0.005	0.74	0.339
Departure Headway (Hd)	8.75	7.925	7.724	7.555	7.621	6.881	7.882	6.709
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	409	451	468	476	475	520	459	536
Service Time	6.514	5.689	5.469	5.3	5.368	4.627	5.623	4.449
HCM Lane V/C Ratio	0.086	0.038	0.667	0.473	0.72	0.006	0.736	0.34
HCM Control Delay	12.3	11	24.8	16.9	27.9	9.7	30	12.9
HCM Lane LOS	B	B	C	C	D	A	D	B
HCM 95th-tile Q	0.3	0.1	4.9	2.5	5.8	0	6.1	1.5

Intersection	
Int Delay, s/veh	44.3

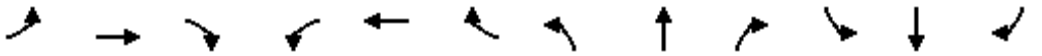
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	153	542	370	82	128	17
Future Vol, veh/h	153	542	370	82	128	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	84	84	76	76
Heavy Vehicles, %	13	13	5	5	12	12
Mvmt Flow	174	616	440	98	168	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1146	-	168	0	-	0
Stage 1	168	-	-	-	-	-
Stage 2	978	-	-	-	-	-
Critical Hdwy	6.53	-	4.15	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	-	2.245	-	-	-
Pot Cap-1 Maneuver	210	0	1392	-	-	0
Stage 1	836	0	-	-	-	0
Stage 2	348	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 144	-	1392	-	-	-
Mov Cap-2 Maneuver	~ 144	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	348	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	202.2	7.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1392	-	144	-	-
HCM Lane V/C Ratio	0.316	-	1.207	-	-
HCM Control Delay (s)	8.8	-	202.2	0	-
HCM Lane LOS	A	-	F	A	-
HCM 95th %tile Q(veh)	1.4	-	10.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	628	22	20	441	285	22	42	42	392	22	256
Future Volume (veh/h)	125	628	22	20	441	285	22	42	42	392	22	256
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1678
Adj Flow Rate, veh/h	144	722	25	23	501	324	33	64	64	472	27	308
Peak Hour Factor	0.87	0.87	0.87	0.88	0.88	0.88	0.66	0.66	0.66	0.83	0.83	0.83
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	15
Cap, veh/h	181	1112	485	61	829	360	463	223	223	559	579	637
Arrive On Green	0.10	0.32	0.32	0.04	0.25	0.25	0.05	0.25	0.25	0.14	0.34	0.34
Sat Flow, veh/h	1753	3497	1526	1654	3300	1431	1781	886	886	1598	1678	1422
Grp Volume(v), veh/h	144	722	25	23	501	324	33	0	128	472	27	308
Grp Sat Flow(s),veh/h/ln	1753	1749	1526	1654	1650	1431	1781	0	1772	1598	1678	1422
Q Serve(g_s), s	5.1	11.3	0.7	0.9	8.5	13.9	0.8	0.0	3.7	9.0	0.7	9.7
Cycle Q Clear(g_c), s	5.1	11.3	0.7	0.9	8.5	13.9	0.8	0.0	3.7	9.0	0.7	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	181	1112	485	61	829	360	463	0	446	559	579	637
V/C Ratio(X)	0.79	0.65	0.05	0.38	0.60	0.90	0.07	0.00	0.29	0.84	0.05	0.48
Avail Cap(c_a), veh/h	221	1112	485	182	831	360	573	0	446	559	579	637
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	1.00	1.00
Uniform Delay (d), s/veh	27.8	18.6	15.0	29.9	21.0	23.0	15.8	0.0	19.2	18.1	13.9	12.3
Incr Delay (d2), s/veh	15.0	1.3	0.0	3.8	1.2	24.7	0.1	0.0	1.6	11.4	0.2	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	2.7	4.1	0.2	0.4	3.0	6.8	0.3	0.0	1.6	4.1	0.3	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.9	20.0	15.1	33.7	22.2	47.7	15.9	0.0	20.8	29.5	14.0	15.0
LnGrp LOS	D	B	B	C	C	D	B	A	C	C	B	B
Approach Vol, veh/h		891			848			161			807	
Approach Delay, s/veh		23.5			32.3			19.8			23.4	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	24.2	7.1	25.9	10.6	20.0	13.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	17.0	7.0	18.0	8.0	16.0	9.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	13.3	2.8	11.7	7.1	15.9	11.0	5.7
Green Ext Time (p_c), s	0.0	1.6	0.0	0.7	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	46	1	114	2	498	39	71	719	5
Future Vol, veh/h	0	0	0	46	1	114	2	498	39	71	719	5
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1000	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	87	87	87	72	72	72	90	90	90
Heavy Vehicles, %	0	0	0	16	16	16	14	14	14	13	13	13
Mvmt Flow	0	0	0	53	1	131	3	692	54	79	799	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1315	1714	405	1283	1690	373	807	0	0	746	0	0
Stage 1	962	962	-	725	725	-	-	-	-	-	-	-
Stage 2	353	752	-	558	965	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.82	6.82	7.22	4.38	-	-	4.36	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.66	4.16	3.46	2.34	-	-	2.33	-	-
Pot Cap-1 Maneuver	118	91	601	108	80	586	741	-	-	789	-	-
Stage 1	279	337	-	352	396	-	-	-	-	-	-	-
Stage 2	642	421	-	448	302	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	83	81	600	99	72	586	740	-	-	789	-	-
Mov Cap-2 Maneuver	83	81	-	99	72	-	-	-	-	-	-	-
Stage 1	277	303	-	351	394	-	-	-	-	-	-	-
Stage 2	495	419	-	403	271	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	57.8	0	0.9
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	740	-	-	-	239	789	-	-
HCM Lane V/C Ratio	0.004	-	-	-	0.774	0.1	-	-
HCM Control Delay (s)	9.9	-	-	0	57.8	10.1	-	-
HCM Lane LOS	A	-	-	A	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	-	5.6	0.3	-	-

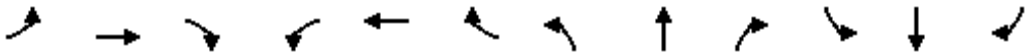
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	1	19	3	0	9	58	825	17	28	715	30
Future Vol, veh/h	6	1	19	3	0	9	58	825	17	28	715	30
Conflicting Peds, #/hr	7	0	0	0	0	7	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	-	0	140	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	75	75	75	93	93	93	85	85	85
Heavy Vehicles, %	15	15	15	25	25	25	8	8	8	14	14	14
Mvmt Flow	8	1	24	4	0	12	62	887	18	33	841	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1500	1954	438	1507	-	460	876	0	0	905	0	0
Stage 1	925	925	-	1020	-	-	-	-	-	-	-	-
Stage 2	575	1029	-	487	-	-	-	-	-	-	-	-
Critical Hdwy	7.8	6.8	7.2	8	-	7.4	4.26	-	-	4.38	-	-
Critical Hdwy Stg 1	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4.15	3.45	3.75	-	3.55	2.28	-	-	2.34	-	-
Pot Cap-1 Maneuver	74	54	532	67	0	490	730	-	-	677	-	-
Stage 1	265	318	-	214	0	-	-	-	-	-	-	-
Stage 2	439	282	-	475	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	65	47	532	56	-	487	730	-	-	677	-	-
Mov Cap-2 Maneuver	65	47	-	56	-	-	-	-	-	-	-	-
Stage 1	242	302	-	196	-	-	-	-	-	-	-	-
Stage 2	389	258	-	430	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.5	28	0.7	0.4
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	730	-	-	174	56	487	677	-	-
HCM Lane V/C Ratio	0.085	-	-	0.189	0.071	0.025	0.049	-	-
HCM Control Delay (s)	10.4	-	-	30.5	74.2	12.6	10.6	-	-
HCM Lane LOS	B	-	-	D	F	B	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.7	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)	16	122	60	108	50	224	14	731	132	219	590	7
Future Volume (veh/h)	16	122	60	108	50	224	14	731	132	219	590	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1870	1870	1870	1707	1707	1776	1841	1841	1841	1707	1707	1707
Adj Flow Rate, veh/h	20	149	73	138	64	287	14	754	136	243	656	8
Peak Hour Factor	0.82	0.82	0.82	0.78	0.78	0.78	0.97	0.97	0.97	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	13	13	13	4	4	4	13	13	13
Cap, veh/h	59	200	98	178	418	368	43	989	439	382	1245	15
Arrive On Green	0.03	0.17	0.17	0.11	0.24	0.24	0.02	0.28	0.28	0.12	0.38	0.38
Sat Flow, veh/h	1781	1185	581	1626	1707	1505	1753	3497	1553	3155	3282	40
Grp Volume(v), veh/h	20	0	222	138	64	287	14	754	136	243	324	340
Grp Sat Flow(s),veh/h/ln	1781	0	1766	1626	1707	1505	1753	1749	1553	1577	1622	1700
Q Serve(g_s), s	0.6	0.0	6.8	4.7	1.7	10.1	0.4	11.2	3.9	4.2	8.8	8.8
Cycle Q Clear(g_c), s	0.6	0.0	6.8	4.7	1.7	10.1	0.4	11.2	3.9	4.2	8.8	8.8
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	59	0	298	178	418	368	43	989	439	382	615	645
V/C Ratio(X)	0.34	0.00	0.75	0.77	0.15	0.78	0.33	0.76	0.31	0.64	0.53	0.53
Avail Cap(c_a), veh/h	220	0	562	216	558	492	217	1205	535	390	615	645
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	0.0	22.4	24.5	16.8	19.9	27.1	18.6	15.9	23.7	13.6	13.6
Incr Delay (d2), s/veh	3.3	0.0	3.7	13.4	0.2	5.7	4.3	2.4	0.4	3.3	3.2	3.1
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	2.8	2.2	0.6	3.5	0.2	4.0	1.2	1.5	3.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.0	0.0	26.1	37.9	16.9	25.6	31.5	20.9	16.3	27.0	16.8	16.7
LnGrp LOS	C	A	C	D	B	C	C	C	B	C	B	B
Approach Vol, veh/h		242			489			904			907	
Approach Delay, s/veh		26.4			27.9			20.4			19.5	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	20.5	10.7	14.0	5.9	26.0	6.4	18.3
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	7.0	19.5	7.5	18.0	7.0	19.5	7.0	18.5
Max Q Clear Time (g_c+I1), s	6.2	13.2	6.7	8.8	2.4	10.8	2.6	12.1
Green Ext Time (p_c), s	0.1	2.7	0.0	0.8	0.0	2.4	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	54	54	15	51	17	19	679	54	18	716	67
Future Volume (veh/h)	76	54	54	15	51	17	19	679	54	18	716	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
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	1870	1945	1870	1870	1870	1870	1899	1826	1826	1752	1752	1752
Adj Flow Rate, veh/h	95	68	68	18	62	21	24	849	68	21	833	78
Peak Hour Factor	0.80	0.80	0.80	0.82	0.82	0.82	0.80	0.80	0.80	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	10	10	10
Cap, veh/h	104	51	512	80	211	512	71	1272	102	58	1187	111
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.04	0.39	0.39	0.03	0.39	0.39
Sat Flow, veh/h	0	154	1556	0	641	1556	1809	3252	260	1668	3068	287
Grp Volume(v), veh/h	163	0	68	80	0	21	24	453	464	21	452	459
Grp Sat Flow(s),veh/h/ln	154	0	1556	641	0	1556	1809	1735	1778	1668	1664	1691
Q Serve(g_s), s	0.0	0.0	1.7	0.0	0.0	0.5	0.7	11.8	11.8	0.7	12.6	12.6
Cycle Q Clear(g_c), s	18.1	0.0	1.7	18.1	0.0	0.5	0.7	11.8	11.8	0.7	12.6	12.6
Prop In Lane	0.58		1.00	0.22		1.00	1.00		0.15	1.00		0.17
Lane Grp Cap(c), veh/h	154	0	512	291	0	512	71	678	695	58	644	654
V/C Ratio(X)	1.06	0.00	0.13	0.28	0.00	0.04	0.34	0.67	0.67	0.36	0.70	0.70
Avail Cap(c_a), veh/h	154	0	512	291	0	512	233	678	695	215	644	654
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	13.0	14.2	0.0	12.6	25.8	13.8	13.8	26.0	14.2	14.2
Incr Delay (d2), s/veh	88.7	0.0	0.1	0.5	0.0	0.0	2.8	5.2	5.0	3.7	6.3	6.2
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	5.7	0.0	0.6	0.7	0.0	0.2	0.3	5.0	5.1	0.3	4.7	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	110.6	0.0	13.1	14.7	0.0	12.6	28.6	19.0	18.8	29.7	20.5	20.4
LnGrp LOS	F	A	B	B	A	B	C	B	B	C	C	C
Approach Vol, veh/h		231			101			941			932	
Approach Delay, s/veh		81.9			14.3			19.2			20.6	
Approach LOS		F			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	26.0		22.6	6.7	25.8		22.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.3		18.1	7.1	21.3		18.1
Max Q Clear Time (g_c+I1), s	2.7	13.8		20.1	2.7	14.6		20.1
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	2.9		0.0

Intersection Summary		
HCM 6th Ctrl Delay		26.1
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	52	75	463	126	423	0	0	781	121
Future Volume (veh/h)	0	0	0	52	75	463	126	423	0	0	781	121
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1811	1811	0	0	1781	1781
Adj Flow Rate, veh/h				55	79	487	145	486	0	0	941	146
Peak Hour Factor				0.95	0.95	0.95	0.87	0.87	0.87	0.83	0.83	0.83
Percent Heavy Veh, %				2	2	2	6	6	0	0	8	8
Cap, veh/h				205	294	449	178	2160	0	0	1393	216
Arrive On Green				0.27	0.27	0.27	0.10	0.63	0.00	0.00	0.47	0.47
Sat Flow, veh/h				752	1081	1648	1725	3532	0	0	3024	455
Grp Volume(v), veh/h				134	0	487	145	486	0	0	542	545
Grp Sat Flow(s),veh/h/ln				1833	0	1648	1725	1721	0	0	1692	1698
Q Serve(g_s), s				5.2	0.0	24.5	7.4	5.5	0.0	0.0	22.3	22.3
Cycle Q Clear(g_c), s				5.2	0.0	24.5	7.4	5.5	0.0	0.0	22.3	22.3
Prop In Lane				0.41		1.00	1.00		0.00	0.00		0.27
Lane Grp Cap(c), veh/h				499	0	449	178	2160	0	0	803	806
V/C Ratio(X)				0.27	0.00	1.09	0.82	0.22	0.00	0.00	0.68	0.68
Avail Cap(c_a), veh/h				499	0	449	259	2160	0	0	803	806
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				25.7	0.0	32.8	39.5	7.3	0.0	0.0	18.3	18.3
Incr Delay (d2), s/veh				0.3	0.0	67.4	12.1	0.2	0.0	0.0	4.5	4.5
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				2.3	0.0	17.8	3.7	1.9	0.0	0.0	9.2	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				26.0	0.0	100.2	51.6	7.5	0.0	0.0	22.8	22.8
LnGrp LOS				C	A	F	D	A	A	A	C	C
Approach Vol, veh/h					621			631			1087	
Approach Delay, s/veh					84.2			17.6			22.8	
Approach LOS					F			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	61.0		13.8	47.2		29.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	56.5		13.5	38.5		24.5
Max Q Clear Time (g_c+I1), s	7.5		9.4	24.3		26.5
Green Ext Time (p_c), s	3.7		0.1	6.3		0.0

Intersection Summary		
HCM 6th Ctrl Delay	37.7	
HCM 6th LOS	D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	0	151	0	0	0	0	396	202	420	413	0
Future Volume (veh/h)	153	0	151	0	0	0	0	396	202	420	413	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				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	1900	1841	1900				0	1841	1841	1826	1826	0
Adj Flow Rate, veh/h	189	0	186				0	455	232	477	469	0
Peak Hour Factor	0.81	0.81	0.81				0.87	0.87	0.87	0.88	0.88	0.88
Percent Heavy Veh, %	0	4	0				0	4	4	5	5	0
Cap, veh/h	273	0	238				0	1335	595	527	2560	0
Arrive On Green	0.16	0.00	0.16				0.00	0.38	0.38	0.30	0.74	0.00
Sat Flow, veh/h	1753	0	1529				0	3589	1560	1739	3561	0
Grp Volume(v), veh/h	189	0	186				0	455	232	477	469	0
Grp Sat Flow(s),veh/h/ln	1753	0	1529				0	1749	1560	1739	1735	0
Q Serve(g_s), s	8.6	0.0	9.9				0.0	7.8	9.2	22.3	3.5	0.0
Cycle Q Clear(g_c), s	8.6	0.0	9.9				0.0	7.8	9.2	22.3	3.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	273	0	238				0	1335	595	527	2560	0
V/C Ratio(X)	0.69	0.00	0.78				0.00	0.34	0.39	0.90	0.18	0.00
Avail Cap(c_a), veh/h	383	0	334				0	1335	595	790	2560	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	0.0	34.4				0.0	18.6	19.0	28.3	3.4	0.0
Incr Delay (d2), s/veh	3.1	0.0	7.6				0.0	0.7	1.9	9.9	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
%ile BackOfQ(50%),veh/ln	3.8	0.0	4.1				0.0	3.2	3.5	10.3	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.0	0.0	42.0				0.0	19.3	20.9	38.3	3.5	0.0
LnGrp LOS	D	A	D				A	B	C	D	A	A
Approach Vol, veh/h		375						687			946	
Approach Delay, s/veh		39.4						19.9			21.0	
Approach LOS		D						B			C	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	30.2	36.8	17.7	67.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	25.5	19.5	18.5	62.5
Max Q Clear Time (g_c+I1), s	24.3	11.2	11.9	5.5
Green Ext Time (p_c), s	1.4	2.5	1.2	3.6

Intersection Summary	
HCM 6th Ctrl Delay	24.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	47	20	44	53	85	4	370	11	104	392	12
Future Volume (veh/h)	20	47	20	44	53	85	4	370	11	104	392	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	33	77	33	49	60	96	4	394	12	113	426	13
Peak Hour Factor	0.61	0.61	0.61	0.89	0.89	0.89	0.94	0.94	0.94	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	275	232	99	318	120	192	557	1473	45	680	1825	56
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.01	0.42	0.42	0.11	0.53	0.53
Sat Flow, veh/h	1217	1235	529	1267	640	1024	1767	3492	106	1753	3464	106
Grp Volume(v), veh/h	33	0	110	49	0	156	4	199	207	113	215	224
Grp Sat Flow(s),veh/h/ln	1217	0	1764	1267	0	1664	1767	1763	1835	1753	1749	1821
Q Serve(g_s), s	1.2	0.0	2.6	1.7	0.0	4.1	0.1	3.6	3.6	1.4	3.2	3.2
Cycle Q Clear(g_c), s	5.3	0.0	2.6	4.3	0.0	4.1	0.1	3.6	3.6	1.4	3.2	3.2
Prop In Lane	1.00		0.30	1.00		0.62	1.00		0.06	1.00		0.06
Lane Grp Cap(c), veh/h	275	0	331	318	0	313	557	743	774	680	921	959
V/C Ratio(X)	0.12	0.00	0.33	0.15	0.00	0.50	0.01	0.27	0.27	0.17	0.23	0.23
Avail Cap(c_a), veh/h	509	0	671	562	0	633	816	743	774	753	921	959
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	17.1	19.0	0.0	17.7	7.9	9.2	9.2	5.0	6.2	6.2
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.2	0.0	1.2	0.0	0.9	0.8	0.1	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	0.3	0.0	1.0	0.5	0.0	1.5	0.0	1.2	1.3	0.3	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	0.0	17.7	19.2	0.0	18.9	7.9	10.0	10.0	5.2	6.8	6.8
LnGrp LOS	C	A	B	B	A	B	A	B	B	A	A	A
Approach Vol, veh/h		143			205			410			552	
Approach Delay, s/veh		18.3			19.0			10.0			6.5	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	25.0		13.6	4.9	30.1		13.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	20.5		18.5	7.5	20.5		18.5
Max Q Clear Time (g_c+I1), s	3.4	5.6		7.3	2.1	5.2		6.3
Green Ext Time (p_c), s	0.1	2.0		0.5	0.0	2.2		0.8

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	20.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	88	450	62	37	185	0	0	275	118
Future Vol, veh/h	0	0	0	88	450	62	37	185	0	0	275	118
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.75	0.75	0.75	0.87	0.87	0.87
Heavy Vehicles, %	0	0	0	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	0	0	101	517	71	49	247	0	0	316	136
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	22	19.9	18
HCM LOS	C	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	28%	0%	0%	0%
Vol Thru, %	83%	72%	78%	100%	0%
Vol Right, %	0%	0%	22%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	222	313	287	275	118
LT Vol	37	88	0	0	0
Through Vol	185	225	225	275	0
RT Vol	0	0	62	0	118
Lane Flow Rate	296	360	330	316	136
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.586	0.696	0.611	0.622	0.24
Departure Headway (Hd)	7.121	6.96	6.663	7.08	6.364
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	506	518	541	509	562
Service Time	5.191	4.73	4.433	4.858	4.141
HCM Lane V/C Ratio	0.585	0.695	0.61	0.621	0.242
HCM Control Delay	19.9	24.3	19.4	20.9	11.2
HCM Lane LOS	C	C	C	C	B
HCM 95th-tile Q	3.7	5.4	4.1	4.2	0.9

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	22	55	63	28	6	30	107	34	4	207	29
Future Vol, veh/h	55	22	55	63	28	6	30	107	34	4	207	29
Peak Hour Factor	0.77	0.77	0.77	0.83	0.83	0.83	0.74	0.74	0.74	0.81	0.81	0.81
Heavy Vehicles, %	4	4	4	2	2	2	4	4	4	2	2	2
Mvmt Flow	71	29	71	76	34	7	41	145	46	5	256	36
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.2	10	10.7	11.5
HCM LOS	B	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	42%	65%	2%
Vol Thru, %	63%	17%	29%	86%
Vol Right, %	20%	42%	6%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	171	132	97	240
LT Vol	30	55	63	4
Through Vol	107	22	28	207
RT Vol	34	55	6	29
Lane Flow Rate	231	171	117	296
Geometry Grp	1	1	1	1
Degree of Util (X)	0.329	0.255	0.184	0.413
Departure Headway (Hd)	5.126	5.364	5.682	5.019
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	702	670	631	717
Service Time	3.153	3.397	3.717	3.044
HCM Lane V/C Ratio	0.329	0.255	0.185	0.413
HCM Control Delay	10.7	10.2	10	11.5
HCM Lane LOS	B	B	A	B
HCM 95th-tile Q	1.4	1	0.7	2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	468	20	69	362	23	27	79	105	39	89	25
Future Volume (veh/h)	34	468	20	69	362	23	27	79	105	39	89	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	0.99		0.98	0.99		0.97
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	1752	1752	1752	1752	1752	1752	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	41	564	24	87	458	29	39	114	152	45	103	29
Peak Hour Factor	0.83	0.83	0.83	0.79	0.79	0.79	0.69	0.69	0.69	0.86	0.86	0.86
Percent Heavy Veh, %	10	10	10	10	10	10	4	4	4	4	4	4
Cap, veh/h	106	941	40	178	1055	67	130	195	226	178	323	77
Arrive On Green	0.06	0.29	0.29	0.11	0.33	0.33	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1668	3248	138	1668	3169	200	117	694	806	248	1153	275
Grp Volume(v), veh/h	41	289	299	87	240	247	305	0	0	177	0	0
Grp Sat Flow(s),veh/h/ln	1668	1664	1722	1668	1664	1704	1617	0	0	1676	0	0
Q Serve(g_s), s	1.0	6.2	6.2	2.1	4.7	4.7	1.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	6.2	6.2	2.1	4.7	4.7	6.8	0.0	0.0	3.3	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.12	0.13		0.50	0.25		0.16
Lane Grp Cap(c), veh/h	106	482	499	178	554	567	550	0	0	578	0	0
V/C Ratio(X)	0.39	0.60	0.60	0.49	0.43	0.44	0.55	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	284	809	838	300	825	845	815	0	0	832	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.8	12.7	12.7	17.6	10.8	10.9	13.2	0.0	0.0	12.0	0.0	0.0
Incr Delay (d2), s/veh	2.3	1.2	1.2	2.1	0.5	0.5	0.9	0.0	0.0	0.3	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	0.4	1.8	1.8	0.7	1.2	1.3	2.1	0.0	0.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	13.9	13.9	19.7	11.4	11.4	14.1	0.0	0.0	12.3	0.0	0.0
LnGrp LOS	C	B	B	B	B	B	B	A	A	B	A	A
Approach Vol, veh/h		629			574			305			177	
Approach Delay, s/veh		14.4			12.6			14.1			12.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	16.6		16.2	7.1	18.4		16.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	20.3		18.7	7.1	20.7		18.7				
Max Q Clear Time (g_c+I1), s	4.1	8.2		5.3	3.0	6.7		8.8				
Green Ext Time (p_c), s	0.0	2.5		0.8	0.0	2.2		1.3				

Intersection Summary		
HCM 6th Ctrl Delay		13.5
HCM 6th LOS		B

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	90	2	58	150	7	5	3	55	7	3	3
Future Vol, veh/h	6	90	2	58	150	7	5	3	55	7	3	3
Peak Hour Factor	0.74	0.74	0.74	0.84	0.84	0.84	0.71	0.71	0.71	0.50	0.50	0.50
Heavy Vehicles, %	18	18	18	10	10	10	10	10	10	23	23	23
Mvmt Flow	8	122	3	69	179	8	7	4	77	14	6	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	9.7	8.1	8.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	6%	27%	54%
Vol Thru, %	5%	92%	70%	23%
Vol Right, %	87%	2%	3%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	98	215	13
LT Vol	5	6	58	7
Through Vol	3	90	150	3
RT Vol	55	2	7	3
Lane Flow Rate	89	132	256	26
Geometry Grp	1	1	1	1
Degree of Util (X)	0.111	0.175	0.322	0.038
Departure Headway (Hd)	4.507	4.762	4.531	5.287
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	795	754	793	677
Service Time	2.536	2.787	2.552	3.321
HCM Lane V/C Ratio	0.112	0.175	0.323	0.038
HCM Control Delay	8.1	8.8	9.7	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.6	1.4	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	0	67	57	1
Future Vol, veh/h	0	3	0	67	57	1
Conflicting Peds, #/hr	1	0	5	0	0	5
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	53	53	67	67
Heavy Vehicles, %	2	2	4	4	3	3
Mvmt Flow	0	12	0	126	85	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	218	91	91	0	-	0
Stage 1	91	-	-	-	-	-
Stage 2	127	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.14	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.236	-	-	-
Pot Cap-1 Maneuver	770	967	1491	-	-	-
Stage 1	933	-	-	-	-	-
Stage 2	899	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	762	962	1484	-	-	-
Mov Cap-2 Maneuver	762	-	-	-	-	-
Stage 1	928	-	-	-	-	-
Stage 2	895	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1484	-	962	-	-
HCM Lane V/C Ratio	-	-	0.012	-	-
HCM Control Delay (s)	0	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-



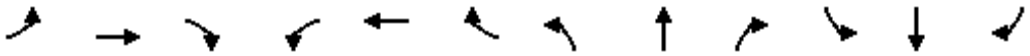
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	5	283	1	0	11	511	325	42	624	2
Future Volume (veh/h)	1	0	5	283	1	0	11	511	325	42	624	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1648	1648	1648	1885	1885	1885	1781	1781	1781	1752	1752	1752
Adj Flow Rate, veh/h	2	0	8	315	0	0	12	568	361	53	790	3
Peak Hour Factor	0.63	0.63	0.63	0.90	0.90	0.90	0.90	0.90	0.90	0.79	0.79	0.79
Percent Heavy Veh, %	17	17	17	1	1	1	8	8	8	10	10	10
Cap, veh/h	29	0	25	503	0	224	37	1366	821	122	1548	6
Arrive On Green	0.02	0.00	0.02	0.14	0.00	0.00	0.02	0.40	0.40	0.07	0.46	0.46
Sat Flow, veh/h	1570	0	1397	3591	0	1598	1697	3385	1510	1668	3401	13
Grp Volume(v), veh/h	2	0	8	315	0	0	12	568	361	53	387	406
Grp Sat Flow(s),veh/h/ln	1570	0	1397	1795	0	1598	1697	1692	1510	1668	1664	1749
Q Serve(g_s), s	0.1	0.0	0.3	4.1	0.0	0.0	0.3	5.9	7.1	1.5	8.1	8.1
Cycle Q Clear(g_c), s	0.1	0.0	0.3	4.1	0.0	0.0	0.3	5.9	7.1	1.5	8.1	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	29	0	25	503	0	224	37	1366	821	122	758	796
V/C Ratio(X)	0.07	0.00	0.32	0.63	0.00	0.00	0.33	0.42	0.44	0.43	0.51	0.51
Avail Cap(c_a), veh/h	223	0	198	1318	0	586	241	1366	821	237	758	796
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	23.9	20.0	0.0	0.0	23.8	10.5	6.8	21.9	9.5	9.5
Incr Delay (d2), s/veh	1.0	0.0	6.9	1.3	0.0	0.0	5.1	0.9	1.7	2.4	2.4	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	0.0	0.0	0.1	1.6	0.0	0.0	0.2	2.0	2.9	0.6	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	0.0	30.8	21.3	0.0	0.0	28.9	11.5	8.5	24.3	12.0	11.9
LnGrp LOS	C	A	C	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		10			315			941			846	
Approach Delay, s/veh		29.6			21.3			10.5			12.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	24.4		5.4	5.6	27.0		11.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.6	19.9		7.0	7.0	19.9		18.1				
Max Q Clear Time (g_c+I1), s	3.5	9.1		2.3	2.3	10.1		6.1				
Green Ext Time (p_c), s	0.0	3.9		0.0	0.0	3.5		0.9				

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th 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)	1	260	154	233	144	8	85	4	85	7	4	2
Future Volume (veh/h)	1	260	154	233	144	8	85	4	85	7	4	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.97
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	1841	1841	1914	1826	1899	1826	1796	1868	1796	1900	1976	1900
Adj Flow Rate, veh/h	1	289	171	248	153	9	101	5	101	11	6	3
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.84	0.84	0.84	0.65	0.65	0.65
Percent Heavy Veh, %	4	4	4	5	5	5	7	7	7	0	0	0
Cap, veh/h	1	389	337	292	180	11	290	44	222	347	182	75
Arrive On Green	0.21	0.21	0.21	0.26	0.26	0.26	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	6	1834	1592	1110	685	40	631	146	741	808	607	250
Grp Volume(v), veh/h	290	0	171	410	0	0	207	0	0	20	0	0
Grp Sat Flow(s),veh/h/ln	1840	0	1592	1835	0	0	1518	0	0	1665	0	0
Q Serve(g_s), s	7.9	0.0	5.1	11.3	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.9	0.0	5.1	11.3	0.0	0.0	5.7	0.0	0.0	0.4	0.0	0.0
Prop In Lane	0.00		1.00	0.60		0.02	0.49		0.49	0.55		0.15
Lane Grp Cap(c), veh/h	390	0	337	483	0	0	556	0	0	604	0	0
V/C Ratio(X)	0.74	0.00	0.51	0.85	0.00	0.00	0.37	0.00	0.00	0.03	0.00	0.00
Avail Cap(c_a), veh/h	552	0	478	551	0	0	556	0	0	604	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)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.7	0.0	18.6	18.6	0.0	0.0	15.0	0.0	0.0	13.2	0.0	0.0
Incr Delay (d2), s/veh	3.3	0.0	1.2	10.9	0.0	0.0	1.9	0.0	0.0	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	3.2	0.0	1.7	5.4	0.0	0.0	2.1	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	0.0	19.7	29.5	0.0	0.0	16.9	0.0	0.0	13.3	0.0	0.0
LnGrp LOS	C	A	B	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		461			410			207			20	
Approach Delay, s/veh		21.8			29.5			16.9			13.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.3		20.0		18.0		20.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0				
Max Q Clear Time (g_c+I1), s		9.9		2.4		13.3		7.7				
Green Ext Time (p_c), s		1.2		0.0		0.6		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			23.6									
HCM 6th LOS			C									

Intersection	
Intersection Delay, s/veh	52
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	244	80	44	93	7	41	224	7	108	354	0
Future Vol, veh/h	1	244	80	44	93	7	41	224	7	108	354	0
Peak Hour Factor	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles, %	6	6	6	4	4	4	1	1	1	1	1	1
Mvmt Flow	1	274	90	47	100	8	45	246	8	117	385	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	37	16.7	24.3	90.2
HCM LOS	E	C	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	15%	0%	0%	32%	0%	23%
Vol Thru, %	85%	0%	75%	68%	0%	77%
Vol Right, %	0%	100%	25%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	265	7	325	137	7	462
LT Vol	41	0	1	44	0	108
Through Vol	224	0	244	93	0	354
RT Vol	0	7	80	0	7	0
Lane Flow Rate	291	8	365	147	8	502
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.644	0.015	0.802	0.36	0.017	1.072
Departure Headway (Hd)	8.264	7.458	8.212	9.192	8.296	7.684
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	440	483	446	393	434	472
Service Time	5.964	5.158	6.212	6.892	5.996	5.741
HCM Lane V/C Ratio	0.661	0.017	0.818	0.374	0.018	1.064
HCM Control Delay	24.7	10.3	37	17	11.1	90.2
HCM Lane LOS	C	B	E	C	B	F
HCM 95th-tile Q	4.4	0	7.3	1.6	0.1	15.9

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	224	12	30	0	6	0	91	80	0	77	0
Future Vol, veh/h	37	224	12	30	0	6	0	91	80	0	77	0
Peak Hour Factor	0.77	0.77	0.77	0.83	0.83	0.83	0.90	0.90	0.90	0.89	0.89	0.89
Heavy Vehicles, %	5	5	5	8	8	8	3	3	3	3	3	3
Mvmt Flow	48	291	16	36	0	7	0	101	89	0	87	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.8	8.7	9.4	9
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	14%	83%	0%
Vol Thru, %	53%	82%	0%	100%
Vol Right, %	47%	4%	17%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	171	273	36	77
LT Vol	0	37	30	0
Through Vol	91	224	0	77
RT Vol	80	12	6	0
Lane Flow Rate	190	355	43	87
Geometry Grp	1	1	1	1
Degree of Util (X)	0.251	0.464	0.063	0.124
Departure Headway (Hd)	4.759	4.713	5.22	5.169
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	750	762	681	689
Service Time	2.816	2.764	3.295	3.238
HCM Lane V/C Ratio	0.253	0.466	0.063	0.126
HCM Control Delay	9.4	11.8	8.7	9
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	1	2.5	0.2	0.4

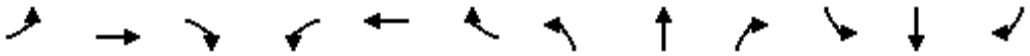
Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	2	324	26	10	299	3	54	0	250	6	0	32
Future Vol, veh/h	2	324	26	10	299	3	54	0	250	6	0	32
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	5	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	115	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	93	93	93	90	90	90	91	91	91
Heavy Vehicles, %	4	4	4	3	3	3	5	5	5	9	9	9
Mvmt Flow	2	364	29	11	322	3	60	0	278	7	0	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	337	0	-	364	0	0	731	727	369	870	726	336
Stage 1	-	-	-	-	-	-	368	368	-	358	358	-
Stage 2	-	-	-	-	-	-	363	359	-	512	368	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.15	6.55	6.25	7.19	6.59	6.29
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.19	5.59	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.19	5.59	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.545	4.045	3.345	3.581	4.081	3.381
Pot Cap-1 Maneuver	1211	-	0	1189	-	-	334	347	670	264	343	690
Stage 1	-	-	0	-	-	-	646	616	-	646	616	-
Stage 2	-	-	0	-	-	-	650	622	-	532	609	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1197	-	-	1189	-	-	314	339	667	150	335	682
Mov Cap-2 Maneuver	-	-	-	-	-	-	314	339	-	150	335	-
Stage 1	-	-	-	-	-	-	645	615	-	638	602	-
Stage 2	-	-	-	-	-	-	610	608	-	308	608	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	15.1	14.1
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	314	667	1197	-	1189	-	-	437
HCM Lane V/C Ratio	0.191	0.416	0.002	-	0.009	-	-	0.096
HCM Control Delay (s)	19.2	14.2	8	0	8.1	0	-	14.1
HCM Lane LOS	C	B	A	A	A	A	-	B
HCM 95th %tile Q(veh)	0.7	2.1	0	-	0	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	670	0	0	498	571	0	0	0	267	0	154
Future Volume (veh/h)	164	670	0	0	498	571	0	0	0	267	0	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1811	1811	1811	1811	1811	1811	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	169	691	0	0	586	0	0	0	0	236	89	173
Peak Hour Factor	0.97	0.97	0.97	0.85	0.85	0.85	0.92	0.92	0.92	0.89	0.89	0.89
Percent Heavy Veh, %	6	6	6	6	6	6	0	0	0	3	3	3
Cap, veh/h	259	1873	0	4	960		0	453	0	605	134	261
Arrive On Green	0.15	0.54	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.24	0.24	0.24
Sat Flow, veh/h	1725	3532	0	1725	3532	0	0	1900	0	1767	563	1095
Grp Volume(v), veh/h	169	691	0	0	586	0	0	0	0	236	0	262
Grp Sat Flow(s),veh/h/ln	1725	1721	0	1725	1721	0	0	1900	0	1767	0	1658
Q Serve(g_s), s	3.6	4.5	0.0	0.0	5.8	0.0	0.0	0.0	0.0	4.6	0.0	5.6
Cycle Q Clear(g_c), s	3.6	4.5	0.0	0.0	5.8	0.0	0.0	0.0	0.0	4.6	0.0	5.6
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.66
Lane Grp Cap(c), veh/h	259	1873	0	4	960		0	453	0	605	0	395
V/C Ratio(X)	0.65	0.37	0.00	0.00	0.61		0.00	0.00	0.00	0.39	0.00	0.66
Avail Cap(c_a), veh/h	375	1935	0	309	1803		0	874	0	997	0	763
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.7	5.1	0.0	0.0	12.3	0.0	0.0	0.0	0.0	13.1	0.0	13.5
Incr Delay (d2), s/veh	2.8	0.1	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.4	0.0	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	1.3	0.7	0.0	0.0	1.6	0.0	0.0	0.0	0.0	1.5	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	5.2	0.0	0.0	12.9	0.0	0.0	0.0	0.0	13.5	0.0	15.4
LnGrp LOS	B	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		860			586	A		0			498	
Approach Delay, s/veh		7.8			12.9			0.0			14.5	
Approach LOS		A			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	25.3		13.8	10.4	14.9		13.8				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	22.0		18.0	8.5	20.5		18.0				
Max Q Clear Time (g_c+I1), s	0.0	6.5		7.6	5.6	7.8		0.0				
Green Ext Time (p_c), s	0.0	4.0		1.7	0.1	2.9		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			11.0									
HCM 6th LOS			B									

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	50.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	115	613	7	20	182	6	2	164	9	250	61	174
Future Vol, veh/h	115	613	7	20	182	6	2	164	9	250	61	174
Peak Hour Factor	0.88	0.88	0.88	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86
Heavy Vehicles, %	7	7	7	3	3	3	6	6	6	2	2	2
Mvmt Flow	131	697	8	24	217	7	2	182	10	291	71	202
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	74.6	23.8	19.7	36.2
HCM LOS	F	C	C	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	1%	0%	27%	0%	10%	0%	80%	0%
Vol Thru, %	99%	0%	73%	98%	90%	0%	20%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	166	9	422	314	202	6	311	174
LT Vol	2	0	115	0	20	0	250	0
Through Vol	164	0	307	307	182	0	61	0
RT Vol	0	9	0	7	0	6	0	174
Lane Flow Rate	184	10	479	356	240	7	362	202
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.468	0.023	1.104	0.805	0.592	0.016	0.867	0.421
Departure Headway (Hd)	9.387	8.65	8.296	8.139	9.131	8.35	8.833	7.693
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	385	416	441	449	397	431	412	471
Service Time	7.087	6.35	5.996	5.839	6.831	6.05	6.533	5.393
HCM Lane V/C Ratio	0.478	0.024	1.086	0.793	0.605	0.016	0.879	0.429
HCM Control Delay	20.1	11.6	102.7	36.8	24.2	11.2	47.5	15.9
HCM Lane LOS	C	B	F	E	C	B	E	C
HCM 95th-tile Q	2.4	0.1	16.5	7.4	3.7	0	8.6	2.1

Intersection	
Int Delay, s/veh	27

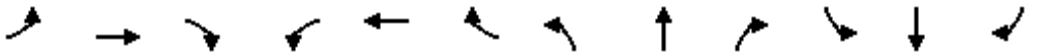
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	59	242	589	119	233	53
Future Vol, veh/h	59	242	589	119	233	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	96	96	84	84
Heavy Vehicles, %	22	22	2	2	2	2
Mvmt Flow	66	272	614	124	277	63

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1629	-	277	0	-	0
Stage 1	277	-	-	-	-	-
Stage 2	1352	-	-	-	-	-
Critical Hdwy	6.62	-	4.12	-	-	-
Critical Hdwy Stg 1	5.62	-	-	-	-	-
Critical Hdwy Stg 2	5.62	-	-	-	-	-
Follow-up Hdwy	3.698	-	2.218	-	-	-
Pot Cap-1 Maneuver	100	0	1286	-	-	0
Stage 1	726	0	-	-	-	0
Stage 2	218	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 52	-	1286	-	-	-
Mov Cap-2 Maneuver	~ 52	-	-	-	-	-
Stage 1	380	-	-	-	-	-
Stage 2	218	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 344.7	8.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1286	-	52	-	-
HCM Lane V/C Ratio	0.477	-	1.275	-	-
HCM Control Delay (s)	10.3	-	$ 344.7	0	-
HCM Lane LOS	B	-	F	A	-
HCM 95th %tile Q(veh)	2.7	-	6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	710	41	35	806	436	27	86	22	175	64	236
Future Volume (veh/h)	186	710	41	35	806	436	27	86	22	175	64	236
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.99	1.00		0.99
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	1826	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1752
Adj Flow Rate, veh/h	202	772	45	43	983	532	36	115	29	199	73	268
Peak Hour Factor	0.92	0.92	0.92	0.82	0.82	0.82	0.75	0.75	0.75	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	10	10	10
Cap, veh/h	224	1340	589	100	1108	475	429	342	86	460	487	601
Arrive On Green	0.13	0.39	0.39	0.06	0.31	0.31	0.05	0.23	0.23	0.10	0.28	0.28
Sat Flow, veh/h	1739	3469	1525	1767	3526	1512	1781	1496	377	1668	1752	1475
Grp Volume(v), veh/h	202	772	45	43	983	532	36	0	144	199	73	268
Grp Sat Flow(s),veh/h/ln	1739	1735	1525	1767	1763	1512	1781	0	1874	1668	1752	1475
Q Serve(g_s), s	8.0	12.3	1.3	1.6	18.6	22.0	1.0	0.0	4.5	6.2	2.2	9.2
Cycle Q Clear(g_c), s	8.0	12.3	1.3	1.6	18.6	22.0	1.0	0.0	4.5	6.2	2.2	9.2
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	224	1340	589	100	1108	475	429	0	428	460	487	601
V/C Ratio(X)	0.90	0.58	0.08	0.43	0.89	1.12	0.08	0.00	0.34	0.43	0.15	0.45
Avail Cap(c_a), veh/h	224	1340	589	177	1108	475	517	0	428	460	487	601
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	1.00	1.00
Uniform Delay (d), s/veh	30.1	17.0	13.6	31.9	22.8	24.0	18.6	0.0	22.6	17.1	19.0	15.1
Incr Delay (d2), s/veh	35.3	0.6	0.1	2.9	8.9	78.1	0.1	0.0	2.1	0.6	0.6	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	5.2	4.3	0.4	0.7	8.0	17.5	0.4	0.0	2.1	2.3	0.9	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.4	17.6	13.6	34.8	31.8	102.1	18.7	0.0	24.7	17.8	19.7	17.4
LnGrp LOS	E	B	B	C	C	F	B	A	C	B	B	B
Approach Vol, veh/h		1019			1558			180			540	
Approach Delay, s/veh		26.9			55.9			23.5			17.9	
Approach LOS		C			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	31.0	7.5	23.5	13.0	26.0	11.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	24.0	7.0	16.0	9.0	22.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	14.3	3.0	11.2	10.0	24.0	8.2	6.5
Green Ext Time (p_c), s	0.0	3.5	0.0	0.6	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	38.9
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	14.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	1	29	1	98	2	749	88	174	923	0
Future Vol, veh/h	0	1	1	29	1	98	2	749	88	174	923	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	-	-	-	-	-	-	1000	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	87	87	87	93	93	93	87	87	87
Heavy Vehicles, %	2	2	2	10	10	10	10	10	10	6	6	6
Mvmt Flow	0	1	1	33	1	113	2	805	95	200	1061	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1868	2365	531	1788	2318	450	1061	0	0	900	0	0
Stage 1	1461	1461	-	857	857	-	-	-	-	-	-	-
Stage 2	407	904	-	931	1461	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.7	6.7	7.1	4.3	-	-	4.22	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.6	4.1	3.4	2.3	-	-	2.26	-	-
Pot Cap-1 Maneuver	45	35	493	47	33	535	607	-	-	726	-	-
Stage 1	135	192	-	302	354	-	-	-	-	-	-	-
Stage 2	592	354	-	272	178	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	27	25	493	36	24	535	607	-	-	726	-	-
Mov Cap-2 Maneuver	27	25	-	36	24	-	-	-	-	-	-	-
Stage 1	135	139	-	301	353	-	-	-	-	-	-	-
Stage 2	464	353	-	195	129	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	83.5	207.4	0	1.9
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	607	-	-	48	124	726	-	-
HCM Lane V/C Ratio	0.004	-	-	0.045	1.187	0.275	-	-
HCM Control Delay (s)	11	-	-	83.5	207.4	11.8	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	9	1.1	-	-

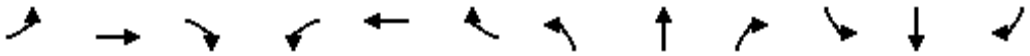
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	0	58	7	0	4	7	812	4	8	1017	7
Future Vol, veh/h	31	0	58	7	0	4	7	812	4	8	1017	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	-	-	-	100	-	0	140	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	67	67	67	90	90	90	92	92	92
Heavy Vehicles, %	3	3	3	27	27	27	9	9	9	6	6	6
Mvmt Flow	39	0	73	10	0	6	8	902	4	9	1105	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1594	2049	557	1491	-	453	1113	0	0	906	0	0
Stage 1	1127	1127	-	920	-	-	-	-	-	-	-	-
Stage 2	467	922	-	571	-	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	8.04	-	7.44	4.28	-	-	4.22	-	-
Critical Hdwy Stg 1	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.77	-	3.57	2.29	-	-	2.26	-	-
Pot Cap-1 Maneuver	71	54	471	68	0	491	584	-	-	722	-	-
Stage 1	216	276	-	246	0	-	-	-	-	-	-	-
Stage 2	543	345	-	415	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	69	53	471	56	-	491	584	-	-	722	-	-
Mov Cap-2 Maneuver	69	53	-	56	-	-	-	-	-	-	-	-
Stage 1	213	273	-	243	-	-	-	-	-	-	-	-
Stage 2	529	340	-	347	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	72.1	57.6	0.1	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	584	-	-	155	56	491	722	-	-
HCM Lane V/C Ratio	0.013	-	-	0.718	0.187	0.012	0.012	-	-
HCM Control Delay (s)	11.2	-	-	72.1	83.5	12.4	10	-	-
HCM Lane LOS	B	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	4.3	0.6	0	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	110	32	144	91	138	41	616	145	443	776	21
Future Volume (veh/h)	18	110	32	144	91	138	41	616	145	443	776	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
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	1870	1870	1870	1781	1781	1853	1811	1811	1811	1841	1841	1841
Adj Flow Rate, veh/h	23	141	41	164	103	157	45	677	159	482	843	23
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	8	8	8	6	6	6	4	4	4
Cap, veh/h	188	190	55	202	267	236	103	1025	455	597	1440	39
Arrive On Green	0.11	0.14	0.14	0.12	0.15	0.15	0.06	0.30	0.30	0.18	0.41	0.41
Sat Flow, veh/h	1781	1393	405	1697	1781	1570	1725	3441	1527	3401	3477	95
Grp Volume(v), veh/h	23	0	182	164	103	157	45	677	159	482	424	442
Grp Sat Flow(s),veh/h/ln	1781	0	1797	1697	1781	1570	1725	1721	1527	1700	1749	1823
Q Serve(g_s), s	0.8	0.0	6.5	6.3	3.5	6.3	1.7	11.4	5.4	9.0	12.5	12.5
Cycle Q Clear(g_c), s	0.8	0.0	6.5	6.3	3.5	6.3	1.7	11.4	5.4	9.0	12.5	12.5
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	188	0	245	202	267	236	103	1025	455	597	724	755
V/C Ratio(X)	0.12	0.00	0.74	0.81	0.39	0.67	0.44	0.66	0.35	0.81	0.59	0.59
Avail Cap(c_a), veh/h	188	0	487	243	550	485	182	1036	460	743	724	755
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	27.6	28.5	25.5	26.6	30.2	20.4	18.3	26.3	15.0	15.0
Incr Delay (d2), s/veh	0.3	0.0	4.4	15.9	0.9	3.2	2.9	1.5	0.5	5.3	3.4	3.3
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	0.0	2.9	3.2	1.4	2.3	0.7	4.2	1.7	3.7	4.6	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	0.0	32.0	44.4	26.4	29.9	33.1	21.9	18.7	31.6	18.5	18.4
LnGrp LOS	C	A	C	D	C	C	C	C	B	C	B	B
Approach Vol, veh/h		205			424			881			1348	
Approach Delay, s/veh		31.4			34.7			21.9			23.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	24.3	12.4	13.6	8.4	32.0	11.5	14.5
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	14.5	20.0	9.5	18.0	7.0	27.5	7.0	20.5
Max Q Clear Time (g_c+I1), s	11.0	13.4	8.3	8.5	3.7	14.5	2.8	8.3
Green Ext Time (p_c), s	0.6	2.6	0.0	0.6	0.0	4.0	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	154	50	31	52	36	32	837	74	43	817	53
Future Volume (veh/h)	97	154	50	31	52	36	32	837	74	43	817	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.97	1.00		0.95
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	1870	1945	1870	1870	1870	1870	1884	1811	1811	1856	1856	1856
Adj Flow Rate, veh/h	101	160	52	40	67	46	34	881	78	48	908	59
Peak Hour Factor	0.96	0.96	0.96	0.78	0.78	0.78	0.95	0.95	0.95	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	6	6	6	3	3	3
Cap, veh/h	88	108	487	87	109	495	92	1200	106	116	1308	85
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.05	0.38	0.38	0.07	0.39	0.39
Sat Flow, veh/h	0	336	1525	0	341	1549	1794	3190	282	1767	3349	218
Grp Volume(v), veh/h	261	0	52	107	0	46	34	475	484	48	478	489
Grp Sat Flow(s),veh/h/ln	336	0	1525	341	0	1549	1794	1721	1752	1767	1763	1804
Q Serve(g_s), s	0.0	0.0	1.4	0.0	0.0	1.2	1.0	13.5	13.5	1.5	12.8	12.8
Cycle Q Clear(g_c), s	18.1	0.0	1.4	18.1	0.0	1.2	1.0	13.5	13.5	1.5	12.8	12.8
Prop In Lane	0.39		1.00	0.37		1.00	1.00		0.16	1.00		0.12
Lane Grp Cap(c), veh/h	196	0	487	196	0	495	92	647	659	116	688	705
V/C Ratio(X)	1.33	0.00	0.11	0.54	0.00	0.09	0.37	0.73	0.73	0.41	0.69	0.69
Avail Cap(c_a), veh/h	196	0	487	196	0	495	225	647	659	222	688	705
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	13.6	15.8	0.0	13.5	26.0	15.2	15.2	25.4	14.4	14.4
Incr Delay (d2), s/veh	180.5	0.0	0.1	3.1	0.0	0.1	2.5	7.2	7.1	2.4	5.7	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	12.4	0.0	0.4	1.1	0.0	0.4	0.5	6.0	6.1	0.6	5.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	199.7	0.0	13.7	18.9	0.0	13.6	28.4	22.5	22.3	27.8	20.1	20.0
LnGrp LOS	F	A	B	B	A	B	C	C	C	C	C	B
Approach Vol, veh/h		313			153			993			1015	
Approach Delay, s/veh		168.8			17.3			22.6			20.4	
Approach LOS		F			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	25.8		22.6	7.4	26.6		22.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.3		18.1	7.1	21.3		18.1
Max Q Clear Time (g_c+I1), s	3.5	15.5		20.1	3.0	14.8		20.1
Green Ext Time (p_c), s	0.0	3.1		0.0	0.0	3.0		0.0

Intersection Summary		
HCM 6th Ctrl Delay		39.9
HCM 6th LOS		D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	65	150	380	244	626	0	0	766	189
Future Volume (veh/h)	0	0	0	65	150	380	244	626	0	0	766	189
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1826	1826	1899	1856	1856	0	0	1841	1841
Adj Flow Rate, veh/h				69	160	404	268	688	0	0	833	205
Peak Hour Factor				0.94	0.94	0.94	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %				5	5	5	3	3	0	0	4	4
Cap, veh/h				123	286	362	307	2370	0	0	1245	306
Arrive On Green				0.23	0.23	0.23	0.17	0.67	0.00	0.00	0.45	0.45
Sat Flow, veh/h				542	1257	1588	1767	3618	0	0	2867	683
Grp Volume(v), veh/h				229	0	404	268	688	0	0	525	513
Grp Sat Flow(s),veh/h/ln				1799	0	1588	1767	1763	0	0	1749	1710
Q Serve(g_s), s				10.1	0.0	20.5	13.3	7.2	0.0	0.0	21.3	21.3
Cycle Q Clear(g_c), s				10.1	0.0	20.5	13.3	7.2	0.0	0.0	21.3	21.3
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.40
Lane Grp Cap(c), veh/h				410	0	362	307	2370	0	0	784	767
V/C Ratio(X)				0.56	0.00	1.12	0.87	0.29	0.00	0.00	0.67	0.67
Avail Cap(c_a), veh/h				410	0	362	403	2370	0	0	784	767
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				30.7	0.0	34.8	36.2	6.0	0.0	0.0	19.6	19.6
Incr Delay (d2), s/veh				1.7	0.0	82.7	15.1	0.3	0.0	0.0	4.5	4.6
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				4.5	0.0	16.0	6.9	2.4	0.0	0.0	9.2	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				32.5	0.0	117.5	51.3	6.3	0.0	0.0	24.1	24.2
LnGrp LOS				C	A	F	D	A	A	A	C	C
Approach Vol, veh/h					633			956			1038	
Approach Delay, s/veh					86.7			18.9			24.1	
Approach LOS					F			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	65.0		20.1	44.9		25.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	60.5		20.5	35.5		20.5
Max Q Clear Time (g_c+I1), s	9.2		15.3	23.3		22.5
Green Ext Time (p_c), s	5.7		0.4	5.5		0.0

Intersection Summary	
HCM 6th Ctrl Delay	37.3
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	9	182	0	0	0	0	762	172	328	503	0
Future Volume (veh/h)	108	9	182	0	0	0	0	762	172	328	503	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
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	1900	1781	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	124	10	209				0	876	198	360	553	0
Peak Hour Factor	0.87	0.87	0.87				0.87	0.87	0.87	0.91	0.91	0.91
Percent Heavy Veh, %	0	8	0				0	2	2	2	2	0
Cap, veh/h	262	21	251				0	1598	712	405	2592	0
Arrive On Green	0.17	0.17	0.17				0.00	0.45	0.45	0.23	0.73	0.00
Sat Flow, veh/h	1576	127	1510				0	3647	1583	1781	3647	0
Grp Volume(v), veh/h	134	0	209				0	876	198	360	553	0
Grp Sat Flow(s),veh/h/ln	1703	0	1510				0	1777	1583	1781	1777	0
Q Serve(g_s), s	6.2	0.0	11.6				0.0	15.6	6.8	16.9	4.3	0.0
Cycle Q Clear(g_c), s	6.2	0.0	11.6				0.0	15.6	6.8	16.9	4.3	0.0
Prop In Lane	0.93		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	284	0	251				0	1598	712	405	2592	0
V/C Ratio(X)	0.47	0.00	0.83				0.00	0.55	0.28	0.89	0.21	0.00
Avail Cap(c_a), veh/h	355	0	315				0	1598	712	567	2592	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	0.0	34.8				0.0	17.4	15.0	32.3	3.8	0.0
Incr Delay (d2), s/veh	1.2	0.0	14.1				0.0	1.4	1.0	12.1	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
%ile BackOfQ(50%),veh/ln	2.6	0.0	5.1				0.0	6.3	2.5	8.4	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	0.0	48.9				0.0	18.7	15.9	44.4	3.9	0.0
LnGrp LOS	C	A	D				A	B	B	D	A	A
Approach Vol, veh/h		343						1074			913	
Approach Delay, s/veh		43.0						18.2			19.9	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	24.2	43.3	18.9	67.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	27.5	31.0	18.0	63.0
Max Q Clear Time (g_c+I1), s	19.9	17.6	13.6	6.3
Green Ext Time (p_c), s	0.8	5.7	0.8	4.3

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	156	24	48	28	81	3	565	33	107	410	12
Future Volume (veh/h)	51	156	24	48	28	81	3	565	33	107	410	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.99	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	168	26	52	30	88	3	628	37	115	441	13
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	315	49	269	83	244	543	1414	83	563	1838	54
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.01	0.41	0.41	0.11	0.52	0.52
Sat Flow, veh/h	1267	1576	244	1184	417	1223	1781	3409	201	1781	3524	104
Grp Volume(v), veh/h	55	0	194	52	0	118	3	327	338	115	222	232
Grp Sat Flow(s),veh/h/ln	1267	0	1820	1184	0	1639	1781	1777	1833	1781	1777	1851
Q Serve(g_s), s	1.9	0.0	4.7	2.0	0.0	3.1	0.0	6.5	6.5	1.5	3.4	3.4
Cycle Q Clear(g_c), s	5.0	0.0	4.7	6.8	0.0	3.1	0.0	6.5	6.5	1.5	3.4	3.4
Prop In Lane	1.00		0.13	1.00		0.75	1.00		0.11	1.00		0.06
Lane Grp Cap(c), veh/h	320	0	363	269	0	327	543	737	760	563	927	965
V/C Ratio(X)	0.17	0.00	0.53	0.19	0.00	0.36	0.01	0.44	0.44	0.20	0.24	0.24
Avail Cap(c_a), veh/h	541	0	681	476	0	614	789	737	760	633	927	965
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	17.7	20.7	0.0	17.1	8.3	10.4	10.4	5.8	6.5	6.5
Incr Delay (d2), s/veh	0.3	0.0	1.2	0.3	0.0	0.7	0.0	1.9	1.9	0.2	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	0.5	0.0	1.9	0.5	0.0	1.1	0.0	2.4	2.4	0.4	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	0.0	18.9	21.1	0.0	17.7	8.3	12.3	12.3	6.0	7.1	7.1
LnGrp LOS	B	A	B	C	A	B	A	B	B	A	A	A
Approach Vol, veh/h		249			170			668			569	
Approach Delay, s/veh		19.1			18.8			12.3			6.8	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	25.0		14.4	4.8	30.3		14.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	20.5		18.5	7.1	20.9		18.5				
Max Q Clear Time (g_c+I1), s	13.5	8.5		7.0	2.0	5.4		8.8				
Green Ext Time (p_c), s	0.1	3.1		0.9	0.0	2.3		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		12.1
HCM 6th LOS		B

Intersection	
Intersection Delay, s/veh	44
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	71	440	241	89	248	0	0	304	92
Future Vol, veh/h	0	0	0	71	440	241	89	248	0	0	304	92
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	0	0	81	500	274	113	314	0	0	345	105
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	52.3	46.7	25.7
HCM LOS	F	E	D

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	26%	24%	0%	0%	0%
Vol Thru, %	74%	76%	48%	100%	0%
Vol Right, %	0%	0%	52%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	337	291	461	304	92
LT Vol	89	71	0	0	0
Through Vol	248	220	220	304	0
RT Vol	0	0	241	0	92
Lane Flow Rate	427	331	524	345	105
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.892	0.685	1.013	0.744	0.204
Departure Headway (Hd)	7.525	7.462	6.963	7.752	7.03
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	482	483	519	463	507
Service Time	5.602	5.257	4.757	5.543	4.821
HCM Lane V/C Ratio	0.886	0.685	1.01	0.745	0.207
HCM Control Delay	46.7	25.1	69.5	30	11.6
HCM Lane LOS	E	D	F	D	B
HCM 95th-tile Q	9.8	5.1	14.3	6.1	0.8

Intersection	
Intersection Delay, s/veh	26.1
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	94	89	67	67	37	2	60	267	115	5	202	16
Future Vol, veh/h	94	89	67	67	37	2	60	267	115	5	202	16
Peak Hour Factor	0.97	0.97	0.97	0.88	0.88	0.88	0.78	0.78	0.78	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	97	92	69	76	42	2	77	342	147	6	253	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	15.7	12.7	39	15.2
HCM LOS	C	B	E	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	38%	63%	2%
Vol Thru, %	60%	36%	35%	91%
Vol Right, %	26%	27%	2%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	442	250	106	223
LT Vol	60	94	67	5
Through Vol	267	89	37	202
RT Vol	115	67	2	16
Lane Flow Rate	567	258	120	279
Geometry Grp	1	1	1	1
Degree of Util (X)	0.897	0.476	0.243	0.487
Departure Headway (Hd)	5.701	6.652	7.275	6.295
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	635	541	491	571
Service Time	3.745	4.709	5.348	4.353
HCM Lane V/C Ratio	0.893	0.477	0.244	0.489
HCM Control Delay	39	15.7	12.7	15.2
HCM Lane LOS	E	C	B	C
HCM 95th-tile Q	11	2.5	0.9	2.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	588	22	127	408	52	37	172	133	36	83	21
Future Volume (veh/h)	69	588	22	127	408	52	37	172	133	36	83	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	1.00		0.99
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	1781	1781	1781	1826	1826	1826	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	653	24	148	474	60	45	207	160	40	91	23
Peak Hour Factor	0.90	0.90	0.90	0.86	0.86	0.86	0.83	0.83	0.83	0.91	0.91	0.91
Percent Heavy Veh, %	8	8	8	5	5	5	2	2	2	2	2	2
Cap, veh/h	160	938	34	221	971	122	118	283	201	178	352	76
Arrive On Green	0.09	0.28	0.28	0.13	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1697	3328	122	1739	3087	389	109	925	656	269	1153	250
Grp Volume(v), veh/h	77	332	345	148	265	269	412	0	0	154	0	0
Grp Sat Flow(s),veh/h/ln	1697	1692	1758	1739	1735	1741	1690	0	0	1672	0	0
Q Serve(g_s), s	2.0	8.3	8.3	3.8	5.8	5.9	4.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.0	8.3	8.3	3.8	5.8	5.9	10.5	0.0	0.0	3.0	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.22	0.11		0.39	0.26		0.15
Lane Grp Cap(c), veh/h	160	477	495	221	546	548	601	0	0	607	0	0
V/C Ratio(X)	0.48	0.70	0.70	0.67	0.49	0.49	0.69	0.00	0.00	0.25	0.00	0.00
Avail Cap(c_a), veh/h	251	698	725	313	771	773	743	0	0	735	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.3	15.2	15.2	19.7	13.1	13.1	15.0	0.0	0.0	12.4	0.0	0.0
Incr Delay (d2), s/veh	2.2	1.8	1.8	3.5	0.7	0.7	1.9	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.7	2.8	1.5	1.8	1.8	3.6	0.0	0.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	17.0	16.9	23.2	13.8	13.8	16.9	0.0	0.0	12.7	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		754			682			412			154	
Approach Delay, s/veh		17.5			15.8			16.9			12.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.5	17.8		18.9	9.0	19.4		18.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.5	19.5		18.5	7.0	21.0		18.5
Max Q Clear Time (g_c+I1), s	5.8	10.3		5.0	4.0	7.9		12.5
Green Ext Time (p_c), s	0.1	2.6		0.6	0.0	2.4		1.3

Intersection Summary		
HCM 6th Ctrl Delay		16.5
HCM 6th LOS		B

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	4	2	138	87	4
Future Vol, veh/h	6	4	2	138	87	4
Conflicting Peds, #/hr	0	0	2	0	0	2
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	56	56	74	74	65	65
Heavy Vehicles, %	10	10	1	1	2	2
Mvmt Flow	11	7	3	186	134	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	331	139	142	0	-	0
Stage 1	139	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.11	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.209	-	-	-
Pot Cap-1 Maneuver	648	888	1447	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	822	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	644	886	1444	-	-	-
Mov Cap-2 Maneuver	644	-	-	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	820	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1444	-	723	-	-
HCM Lane V/C Ratio	0.002	-	0.025	-	-
HCM Control Delay (s)	7.5	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	244	14	60	80	3	10	0	140	10	4	1
Future Vol, veh/h	0	244	14	60	80	3	10	0	140	10	4	1
Peak Hour Factor	0.86	0.86	0.86	0.83	0.83	0.83	0.92	0.92	0.92	0.36	0.36	0.36
Heavy Vehicles, %	3	3	3	10	10	10	4	4	4	33	33	33
Mvmt Flow	0	284	16	72	96	4	11	0	152	28	11	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.6	9.6	8.9	9.4
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	0%	42%	67%
Vol Thru, %	0%	95%	56%	27%
Vol Right, %	93%	5%	2%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	150	258	143	15
LT Vol	10	0	60	10
Through Vol	0	244	80	4
RT Vol	140	14	3	1
Lane Flow Rate	163	300	172	42
Geometry Grp	1	1	1	1
Degree of Util (X)	0.208	0.386	0.239	0.068
Departure Headway (Hd)	4.6	4.631	4.991	5.897
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	776	774	715	603
Service Time	2.658	2.681	3.048	3.973
HCM Lane V/C Ratio	0.21	0.388	0.241	0.07
HCM Control Delay	8.9	10.6	9.6	9.4
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.8	1.8	0.9	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	4	22	243	0	0	10	606	273	87	729	0
Future Volume (veh/h)	1	4	22	243	0	0	10	606	273	87	729	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1900	1900	1900	1811	1811	1811	1826	1826	1826
Adj Flow Rate, veh/h	1	5	29	296	0	0	11	645	290	93	776	0
Peak Hour Factor	0.75	0.75	0.75	0.82	0.82	0.82	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	5	5	5
Cap, veh/h	17	84	86	477	0	212	34	1281	773	172	1566	0
Arrive On Green	0.05	0.05	0.05	0.13	0.00	0.00	0.02	0.37	0.37	0.10	0.45	0.00
Sat Flow, veh/h	314	1570	1610	3619	0	1610	1725	3441	1533	1739	3561	0
Grp Volume(v), veh/h	6	0	29	296	0	0	11	645	290	93	776	0
Grp Sat Flow(s),veh/h/ln	1884	0	1610	1810	0	1610	1725	1721	1533	1739	1735	0
Q Serve(g_s), s	0.2	0.0	0.9	4.1	0.0	0.0	0.3	7.6	6.1	2.7	8.3	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.9	4.1	0.0	0.0	0.3	7.6	6.1	2.7	8.3	0.0
Prop In Lane	0.17		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	100	0	86	477	0	212	34	1281	773	172	1566	0
V/C Ratio(X)	0.06	0.00	0.34	0.62	0.00	0.00	0.32	0.50	0.38	0.54	0.50	0.00
Avail Cap(c_a), veh/h	252	0	215	1243	0	553	230	1281	773	249	1566	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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.6	0.0	23.9	21.5	0.0	0.0	25.3	12.7	7.9	22.5	10.2	0.0
Incr Delay (d2), s/veh	0.2	0.0	2.3	1.3	0.0	0.0	5.3	1.4	1.4	2.6	1.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4	1.7	0.0	0.0	0.2	2.7	2.5	1.1	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	0.0	26.2	22.8	0.0	0.0	30.7	14.1	9.3	25.1	11.3	0.0
LnGrp LOS	C	A	C	C	A	A	C	B	A	C	B	A
Approach Vol, veh/h		35			296			946			869	
Approach Delay, s/veh		25.8			22.8			12.8			12.8	
Approach LOS		C			C			B			B	

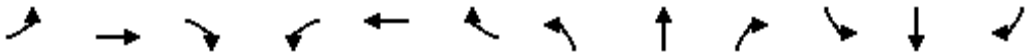
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	24.0		7.3	5.5	28.2		11.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	19.5		7.0	7.0	20.0		18.0
Max Q Clear Time (g_c+I1), s	4.7	9.6		2.9	2.3	10.3		6.1
Green Ext Time (p_c), s	0.0	3.9		0.0	0.0	3.7		0.8

Intersection Summary		
HCM 6th Ctrl Delay		14.4
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

EXISTING + PROJECT SPECIFIC PLAN SCENARIO ONE



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	220	155	420	213	15	88	3	116	21	17	4
Future Volume (veh/h)	0	220	155	420	213	15	88	3	116	21	17	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1693	1693	1359	1796	1868	1796	1856	1930	1856	1870	1945	1870
Adj Flow Rate, veh/h	0	268	189	483	245	17	99	3	130	37	30	7
Peak Hour Factor	0.82	0.82	0.82	0.87	0.87	0.87	0.89	0.89	0.89	0.57	0.57	0.57
Percent Heavy Veh, %	14	14	40	7	7	7	3	3	3	2	2	2
Cap, veh/h	0	360	243	334	170	12	248	41	252	299	226	45
Arrive On Green	0.00	0.21	0.21	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	0	1693	1141	1168	593	41	546	144	880	707	789	156
Grp Volume(v), veh/h	0	268	189	745	0	0	232	0	0	74	0	0
Grp Sat Flow(s),veh/h/ln	0	1693	1141	1802	0	0	1570	0	0	1652	0	0
Q Serve(g_s), s	0.0	8.3	8.7	16.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.3	8.7	16.0	0.0	0.0	6.7	0.0	0.0	1.6	0.0	0.0
Prop In Lane	0.00		1.00	0.65		0.02	0.43		0.56	0.50		0.09
Lane Grp Cap(c), veh/h	0	360	243	516	0	0	541	0	0	570	0	0
V/C Ratio(X)	0.00	0.74	0.78	1.44	0.00	0.00	0.43	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	0	485	327	516	0	0	541	0	0	570	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)	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	20.6	20.8	19.9	0.0	0.0	16.5	0.0	0.0	14.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.2	8.2	210.6	0.0	0.0	2.5	0.0	0.0	0.5	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	0.0	3.2	2.6	35.8	0.0	0.0	2.6	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	24.8	28.9	230.5	0.0	0.0	19.0	0.0	0.0	15.3	0.0	0.0
LnGrp LOS	A	C	C	F	A	A	B	A	A	B	A	A
Approach Vol, veh/h		457			745			232			74	
Approach Delay, s/veh		26.5			230.5			19.0			15.3	
Approach LOS		C			F			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.9		20.0		20.0		20.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0				
Max Q Clear Time (g_c+I1), s		10.7		3.6		18.0		8.7				
Green Ext Time (p_c), s		1.0		0.2		0.0		0.8				

Intersection Summary												
HCM 6th Ctrl Delay			125.6									
HCM 6th LOS			F									

Intersection	
Intersection Delay, s/veh	157
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	475	80	62	125	5	41	85	28	137	359	0
Future Vol, veh/h	2	475	80	62	125	5	41	85	28	137	359	0
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	8	15	8	2	2	2	3	3	4	2	2	2
Mvmt Flow	2	546	92	75	151	6	49	102	34	165	433	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	219.4	24.5	18.7	184.4
HCM LOS	F	C	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	33%	0%	0%	33%	0%	28%
Vol Thru, %	67%	0%	85%	67%	0%	72%
Vol Right, %	0%	100%	14%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	126	28	557	187	5	496
LT Vol	41	0	2	62	0	137
Through Vol	85	0	475	125	0	359
RT Vol	0	28	80	0	5	0
Lane Flow Rate	152	34	640	225	6	598
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.377	0.076	1.402	0.542	0.013	1.315
Departure Headway (Hd)	10.813	9.902	8.778	10.445	9.532	8.949
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	335	364	423	347	378	412
Service Time	8.513	7.602	6.778	8.145	7.232	6.949
HCM Lane V/C Ratio	0.454	0.093	1.513	0.648	0.016	1.451
HCM Control Delay	19.9	13.4	219.4	24.8	12.4	184.4
HCM Lane LOS	C	B	F	C	B	F
HCM 95th-tile Q	1.7	0.2	28.2	3.1	0	24.1

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	274	57	35	0	0	0	44	57	2	93	0
Future Vol, veh/h	38	274	57	35	0	0	0	44	57	2	93	0
Peak Hour Factor	0.78	0.78	0.78	0.64	0.64	0.64	0.88	0.88	0.88	0.63	0.63	0.63
Heavy Vehicles, %	11	20	11	12	12	12	3	3	3	2	2	2
Mvmt Flow	49	351	73	55	0	0	0	50	65	3	148	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	15.7	9.3	9.3	10.1
HCM LOS	C	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	10%	100%	2%
Vol Thru, %	44%	74%	0%	98%
Vol Right, %	56%	15%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	101	369	35	95
LT Vol	0	38	35	2
Through Vol	44	274	0	93
RT Vol	57	57	0	0
Lane Flow Rate	115	473	55	151
Geometry Grp	1	1	1	1
Degree of Util (X)	0.167	0.627	0.087	0.23
Departure Headway (Hd)	5.237	4.772	5.699	5.5
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	689	747	631	657
Service Time	3.245	2.858	3.715	3.5
HCM Lane V/C Ratio	0.167	0.633	0.087	0.23
HCM Control Delay	9.3	15.7	9.3	10.1
HCM Lane LOS	A	C	A	B
HCM 95th-tile Q	0.6	4.5	0.3	0.9

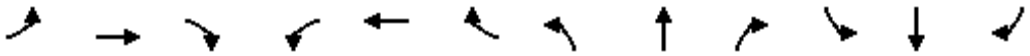
Intersection	
Int Delay, s/veh	15.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	0	343	15	20	571	5	121	2	210	4	0	26
Future Vol, veh/h	0	343	15	20	571	5	121	2	210	4	0	26
Conflicting Peds, #/hr	5	0	1	1	0	5	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	115	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	87	87	87	89	89	89	92	92	92
Heavy Vehicles, %	4	10	4	6	6	6	42	11	11	4	4	4
Mvmt Flow	0	418	18	23	656	6	136	2	236	4	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	667	0	-	419	0	0	1138	1132	420	1248	1129	664
Stage 1	-	-	-	-	-	-	419	419	-	710	710	-
Stage 2	-	-	-	-	-	-	719	713	-	538	419	-
Critical Hdwy	4.14	-	-	4.16	-	-	7.52	6.61	6.31	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.61	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.61	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.254	-	-	3.878	4.099	3.399	3.536	4.036	3.336
Pot Cap-1 Maneuver	913	-	0	1119	-	-	150	196	614	149	202	457
Stage 1	-	-	0	-	-	-	540	575	-	421	434	-
Stage 2	-	-	0	-	-	-	363	422	-	524	587	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	909	-	-	1118	-	-	137	188	613	88	194	455
Mov Cap-2 Maneuver	-	-	-	-	-	-	137	188	-	88	194	-
Stage 1	-	-	-	-	-	-	539	574	-	419	418	-
Stage 2	-	-	-	-	-	-	329	406	-	321	586	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	60.8	18.9
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	138	613	909	-	1118	-	-	292
HCM Lane V/C Ratio	1.001	0.385	-	-	0.021	-	-	0.112
HCM Control Delay (s)	139.8	14.5	0	-	8.3	0	-	18.9
HCM Lane LOS	F	B	A	-	A	A	-	C
HCM 95th %tile Q(veh)	7.2	1.8	0	-	0.1	-	-	0.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	643	0	0	462	475	0	0	0	366	0	118
Future Volume (veh/h)	184	643	0	0	462	475	0	0	0	366	0	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1767	1767	1767	1678	1737	1737	1900	1900	1900	1826	1826	1826
Adj Flow Rate, veh/h	219	765	0	0	563	0	0	0	0	272	195	133
Peak Hour Factor	0.84	0.84	0.84	0.82	0.82	0.82	0.92	0.92	0.92	0.89	0.89	0.89
Percent Heavy Veh, %	9	9	9	15	11	11	0	0	0	5	5	5
Cap, veh/h	273	1789	0	4	875		0	509	0	635	270	184
Arrive On Green	0.16	0.53	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.27	0.27	0.27
Sat Flow, veh/h	1682	3445	0	1598	3387	0	0	1900	0	1739	1006	686
Grp Volume(v), veh/h	219	765	0	0	563	0	0	0	0	272	0	328
Grp Sat Flow(s),veh/h/ln	1682	1678	0	1598	1650	0	0	1900	0	1739	0	1692
Q Serve(g_s), s	5.4	5.9	0.0	0.0	6.5	0.0	0.0	0.0	0.0	5.8	0.0	7.5
Cycle Q Clear(g_c), s	5.4	5.9	0.0	0.0	6.5	0.0	0.0	0.0	0.0	5.8	0.0	7.5
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.41
Lane Grp Cap(c), veh/h	273	1789	0	4	875		0	509	0	635	0	453
V/C Ratio(X)	0.80	0.43	0.00	0.00	0.64		0.00	0.00	0.00	0.43	0.00	0.72
Avail Cap(c_a), veh/h	374	1789	0	262	1507		0	801	0	902	0	713
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.2	6.0	0.0	0.0	13.9	0.0	0.0	0.0	0.0	13.6	0.0	14.2
Incr Delay (d2), s/veh	8.5	0.2	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.5	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	2.3	1.1	0.0	0.0	1.8	0.0	0.0	0.0	0.0	1.9	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	6.2	0.0	0.0	14.7	0.0	0.0	0.0	0.0	14.0	0.0	16.4
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		984			563	A		0			600	
Approach Delay, s/veh		10.6			14.7			0.0			15.3	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	26.8		15.9	11.4	15.3		15.9				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	22.0		18.0	9.5	19.5		18.0				
Max Q Clear Time (g_c+I1), s	0.0	7.9		9.5	7.4	8.5		0.0				
Green Ext Time (p_c), s	0.0	4.3		1.9	0.1	2.6		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		13.0
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	60
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	117	533	7	15	316	3	7	22	17	327	41	198
Future Vol, veh/h	117	533	7	15	316	3	7	22	17	327	41	198
Peak Hour Factor	0.95	0.95	0.95	0.77	0.77	0.77	0.77	0.77	0.77	0.82	0.82	0.82
Heavy Vehicles, %	20	18	20	5	4	5	2	2	2	2	2	2
Mvmt Flow	123	561	7	19	410	4	9	29	22	399	50	241
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	46.1	75.8	13.6	68.1
HCM LOS	E	F	B	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	24%	0%	31%	0%	5%	0%	89%	0%
Vol Thru, %	76%	0%	69%	97%	95%	0%	11%	0%
Vol Right, %	0%	100%	0%	3%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	17	384	274	331	3	368	198
LT Vol	7	0	117	0	15	0	327	0
Through Vol	22	0	267	267	316	0	41	0
RT Vol	0	17	0	7	0	3	0	198
Lane Flow Rate	38	22	404	288	430	4	449	241
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.104	0.056	0.94	0.654	1.009	0.008	1.076	0.499
Departure Headway (Hd)	10.262	9.396	8.784	8.572	8.725	7.959	8.632	7.447
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	351	383	416	423	417	452	422	485
Service Time	7.962	7.096	6.484	6.272	6.425	5.659	6.352	5.167
HCM Lane V/C Ratio	0.108	0.057	0.971	0.681	1.031	0.009	1.064	0.497
HCM Control Delay	14.1	12.7	60.4	26.1	76.4	10.7	95.4	17.4
HCM Lane LOS	B	B	F	D	F	B	F	C
HCM 95th-tile Q	0.3	0.2	10.6	4.5	12.7	0	15.1	2.7

Intersection	
Int Delay, s/veh	215.2

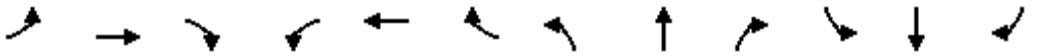
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	204	702	470	109	171	23
Future Vol, veh/h	204	702	470	109	171	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	84	84	76	76
Heavy Vehicles, %	13	12	4	5	12	12
Mvmt Flow	232	798	560	130	225	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1475	-	225	0	-	0
Stage 1	225	-	-	-	-	-
Stage 2	1250	-	-	-	-	-
Critical Hdwy	6.53	-	4.14	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	-	2.236	-	-	-
Pot Cap-1 Maneuver	~ 131	0	1332	-	-	0
Stage 1	787	0	-	-	-	0
Stage 2	256	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 76	-	1332	-	-	-
Mov Cap-2 Maneuver	~ 76	-	-	-	-	-
Stage 1	456	-	-	-	-	-
Stage 2	256	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 1040.8	7.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1332	-	76	-	-
HCM Lane V/C Ratio	0.42	-	3.05	-	-
HCM Control Delay (s)	9.6	-	$ 1040.8	0	-
HCM Lane LOS	A	-	F	A	-
HCM 95th %tile Q(veh)	2.1	-	23.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	836	29	26	586	379	29	56	56	522	29	321
Future Volume (veh/h)	144	836	29	26	586	379	29	56	56	522	29	321
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	166	961	33	30	666	431	44	85	85	629	35	387
Peak Hour Factor	0.87	0.87	0.87	0.88	0.88	0.88	0.66	0.66	0.66	0.83	0.83	0.83
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	189	1134	495	75	863	375	453	218	218	513	546	621
Arrive On Green	0.11	0.32	0.32	0.05	0.26	0.26	0.06	0.25	0.25	0.14	0.33	0.33
Sat Flow, veh/h	1753	3497	1526	1654	3300	1433	1781	886	886	1598	1678	1434
Grp Volume(v), veh/h	166	961	33	30	666	431	44	0	170	629	35	387
Grp Sat Flow(s),veh/h/ln	1753	1749	1526	1654	1650	1433	1781	0	1772	1598	1678	1434
Q Serve(g_s), s	6.1	16.6	1.0	1.1	12.1	17.0	1.1	0.0	5.2	9.0	0.9	13.6
Cycle Q Clear(g_c), s	6.1	16.6	1.0	1.1	12.1	17.0	1.1	0.0	5.2	9.0	0.9	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	189	1134	495	75	863	375	453	0	436	513	546	621
V/C Ratio(X)	0.88	0.85	0.07	0.40	0.77	1.15	0.10	0.00	0.39	1.23	0.06	0.62
Avail Cap(c_a), veh/h	189	1134	495	178	863	375	540	0	436	513	546	621
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	1.00	1.00
Uniform Delay (d), s/veh	28.6	20.5	15.2	30.2	22.2	24.0	16.1	0.0	20.4	20.9	15.1	14.3
Incr Delay (d2), s/veh	34.5	6.2	0.1	3.5	4.3	94.1	0.1	0.0	2.6	118.0	0.2	4.7
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	4.1	6.7	0.3	0.5	4.6	15.1	0.4	0.0	2.3	20.6	0.4	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.0	26.6	15.2	33.7	26.5	118.1	16.2	0.0	23.0	138.9	15.3	18.9
LnGrp LOS	E	C	B	C	C	F	B	A	C	F	B	B
Approach Vol, veh/h		1160			1127			214			1051	
Approach Delay, s/veh		31.5			61.7			21.6			90.6	
Approach LOS		C			E			C			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	25.1	7.8	25.2	11.0	21.0	13.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	17.0	7.0	18.0	7.0	17.0	9.0	16.0
Max Q Clear Time (g_c+I1), s	3.1	18.6	3.1	15.6	8.1	19.0	11.0	7.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	58.0
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	615.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	145	1	281	2	548	137	240	747	6
Future Vol, veh/h	0	0	0	145	1	281	2	548	137	240	747	6
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
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	92	92	92	87	87	87	72	72	72	90	90	90
Heavy Vehicles, %	0	0	0	16	16	39	14	7	14	50	7	13
Mvmt Flow	0	0	0	167	1	323	3	761	190	267	830	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1757	2327	421	1811	2235	476	839	0	0	951	0	0
Stage 1	1370	1370	-	862	862	-	-	-	-	-	-	-
Stage 2	387	957	-	949	1373	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.82	6.82	7.68	4.38	-	-	5.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.66	4.16	3.69	2.34	-	-	2.7	-	-
Pot Cap-1 Maneuver	55	38	587	~ 42	35	447	719	-	-	485	-	-
Stage 1	157	216	-	288	339	-	-	-	-	-	-	-
Stage 2	614	339	-	254	188	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	8	17	586	~ 24	16	447	718	-	-	485	-	-
Mov Cap-2 Maneuver	8	17	-	~ 24	16	-	-	-	-	-	-	-
Stage 1	156	97	-	287	338	-	-	-	-	-	-	-
Stage 2	169	338	-	~ 114	84	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 3182.1	0	5.1
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	718	-	-	-	63	485	-	-
HCM Lane V/C Ratio	0.004	-	-	-	7.791	0.55	-	-
HCM Control Delay (s)	10	-	-	$	$ 3182.1	21.1	-	-
HCM Lane LOS	B	-	-	A	F	C	-	-
HCM 95th %tile Q(veh)	0	-	-	-	56.7	3.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

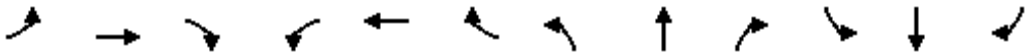
Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	2	24	29	0	30	66	813	54	41	738	31
Future Vol, veh/h	5	2	24	29	0	30	66	813	54	41	738	31
Conflicting Peds, #/hr	7	0	0	0	0	7	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	-	0	140	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	75	75	75	93	93	93	85	85	85
Heavy Vehicles, %	15	15	15	25	25	25	8	5	8	14	8	14
Mvmt Flow	6	3	30	39	0	40	71	874	58	48	868	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1568	2056	452	1577	-	473	904	0	0	932	0	0
Stage 1	982	982	-	1045	-	-	-	-	-	-	-	-
Stage 2	586	1074	-	532	-	-	-	-	-	-	-	-
Critical Hdwy	7.8	6.8	7.2	8	-	7.4	4.26	-	-	4.38	-	-
Critical Hdwy Stg 1	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4.15	3.45	3.75	-	3.55	2.28	-	-	2.34	-	-
Pot Cap-1 Maneuver	66	47	521	59	0	480	712	-	-	660	-	-
Stage 1	244	298	-	207	0	-	-	-	-	-	-	-
Stage 2	432	268	-	444	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	52	39	521	46	-	477	712	-	-	660	-	-
Mov Cap-2 Maneuver	52	39	-	46	-	-	-	-	-	-	-	-
Stage 1	220	276	-	186	-	-	-	-	-	-	-	-
Stage 2	354	241	-	384	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	34.7	116.4	0.8	0.6
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	712	-	-	160	46	477	660	-	-
HCM Lane V/C Ratio	0.1	-	-	0.245	0.841	0.084	0.073	-	-
HCM Control Delay (s)	10.6	-	-	34.7	223.1	13.2	10.9	-	-
HCM Lane LOS	B	-	-	D	F	B	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.9	3.4	0.3	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	199	76	116	69	201	16	748	153	264	612	10
Future Volume (veh/h)	20	199	76	116	69	201	16	748	153	264	612	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1870	1870	1870	1781	1707	1853	1856	1856	1856	1781	1781	1781
Adj Flow Rate, veh/h	24	243	93	149	88	258	16	771	158	293	680	11
Peak Hour Factor	0.82	0.82	0.82	0.78	0.78	0.78	0.97	0.97	0.97	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	8	13	8	3	3	3	8	8	8
Cap, veh/h	68	289	111	185	504	464	48	956	425	364	1209	20
Arrive On Green	0.04	0.22	0.22	0.11	0.30	0.30	0.03	0.27	0.27	0.11	0.35	0.35
Sat Flow, veh/h	1781	1288	493	1697	1707	1570	1767	3526	1566	3291	3408	55
Grp Volume(v), veh/h	24	0	336	149	88	258	16	771	158	293	338	353
Grp Sat Flow(s),veh/h/ln	1781	0	1782	1697	1707	1570	1767	1763	1566	1646	1692	1771
Q Serve(g_s), s	0.8	0.0	11.4	5.4	2.4	8.8	0.6	12.9	5.2	5.5	10.2	10.2
Cycle Q Clear(g_c), s	0.8	0.0	11.4	5.4	2.4	8.8	0.6	12.9	5.2	5.5	10.2	10.2
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	68	0	400	185	504	464	48	956	425	364	601	629
V/C Ratio(X)	0.35	0.00	0.84	0.81	0.17	0.56	0.33	0.81	0.37	0.80	0.56	0.56
Avail Cap(c_a), veh/h	197	0	507	201	504	464	196	1087	483	364	601	629
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	0.0	23.4	27.5	16.6	18.8	30.2	21.5	18.7	27.4	16.4	16.4
Incr Delay (d2), s/veh	3.1	0.0	9.8	19.6	0.2	1.5	4.0	4.1	0.5	12.3	3.8	3.6
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	0.4	0.0	5.4	3.0	0.8	2.9	0.3	5.1	1.7	2.5	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	0.0	33.3	47.2	16.7	20.3	34.2	25.6	19.2	39.8	20.2	20.0
LnGrp LOS	C	A	C	D	B	C	C	C	B	D	C	C
Approach Vol, veh/h		360			495			945			984	
Approach Delay, s/veh		33.2			27.7			24.6			26.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	21.6	11.4	18.7	6.2	26.9	6.9	23.2
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	7.0	19.5	7.5	18.0	7.0	19.5	7.0	18.5
Max Q Clear Time (g_c+I1), s	7.5	14.9	7.4	13.4	2.6	12.2	2.8	10.8
Green Ext Time (p_c), s	0.0	2.2	0.0	0.8	0.0	2.2	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	75	57	14	52	18	19	646	89	37	749	81
Future Volume (veh/h)	78	75	57	14	52	18	19	646	89	37	749	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
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	1870	1945	1870	1870	1870	1870	1930	1856	1856	1796	1796	1796
Adj Flow Rate, veh/h	98	94	71	17	63	22	24	808	111	43	871	94
Peak Hour Factor	0.80	0.80	0.80	0.82	0.82	0.82	0.80	0.80	0.80	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	7	7	7
Cap, veh/h	97	66	500	77	218	500	72	1177	162	104	1240	134
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.38	0.38	0.06	0.40	0.40
Sat Flow, veh/h	0	206	1556	0	678	1556	1838	3112	427	1711	3098	334
Grp Volume(v), veh/h	192	0	71	80	0	22	24	458	461	43	480	485
Grp Sat Flow(s),veh/h/ln	206	0	1556	678	0	1556	1838	1763	1777	1711	1706	1726
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	0.5	0.7	12.3	12.3	1.4	13.2	13.2
Cycle Q Clear(g_c), s	18.1	0.0	1.8	18.1	0.0	0.5	0.7	12.3	12.3	1.4	13.2	13.2
Prop In Lane	0.51		1.00	0.21		1.00	1.00		0.24	1.00		0.19
Lane Grp Cap(c), veh/h	163	0	500	295	0	500	72	667	672	104	683	691
V/C Ratio(X)	1.18	0.00	0.14	0.27	0.00	0.04	0.34	0.69	0.69	0.41	0.70	0.70
Avail Cap(c_a), veh/h	163	0	500	295	0	500	232	667	672	216	683	691
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	13.6	14.7	0.0	13.2	26.4	14.7	14.7	25.5	14.1	14.1
Incr Delay (d2), s/veh	127.3	0.0	0.1	0.5	0.0	0.0	2.7	5.7	5.6	2.6	6.0	5.9
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	7.9	0.0	0.6	0.7	0.0	0.2	0.4	5.4	5.5	0.6	5.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	148.5	0.0	13.7	15.2	0.0	13.2	29.1	20.4	20.4	28.1	20.1	20.0
LnGrp LOS	F	A	B	B	A	B	C	C	C	C	C	B
Approach Vol, veh/h		263			102			943			1008	
Approach Delay, s/veh		112.1			14.8			20.6			20.4	
Approach LOS		F			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	25.8		22.6	6.7	27.0		22.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.3		18.1	7.1	21.3		18.1
Max Q Clear Time (g_c+I1), s	3.4	14.3		20.1	2.7	15.2		20.1
Green Ext Time (p_c), s	0.0	3.4		0.0	0.0	2.9		0.0

Intersection Summary		
HCM 6th Ctrl Delay		30.6
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	56	104	487	195	454	0	0	818	139
Future Volume (veh/h)	0	0	0	56	104	487	195	454	0	0	818	139
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1841	1841	0	0	1811	1811
Adj Flow Rate, veh/h				59	109	513	224	522	0	0	986	167
Peak Hour Factor				0.95	0.95	0.95	0.87	0.87	0.87	0.83	0.83	0.83
Percent Heavy Veh, %				2	2	2	4	4	0	0	6	6
Cap, veh/h				176	325	449	257	2196	0	0	1268	215
Arrive On Green				0.27	0.27	0.27	0.15	0.63	0.00	0.00	0.43	0.43
Sat Flow, veh/h				646	1193	1648	1753	3589	0	0	3033	498
Grp Volume(v), veh/h				168	0	513	224	522	0	0	576	577
Grp Sat Flow(s),veh/h/ln				1838	0	1648	1753	1749	0	0	1721	1719
Q Serve(g_s), s				6.6	0.0	24.5	11.2	5.9	0.0	0.0	25.8	25.9
Cycle Q Clear(g_c), s				6.6	0.0	24.5	11.2	5.9	0.0	0.0	25.8	25.9
Prop In Lane				0.35		1.00	1.00		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				500	0	449	257	2196	0	0	741	741
V/C Ratio(X)				0.34	0.00	1.14	0.87	0.24	0.00	0.00	0.78	0.78
Avail Cap(c_a), veh/h				500	0	449	263	2196	0	0	741	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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.2	0.0	32.8	37.6	7.3	0.0	0.0	21.9	21.9
Incr Delay (d2), s/veh				0.4	0.0	87.9	25.1	0.3	0.0	0.0	7.9	7.9
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				2.9	0.0	20.4	6.5	2.0	0.0	0.0	11.4	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				26.6	0.0	120.7	62.7	7.6	0.0	0.0	29.8	29.8
LnGrp LOS				C	A	F	E	A	A	A	C	C
Approach Vol, veh/h					681			746			1153	
Approach Delay, s/veh					97.5			24.1			29.8	
Approach LOS					F			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	61.0		17.7	43.3		29.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	56.5		13.5	38.5		24.5
Max Q Clear Time (g_c+I1), s	7.9		13.2	27.9		26.5
Green Ext Time (p_c), s	4.0		0.0	5.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	46.0
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	0	178	0	0	0	0	446	201	445	452	0
Future Volume (veh/h)	211	0	178	0	0	0	0	446	201	445	452	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				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	1900	1856	1900				0	1856	1856	1841	1841	0
Adj Flow Rate, veh/h	260	0	220				0	513	231	506	514	0
Peak Hour Factor	0.81	0.81	0.81				0.87	0.87	0.87	0.88	0.88	0.88
Percent Heavy Veh, %	0	3	0				0	3	3	4	4	0
Cap, veh/h	315	0	275				0	1234	550	555	2512	0
Arrive On Green	0.18	0.00	0.18				0.00	0.35	0.35	0.32	0.72	0.00
Sat Flow, veh/h	1767	0	1543				0	3618	1572	1753	3589	0
Grp Volume(v), veh/h	260	0	220				0	513	231	506	514	0
Grp Sat Flow(s),veh/h/ln	1767	0	1543				0	1763	1572	1753	1749	0
Q Serve(g_s), s	12.3	0.0	11.9				0.0	9.6	9.7	24.1	4.2	0.0
Cycle Q Clear(g_c), s	12.3	0.0	11.9				0.0	9.6	9.7	24.1	4.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	315	0	275				0	1234	550	555	2512	0
V/C Ratio(X)	0.82	0.00	0.80				0.00	0.42	0.42	0.91	0.20	0.00
Avail Cap(c_a), veh/h	376	0	328				0	1234	550	776	2512	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.4	0.0	34.3				0.0	21.5	21.5	28.6	4.1	0.0
Incr Delay (d2), s/veh	12.1	0.0	11.2				0.0	1.0	2.3	11.8	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
%ile BackOfQ(50%),veh/ln	6.2	0.0	5.2				0.0	4.0	3.8	11.5	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.5	0.0	45.5				0.0	22.5	23.9	40.4	4.2	0.0
LnGrp LOS	D	A	D				A	C	C	D	A	A
Approach Vol, veh/h		480						744			1020	
Approach Delay, s/veh		46.0						23.0			22.2	
Approach LOS		D						C			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.0	35.0		20.0		67.0						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	38.5	19.5		18.5		62.5						
Max Q Clear Time (g_c+I1), s	26.1	11.7		14.3		6.2						
Green Ext Time (p_c), s	1.4	2.6		1.2		4.0						

Intersection Summary												
HCM 6th Ctrl Delay			27.5									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	70	22	73	57	138	4	360	12	150	426	12
Future Volume (veh/h)	23	70	22	73	57	138	4	360	12	150	426	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	38	115	36	82	64	155	4	383	13	163	463	13
Peak Hour Factor	0.61	0.61	0.61	0.89	0.89	0.89	0.94	0.94	0.94	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	256	302	94	322	106	258	511	1376	47	664	1772	50
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.01	0.40	0.40	0.12	0.51	0.51
Sat Flow, veh/h	1153	1360	426	1224	479	1161	1767	3478	118	1753	3474	97
Grp Volume(v), veh/h	38	0	151	82	0	219	4	194	202	163	233	243
Grp Sat Flow(s),veh/h/ln	1153	0	1786	1224	0	1641	1767	1763	1833	1753	1749	1822
Q Serve(g_s), s	1.6	0.0	3.7	3.2	0.0	6.2	0.1	3.9	3.9	2.4	3.9	3.9
Cycle Q Clear(g_c), s	7.8	0.0	3.7	6.9	0.0	6.2	0.1	3.9	3.9	2.4	3.9	3.9
Prop In Lane	1.00		0.24	1.00		0.71	1.00		0.06	1.00		0.05
Lane Grp Cap(c), veh/h	256	0	396	322	0	364	511	697	725	664	892	930
V/C Ratio(X)	0.15	0.00	0.38	0.25	0.00	0.60	0.01	0.28	0.28	0.25	0.26	0.26
Avail Cap(c_a), veh/h	412	0	638	488	0	586	753	697	725	703	892	930
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	0.0	17.1	20.1	0.0	18.1	9.3	10.6	10.6	6.0	7.2	7.2
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.4	0.0	1.6	0.0	1.0	1.0	0.2	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	0.4	0.0	1.4	0.9	0.0	2.3	0.0	1.4	1.5	0.6	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	17.7	20.5	0.0	19.7	9.3	11.6	11.6	6.2	7.9	7.9
LnGrp LOS	C	A	B	C	A	B	A	B	B	A	A	A
Approach Vol, veh/h		189			301			400			639	
Approach Delay, s/veh		18.6			19.9			11.6			7.5	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	25.0		16.0	4.9	30.9		16.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	20.5		18.5	7.5	20.5		18.5
Max Q Clear Time (g_c+I1), s	14.4	5.9		9.8	2.1	5.9		8.9
Green Ext Time (p_c), s	0.1	1.9		0.6	0.0	2.3		1.1

Intersection Summary		
HCM 6th Ctrl Delay	12.4	
HCM 6th LOS	B	

Intersection	
Intersection Delay, s/veh	22.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	94	462	63	40	197	0	0	300	134
Future Vol, veh/h	0	0	0	94	462	63	40	197	0	0	300	134
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.75	0.75	0.75	0.87	0.87	0.87
Heavy Vehicles, %	0	0	0	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	0	0	108	531	72	53	263	0	0	345	154
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	24.7	22.3	20.7
HCM LOS	C	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	29%	0%	0%	0%
Vol Thru, %	83%	71%	79%	100%	0%
Vol Right, %	0%	0%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	237	325	294	300	134
LT Vol	40	94	0	0	0
Through Vol	197	231	231	300	0
RT Vol	0	0	63	0	134
Lane Flow Rate	316	374	338	345	154
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.637	0.742	0.643	0.691	0.278
Departure Headway (Hd)	7.258	7.148	6.847	7.209	6.492
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	496	504	524	500	550
Service Time	5.332	4.923	4.622	4.992	4.274
HCM Lane V/C Ratio	0.637	0.742	0.645	0.69	0.28
HCM Control Delay	22.3	27.9	21.2	24.7	11.8
HCM Lane LOS	C	D	C	C	B
HCM 95th-tile Q	4.4	6.2	4.5	5.3	1.1

Intersection	
Intersection Delay, s/veh	13
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	89	37	81	67	29	7	32	114	36	5	238	35
Future Vol, veh/h	89	37	81	67	29	7	32	114	36	5	238	35
Peak Hour Factor	0.77	0.77	0.77	0.83	0.83	0.83	0.74	0.74	0.74	0.81	0.81	0.81
Heavy Vehicles, %	4	4	4	2	2	2	4	4	4	2	2	2
Mvmt Flow	116	48	105	81	35	8	43	154	49	6	294	43
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.9	10.9	12.2	14.3
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	43%	65%	2%
Vol Thru, %	63%	18%	28%	86%
Vol Right, %	20%	39%	7%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	182	207	103	278
LT Vol	32	89	67	5
Through Vol	114	37	29	238
RT Vol	36	81	7	35
Lane Flow Rate	246	269	124	343
Geometry Grp	1	1	1	1
Degree of Util (X)	0.384	0.425	0.213	0.519
Departure Headway (Hd)	5.626	5.688	6.181	5.447
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	637	629	577	659
Service Time	3.694	3.752	4.261	3.509
HCM Lane V/C Ratio	0.386	0.428	0.215	0.52
HCM Control Delay	12.2	12.9	10.9	14.3
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.8	2.1	0.8	3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	652	21	73	372	40	29	84	151	183	107	40
Future Volume (veh/h)	36	652	21	73	372	40	29	84	151	183	107	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.98	0.99		0.97
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	1811	1811	1811	1811	1811	1811	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	43	786	25	92	471	51	42	122	219	213	124	47
Peak Hour Factor	0.83	0.83	0.83	0.79	0.79	0.79	0.69	0.69	0.69	0.86	0.86	0.86
Percent Heavy Veh, %	6	6	6	6	6	6	3	3	3	3	3	3
Cap, veh/h	106	1035	33	168	1059	114	112	214	337	313	155	51
Arrive On Green	0.06	0.30	0.30	0.10	0.34	0.34	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1725	3400	108	1725	3117	336	109	617	970	601	447	146
Grp Volume(v), veh/h	43	398	413	92	259	263	383	0	0	384	0	0
Grp Sat Flow(s),veh/h/ln	1725	1721	1788	1725	1721	1732	1696	0	0	1194	0	0
Q Serve(g_s), s	1.3	11.3	11.3	2.7	6.3	6.4	0.0	0.0	0.0	6.5	0.0	0.0
Cycle Q Clear(g_c), s	1.3	11.3	11.3	2.7	6.3	6.4	10.3	0.0	0.0	16.8	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.19	0.11		0.57	0.55		0.12
Lane Grp Cap(c), veh/h	106	523	544	168	585	588	664	0	0	519	0	0
V/C Ratio(X)	0.40	0.76	0.76	0.55	0.44	0.45	0.58	0.00	0.00	0.74	0.00	0.00
Avail Cap(c_a), veh/h	228	649	675	240	662	666	664	0	0	519	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.3	16.9	16.9	23.2	13.8	13.8	14.9	0.0	0.0	16.9	0.0	0.0
Incr Delay (d2), s/veh	2.5	4.1	4.0	2.8	0.5	0.5	1.2	0.0	0.0	5.6	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	4.1	4.3	1.1	2.0	2.0	3.5	0.0	0.0	4.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	21.0	20.9	25.9	14.3	14.4	16.1	0.0	0.0	22.5	0.0	0.0
LnGrp LOS	C	C	C	C	B	B	B	A	A	C	A	A
Approach Vol, veh/h		854			614			383			384	
Approach Delay, s/veh		21.3			16.1			16.1			22.5	
Approach LOS		C			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	20.9		23.2	7.8	22.8		23.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	20.3		18.7	7.1	20.7		18.7
Max Q Clear Time (g_c+I1), s	14.7	13.3		18.8	3.3	8.4		12.3
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	2.3		1.3

Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	16	0	171	152	1
Future Vol, veh/h	0	16	0	171	152	1
Conflicting Peds, #/hr	1	0	5	0	0	5
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	53	53	67	67
Heavy Vehicles, %	2	2	4	4	3	3
Mvmt Flow	0	64	0	323	227	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	557	233	233	0	-	0
Stage 1	233	-	-	-	-	-
Stage 2	324	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.14	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.236	-	-	-
Pot Cap-1 Maneuver	491	806	1323	-	-	-
Stage 1	806	-	-	-	-	-
Stage 2	733	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	486	802	1317	-	-	-
Mov Cap-2 Maneuver	486	-	-	-	-	-
Stage 1	802	-	-	-	-	-
Stage 2	729	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1317	-	802	-	-
HCM Lane V/C Ratio	-	-	0.08	-	-
HCM Control Delay (s)	0	-	9.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Intersection Delay, s/veh	15
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	219	2	81	247	15	6	3	192	8	3	3
Future Vol, veh/h	7	219	2	81	247	15	6	3	192	8	3	3
Peak Hour Factor	0.74	0.74	0.74	0.84	0.84	0.84	0.71	0.71	0.71	0.50	0.50	0.50
Heavy Vehicles, %	18	41	18	10	29	10	10	10	10	23	23	23
Mvmt Flow	9	296	3	96	294	18	8	4	270	16	6	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	14.3	17.4	12.7	10.4
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	3%	24%	57%
Vol Thru, %	1%	96%	72%	21%
Vol Right, %	96%	1%	4%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	201	228	343	14
LT Vol	6	7	81	8
Through Vol	3	219	247	3
RT Vol	192	2	15	3
Lane Flow Rate	283	308	408	28
Geometry Grp	1	1	1	1
Degree of Util (X)	0.433	0.493	0.625	0.053
Departure Headway (Hd)	5.501	5.762	5.508	6.875
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	651	622	653	517
Service Time	3.559	3.815	3.556	4.964
HCM Lane V/C Ratio	0.435	0.495	0.625	0.054
HCM Control Delay	12.7	14.3	17.4	10.4
HCM Lane LOS	B	B	C	B
HCM 95th-tile Q	2.2	2.7	4.4	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	6	301	1	0	12	630	346	69	933	5
Future Volume (veh/h)	2	0	6	301	1	0	12	630	346	69	933	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1648	1648	1648	1885	1885	1885	1781	1781	1781	1752	1752	1752
Adj Flow Rate, veh/h	3	0	10	335	0	0	13	700	384	87	1181	6
Peak Hour Factor	0.63	0.63	0.63	0.90	0.90	0.90	0.90	0.90	0.90	0.79	0.79	0.79
Percent Heavy Veh, %	17	17	17	1	1	1	8	8	8	10	10	10
Cap, veh/h	36	0	32	516	0	229	39	1309	801	162	1564	8
Arrive On Green	0.02	0.00	0.02	0.14	0.00	0.00	0.02	0.39	0.39	0.10	0.46	0.46
Sat Flow, veh/h	1570	0	1397	3591	0	1598	1697	3385	1510	1668	3396	17
Grp Volume(v), veh/h	3	0	10	335	0	0	13	700	384	87	579	608
Grp Sat Flow(s),veh/h/ln	1570	0	1397	1795	0	1598	1697	1692	1510	1668	1664	1749
Q Serve(g_s), s	0.1	0.0	0.4	4.5	0.0	0.0	0.4	8.2	8.2	2.6	14.8	14.8
Cycle Q Clear(g_c), s	0.1	0.0	0.4	4.5	0.0	0.0	0.4	8.2	8.2	2.6	14.8	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	36	0	32	516	0	229	39	1309	801	162	766	805
V/C Ratio(X)	0.08	0.00	0.31	0.65	0.00	0.00	0.33	0.53	0.48	0.54	0.76	0.76
Avail Cap(c_a), veh/h	214	0	190	1263	0	562	231	1309	801	227	766	805
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	0.0	24.7	20.8	0.0	0.0	24.7	12.2	7.6	22.1	11.5	11.5
Incr Delay (d2), s/veh	1.0	0.0	5.3	1.4	0.0	0.0	4.9	1.6	2.1	2.8	6.8	6.5
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	0.0	0.0	0.2	1.8	0.0	0.0	0.2	2.9	3.5	1.0	5.7	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.6	0.0	30.1	22.2	0.0	0.0	29.6	13.8	9.7	24.9	18.3	18.0
LnGrp LOS	C	A	C	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		13			335			1097			1274	
Approach Delay, s/veh		29.0			22.2			12.5			18.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	24.4		5.7	5.7	28.2		11.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.0	19.9		7.0	7.0	19.9		18.1
Max Q Clear Time (g_c+I1), s	4.6	10.2		2.4	2.4	16.8		6.5
Green Ext Time (p_c), s	0.0	4.4		0.0	0.0	2.1		0.9

Intersection Summary		
HCM 6th Ctrl Delay		16.6
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	46.7

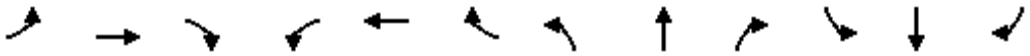
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	138	163	653	176	211	855
Future Vol, veh/h	138	163	653	176	211	855
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	72	72	90	90
Heavy Vehicles, %	9	9	14	9	9	13
Mvmt Flow	150	177	907	244	234	950

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1972	576	0	0	1151	0
Stage 1	1029	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.28	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	~ 50	443	-	-	564	-
Stage 1	290	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 29	443	-	-	564	-
Mov Cap-2 Maneuver	~ 117	-	-	-	-	-
Stage 1	290	-	-	-	-	-
Stage 2	189	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 368.8	0	3.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	195	564	-
HCM Lane V/C Ratio	-	-	1.678	0.416	-
HCM Control Delay (s)	-	-	$ 368.8	15.8	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	22.1	2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	354	241	301	186	11	110	5	110	9	5	3
Future Volume (veh/h)	1	354	241	301	186	11	110	5	110	9	5	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	0.99		0.99	1.00		0.97
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	1796	1796	1683	1826	1899	1826	1796	1868	1796	1870	1945	1870
Adj Flow Rate, veh/h	1	393	268	320	198	12	131	6	131	14	8	5
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.84	0.84	0.84	0.65	0.65	0.65
Percent Heavy Veh, %	7	7	19	5	5	5	7	7	7	2	2	2
Cap, veh/h	1	456	357	300	186	11	263	37	200	281	155	78
Arrive On Green	0.25	0.25	0.25	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	5	1791	1404	1108	686	42	636	137	739	695	573	288
Grp Volume(v), veh/h	394	0	268	530	0	0	268	0	0	27	0	0
Grp Sat Flow(s),veh/h/ln	1796	0	1404	1835	0	0	1513	0	0	1556	0	0
Q Serve(g_s), s	12.4	0.0	10.4	16.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.4	0.0	10.4	16.0	0.0	0.0	9.1	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.00		1.00	0.60		0.02	0.49		0.49	0.52		0.19
Lane Grp Cap(c), veh/h	457	0	357	498	0	0	501	0	0	514	0	0
V/C Ratio(X)	0.86	0.00	0.75	1.07	0.00	0.00	0.54	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	487	0	381	498	0	0	501	0	0	514	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)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.0	0.0	20.3	21.5	0.0	0.0	18.9	0.0	0.0	15.9	0.0	0.0
Incr Delay (d2), s/veh	14.1	0.0	7.6	58.8	0.0	0.0	4.1	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	3.7	14.0	0.0	0.0	3.6	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.1	0.0	27.9	80.4	0.0	0.0	23.0	0.0	0.0	16.1	0.0	0.0
LnGrp LOS	D	A	C	F	A	A	C	A	A	B	A	A
Approach Vol, veh/h		662			530			268			27	
Approach Delay, s/veh		32.1			80.4			23.0			16.1	
Approach LOS		C			F			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.0		20.0		20.0		20.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0				
Max Q Clear Time (g_c+I1), s		14.4		2.6		18.0		11.1				
Green Ext Time (p_c), s		0.6		0.1		0.0		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			47.4									
HCM 6th LOS			D									

Intersection	
Intersection Delay, s/veh	179.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	357	103	57	120	9	53	289	9	140	458	0
Future Vol, veh/h	1	357	103	57	120	9	53	289	9	140	458	0
Peak Hour Factor	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles, %	6	18	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	1	401	116	61	129	10	58	318	10	152	498	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	166.8	26	61.9	306.1
HCM LOS	F	D	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	15%	0%	0%	32%	0%	23%
Vol Thru, %	85%	0%	77%	68%	0%	77%
Vol Right, %	0%	100%	22%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	342	9	461	177	9	598
LT Vol	53	0	1	57	0	140
Through Vol	289	0	357	120	0	458
RT Vol	0	9	103	0	9	0
Lane Flow Rate	376	10	518	190	10	650
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.912	0.022	1.258	0.51	0.024	1.599
Departure Headway (Hd)	10.819	9.996	10.187	12.004	11.089	9.721
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	338	360	363	303	325	377
Service Time	8.519	7.696	8.187	9.704	8.789	7.721
HCM Lane V/C Ratio	1.112	0.028	1.427	0.627	0.031	1.724
HCM Control Delay	63.2	12.9	166.8	26.6	14.1	306.1
HCM Lane LOS	F	B	F	D	B	F
HCM 95th-tile Q	9	0.1	19.8	2.7	0.1	34.2

Intersection	
Intersection Delay, s/veh	17.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	344	16	39	0	8	0	118	103	0	99	0
Future Vol, veh/h	48	344	16	39	0	8	0	118	103	0	99	0
Peak Hour Factor	0.77	0.77	0.77	0.83	0.83	0.83	0.90	0.90	0.90	0.89	0.89	0.89
Heavy Vehicles, %	5	18	5	8	8	8	3	3	3	3	3	3
Mvmt Flow	62	447	21	47	0	10	0	131	114	0	111	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	22	9.6	11.8	10.4
HCM LOS	C	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	12%	83%	0%
Vol Thru, %	53%	84%	0%	100%
Vol Right, %	47%	4%	17%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	221	408	47	99
LT Vol	0	48	39	0
Through Vol	118	344	0	99
RT Vol	103	16	8	0
Lane Flow Rate	246	530	57	111
Geometry Grp	1	1	1	1
Degree of Util (X)	0.373	0.752	0.094	0.185
Departure Headway (Hd)	5.465	5.106	5.953	5.981
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	656	710	600	598
Service Time	3.512	3.139	4.009	4.035
HCM Lane V/C Ratio	0.375	0.746	0.095	0.186
HCM Control Delay	11.8	22	9.6	10.4
HCM Lane LOS	B	C	A	B
HCM 95th-tile Q	1.7	6.9	0.3	0.7

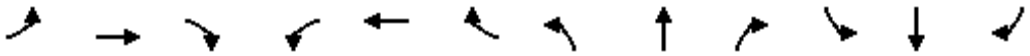
Intersection	
Int Delay, s/veh	13.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	3	437	34	13	410	4	125	0	323	8	0	42
Future Vol, veh/h	3	437	34	13	410	4	125	0	323	8	0	42
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	5	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	115	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	93	93	93	90	90	90	91	91	91
Heavy Vehicles, %	4	6	4	3	8	3	45	5	5	9	9	9
Mvmt Flow	3	491	38	14	441	4	139	0	359	9	0	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	457	0	-	491	0	0	991	982	496	1165	980	455
Stage 1	-	-	-	-	-	-	497	497	-	483	483	-
Stage 2	-	-	-	-	-	-	494	485	-	682	497	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.55	6.55	6.25	7.19	6.59	6.29
Critical Hdwy Stg 1	-	-	-	-	-	-	6.55	5.55	-	6.19	5.59	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.55	5.55	-	6.19	5.59	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.905	4.045	3.345	3.581	4.081	3.381
Pot Cap-1 Maneuver	1093	-	0	1067	-	-	188	246	568	166	243	591
Stage 1	-	-	0	-	-	-	483	540	-	552	541	-
Stage 2	-	-	0	-	-	-	485	547	-	429	533	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1081	-	-	1067	-	-	170	238	565	59	235	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	170	238	-	59	235	-
Stage 1	-	-	-	-	-	-	481	538	-	544	526	-
Stage 2	-	-	-	-	-	-	439	532	-	155	531	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	38.7	24.3
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	170	565	1081	-	1067	-	-	241
HCM Lane V/C Ratio	0.817	0.635	0.003	-	0.013	-	-	0.228
HCM Control Delay (s)	82.4	21.8	8.3	0	8.4	0	-	24.3
HCM Lane LOS	F	C	A	A	A	A	-	C
HCM 95th %tile Q(veh)	5.5	4.5	0	-	0	-	-	0.9



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	847	0	0	631	738	0	0	0	345	0	187
Future Volume (veh/h)	193	847	0	0	631	738	0	0	0	345	0	187
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1841	1841	1841	1811	1841	1841	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	199	873	0	0	742	0	0	0	0	299	125	210
Peak Hour Factor	0.97	0.97	0.97	0.85	0.85	0.85	0.92	0.92	0.92	0.89	0.89	0.89
Percent Heavy Veh, %	4	4	4	6	4	4	0	0	0	3	3	3
Cap, veh/h	248	1913	0	4	1076		0	510	0	631	167	281
Arrive On Green	0.14	0.55	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.27	0.27	0.27
Sat Flow, veh/h	1753	3589	0	1725	3589	0	0	1900	0	1767	622	1045
Grp Volume(v), veh/h	199	873	0	0	742	0	0	0	0	299	0	335
Grp Sat Flow(s),veh/h/ln	1753	1749	0	1725	1749	0	0	1900	0	1767	0	1667
Q Serve(g_s), s	5.1	6.9	0.0	0.0	8.6	0.0	0.0	0.0	0.0	6.9	0.0	8.5
Cycle Q Clear(g_c), s	5.1	6.9	0.0	0.0	8.6	0.0	0.0	0.0	0.0	6.9	0.0	8.5
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.63
Lane Grp Cap(c), veh/h	248	1913	0	4	1076		0	510	0	631	0	448
V/C Ratio(X)	0.80	0.46	0.00	0.00	0.69		0.00	0.00	0.00	0.47	0.00	0.75
Avail Cap(c_a), veh/h	278	1913	0	262	1647		0	742	0	846	0	651
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.2	6.3	0.0	0.0	14.0	0.0	0.0	0.0	0.0	14.8	0.0	15.4
Incr Delay (d2), s/veh	14.1	0.2	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.6	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	2.7	1.5	0.0	0.0	2.6	0.0	0.0	0.0	0.0	2.4	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.2	6.5	0.0	0.0	14.8	0.0	0.0	0.0	0.0	15.4	0.0	18.2
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		1072			742	A		0			634	
Approach Delay, s/veh		11.4			14.8			0.0			16.9	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	29.2		16.9	11.0	18.2		16.9				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	22.0		18.0	7.3	21.7		18.0				
Max Q Clear Time (g_c+I1), s	0.0	8.9		10.5	7.1	10.6		0.0				
Green Ext Time (p_c), s	0.0	4.7		1.9	0.0	3.5		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		13.9	
HCM 6th LOS		B	

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	125.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	149	773	9	26	223	8	3	212	12	323	79	225
Future Vol, veh/h	149	773	9	26	223	8	3	212	12	323	79	225
Peak Hour Factor	0.88	0.88	0.88	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86
Heavy Vehicles, %	7	6	7	3	3	3	6	6	6	2	2	2
Mvmt Flow	169	878	10	31	265	10	3	236	13	376	92	262
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	195.3	39.6	28.4	93.1
HCM LOS	F	E	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	1%	0%	28%	0%	10%	0%	80%	0%
Vol Thru, %	99%	0%	72%	98%	90%	0%	20%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	215	12	536	396	249	8	402	225
LT Vol	3	0	149	0	26	0	323	0
Through Vol	212	0	387	387	223	0	79	0
RT Vol	0	12	0	9	0	8	0	225
Lane Flow Rate	239	13	609	449	296	10	467	262
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.638	0.033	1.505	1.09	0.777	0.023	1.177	0.586
Departure Headway (Hd)	10.234	9.491	9.298	9.118	10.128	9.34	9.387	8.24
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	356	379	396	400	359	386	393	440
Service Time	7.934	7.191	6.998	6.818	7.828	7.04	7.087	5.94
HCM Lane V/C Ratio	0.671	0.034	1.538	1.123	0.825	0.026	1.188	0.595
HCM Control Delay	29.3	12.5	264.2	101.9	40.5	12.3	132.9	22
HCM Lane LOS	D	B	F	F	E	B	F	C
HCM 95th-tile Q	4.2	0.1	31.4	15.1	6.4	0.1	17.9	3.7

Intersection	
Int Delay, s/veh	130.3

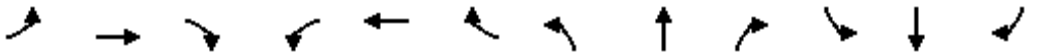
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	76	300	742	154	301	68
Future Vol, veh/h	76	300	742	154	301	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	96	96	84	84
Heavy Vehicles, %	22	20	2	2	2	2
Mvmt Flow	85	337	773	160	358	81

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2064	-	358	0	-	0
Stage 1	358	-	-	-	-	-
Stage 2	1706	-	-	-	-	-
Critical Hdwy	6.62	-	4.12	-	-	-
Critical Hdwy Stg 1	5.62	-	-	-	-	-
Critical Hdwy Stg 2	5.62	-	-	-	-	-
Follow-up Hdwy	3.698	-	2.218	-	-	-
Pot Cap-1 Maneuver	~ 53	0	1201	-	-	0
Stage 1	665	0	-	-	-	0
Stage 2	144	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 19	-	1201	-	-	-
Mov Cap-2 Maneuver	~ 19	-	-	-	-	-
Stage 1	237	-	-	-	-	-
Stage 2	144	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 1981.4	11	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1201	-	19	-	-
HCM Lane V/C Ratio	0.644	-	4.494	-	-
HCM Control Delay (s)	13.2	-	$ 1981.4	0	-
HCM Lane LOS	B	-	F	A	-
HCM 95th %tile Q(veh)	5	-	11.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	918	53	45	1042	564	35	111	28	226	82	293
Future Volume (veh/h)	222	918	53	45	1042	564	35	111	28	226	82	293
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.99	1.00		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	241	998	58	55	1271	688	47	148	37	257	93	333
Peak Hour Factor	0.92	0.92	0.92	0.82	0.82	0.82	0.75	0.75	0.75	0.88	0.88	0.88
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	200	1309	575	116	1158	497	428	343	86	431	471	575
Arrive On Green	0.11	0.38	0.38	0.07	0.33	0.33	0.06	0.23	0.23	0.10	0.27	0.27
Sat Flow, veh/h	1753	3469	1525	1767	3526	1514	1781	1499	375	1668	1752	1500
Grp Volume(v), veh/h	241	998	58	55	1271	688	47	0	185	257	93	333
Grp Sat Flow(s),veh/h/ln	1753	1735	1525	1767	1763	1514	1781	0	1874	1668	1752	1500
Q Serve(g_s), s	8.0	17.6	1.7	2.1	23.0	23.0	1.3	0.0	5.9	7.0	2.9	12.3
Cycle Q Clear(g_c), s	8.0	17.6	1.7	2.1	23.0	23.0	1.3	0.0	5.9	7.0	2.9	12.3
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	200	1309	575	116	1158	497	428	0	428	431	471	575
V/C Ratio(X)	1.20	0.76	0.10	0.47	1.10	1.38	0.11	0.00	0.43	0.60	0.20	0.58
Avail Cap(c_a), veh/h	200	1309	575	177	1158	497	499	0	428	431	471	575
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	1.00	1.00
Uniform Delay (d), s/veh	31.0	19.1	14.1	31.5	23.5	23.5	18.2	0.0	23.1	19.5	19.8	17.1
Incr Delay (d2), s/veh	129.0	2.7	0.1	3.0	57.2	184.8	0.1	0.0	3.2	2.2	0.9	4.2
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	10.3	6.5	0.6	0.9	17.4	33.1	0.5	0.0	2.9	3.3	1.2	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	160.0	21.8	14.2	34.5	80.7	208.3	18.3	0.0	26.3	21.7	20.7	21.3
LnGrp LOS	F	C	B	C	F	F	B	A	C	C	C	C
Approach Vol, veh/h		1297			2014			232			683	
Approach Delay, s/veh		47.1			123.0			24.7			21.4	
Approach LOS		D			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	30.4	8.2	22.8	12.0	27.0	11.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	24.0	7.0	16.0	8.0	23.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	4.1	19.6	3.3	14.3	10.0	25.0	9.0	7.9
Green Ext Time (p_c), s	0.0	2.5	0.0	0.3	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	77.9
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	4314.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	1	140	1	303	2	798	204	340	942	0
Future Vol, veh/h	0	1	1	140	1	303	2	798	204	340	942	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	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	87	87	87	93	93	93	87	87	87
Heavy Vehicles, %	2	2	2	10	10	44	10	5	10	45	3	6
Mvmt Flow	0	1	1	161	1	348	2	858	219	391	1083	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2299	2946	542	2296	2837	539	1083	0	0	1077	0	0
Stage 1	1865	1865	-	972	972	-	-	-	-	-	-	-
Stage 2	434	1081	-	1324	1865	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.7	6.7	7.78	4.3	-	-	5	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.6	4.1	3.74	2.3	-	-	2.65	-	-
Pot Cap-1 Maneuver	21	15	485	~ 19	15	392	595	-	-	441	-	-
Stage 1	75	121	-	256	312	-	-	-	-	-	-	-
Stage 2	570	292	-	~ 153	111	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	0	2	485	~ 3	2	392	595	-	-	441	-	-
Mov Cap-2 Maneuver	0	2	-	~ 3	2	-	-	-	-	-	-	-
Stage 1	75	14	-	255	311	-	-	-	-	-	-	-
Stage 2	63	291	-	~ 16	13	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	1282.6	$ 25873	0	13.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	595	-	-	4	9	441	-	-
HCM Lane V/C Ratio	0.004	-	-	0.543	56.705	0.886	-	-
HCM Control Delay (s)	11.1	-	-	$ 1282.6	$ 25873	50.1	-	-
HCM Lane LOS	B	-	-	F	F	F	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	65.6	9.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

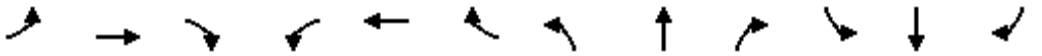
Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	0	63	14	0	7	6	830	21	23	968	8
Future Vol, veh/h	31	0	63	14	0	7	6	830	21	23	968	8
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	-	0	140	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	67	67	67	90	90	90	92	92	92
Heavy Vehicles, %	3	3	3	27	27	27	9	5	9	6	3	6
Mvmt Flow	39	0	79	21	0	10	7	922	23	25	1052	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1582	2066	531	1524	-	473	1061	0	0	945	0	0
Stage 1	1107	1107	-	948	-	-	-	-	-	-	-	-
Stage 2	475	959	-	576	-	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	8.04	-	7.44	4.28	-	-	4.22	-	-
Critical Hdwy Stg 1	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.77	-	3.57	2.29	-	-	2.26	-	-
Pot Cap-1 Maneuver	72	53	490	64	0	475	612	-	-	698	-	-
Stage 1	222	282	-	236	0	-	-	-	-	-	-	-
Stage 2	537	331	-	412	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	68	51	490	52	-	475	612	-	-	698	-	-
Mov Cap-2 Maneuver	68	51	-	52	-	-	-	-	-	-	-	-
Stage 1	220	272	-	233	-	-	-	-	-	-	-	-
Stage 2	519	327	-	333	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	71.6	80.7	0.1	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	612	-	-	161	52	475	698	-	-
HCM Lane V/C Ratio	0.011	-	-	0.73	0.402	0.022	0.036	-	-
HCM Control Delay (s)	10.9	-	-	71.6	114.7	12.7	10.3	-	-
HCM Lane LOS	B	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	4.5	1.5	0.1	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	142	38	167	135	162	50	649	151	426	816	25
Future Volume (veh/h)	23	142	38	167	135	162	50	649	151	426	816	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
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	1870	1870	1870	1826	1781	1899	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	29	182	49	190	153	184	55	713	166	463	887	27
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	8	5	4	4	4	3	3	3
Cap, veh/h	176	229	62	229	345	312	115	1004	445	570	1355	41
Arrive On Green	0.10	0.16	0.16	0.13	0.19	0.19	0.07	0.29	0.29	0.17	0.39	0.39
Sat Flow, veh/h	1781	1419	382	1739	1781	1609	1753	3497	1552	3428	3492	106
Grp Volume(v), veh/h	29	0	231	190	153	184	55	713	166	463	448	466
Grp Sat Flow(s),veh/h/ln	1781	0	1802	1739	1781	1609	1753	1749	1552	1714	1763	1836
Q Serve(g_s), s	1.1	0.0	8.7	7.5	5.4	7.4	2.1	12.9	6.1	9.2	14.8	14.8
Cycle Q Clear(g_c), s	1.1	0.0	8.7	7.5	5.4	7.4	2.1	12.9	6.1	9.2	14.8	14.8
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	176	0	290	229	345	312	115	1004	445	570	684	712
V/C Ratio(X)	0.16	0.00	0.80	0.83	0.44	0.59	0.48	0.71	0.37	0.81	0.65	0.65
Avail Cap(c_a), veh/h	176	0	458	233	515	465	173	1004	445	701	684	712
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	28.6	30.0	25.2	26.0	32.0	22.6	20.2	28.5	17.8	17.8
Incr Delay (d2), s/veh	0.4	0.0	5.1	21.4	0.9	1.8	3.1	2.4	0.5	5.9	4.8	4.7
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	0.5	0.0	4.0	4.2	2.1	2.7	0.9	5.0	2.0	3.8	5.9	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	0.0	33.7	51.4	26.1	27.8	35.1	25.0	20.7	34.4	22.6	22.4
LnGrp LOS	C	A	C	D	C	C	D	C	C	C	C	C
Approach Vol, veh/h		260			527			934			1377	
Approach Delay, s/veh		33.3			35.8			24.8			26.5	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	24.8	13.8	15.9	9.1	32.0	11.5	18.2
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	14.5	20.0	9.5	18.0	7.0	27.5	7.0	20.5
Max Q Clear Time (g_c+I1), s	11.2	14.9	9.5	10.7	4.1	16.8	3.1	9.4
Green Ext Time (p_c), s	0.6	2.2	0.0	0.7	0.0	3.8	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	28.2
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	199	52	33	56	37	38	913	107	52	838	56
Future Volume (veh/h)	97	199	52	33	56	37	38	913	107	52	838	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.97	1.00		0.95
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	1870	1945	1870	1870	1870	1870	1914	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	101	207	54	42	72	47	40	961	113	58	931	62
Peak Hour Factor	0.96	0.96	0.96	0.78	0.78	0.78	0.95	0.95	0.95	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	4	4	4	2	2	2
Cap, veh/h	84	111	483	86	111	491	105	1172	138	131	1311	87
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.06	0.37	0.37	0.07	0.39	0.39
Sat Flow, veh/h	0	350	1524	0	349	1549	1823	3142	369	1781	3369	224
Grp Volume(v), veh/h	308	0	54	114	0	47	40	535	539	58	491	502
Grp Sat Flow(s),veh/h/ln	350	0	1524	349	0	1549	1823	1749	1763	1781	1777	1817
Q Serve(g_s), s	0.0	0.0	1.4	0.0	0.0	1.2	1.2	15.8	15.8	1.8	13.3	13.3
Cycle Q Clear(g_c), s	18.1	0.0	1.4	18.1	0.0	1.2	1.2	15.8	15.8	1.8	13.3	13.3
Prop In Lane	0.33		1.00	0.37		1.00	1.00		0.21	1.00		0.12
Lane Grp Cap(c), veh/h	195	0	483	197	0	491	105	652	657	131	691	707
V/C Ratio(X)	1.58	0.00	0.11	0.58	0.00	0.10	0.38	0.82	0.82	0.44	0.71	0.71
Avail Cap(c_a), veh/h	195	0	483	197	0	491	227	652	657	221	691	707
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	13.8	16.1	0.0	13.7	25.9	16.2	16.2	25.3	14.7	14.7
Incr Delay (d2), s/veh	285.4	0.0	0.1	4.2	0.0	0.1	2.3	11.1	11.0	2.3	6.1	6.0
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	18.0	0.0	0.5	1.2	0.0	0.4	0.6	7.6	7.7	0.8	5.3	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	304.6	0.0	13.9	20.3	0.0	13.8	28.2	27.2	27.2	27.6	20.8	20.7
LnGrp LOS	F	A	B	C	A	B	C	C	C	C	C	C
Approach Vol, veh/h		362			161			1114			1051	
Approach Delay, s/veh		261.2			18.4			27.2			21.1	
Approach LOS		F			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.7	25.8		22.6	7.8	26.7		22.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.3		18.1	7.1	21.3		18.1
Max Q Clear Time (g_c+I1), s	3.8	17.8		20.1	3.2	15.3		20.1
Green Ext Time (p_c), s	0.0	2.2		0.0	0.0	2.9		0.0

Intersection Summary		
HCM 6th Ctrl Delay		55.8
HCM 6th LOS		E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	71	159	383	370	825	0	0	759	189
Future Volume (veh/h)	0	0	0	71	159	383	370	825	0	0	759	189
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1841	1826	1914	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				76	169	407	407	907	0	0	825	205
Peak Hour Factor				0.94	0.94	0.94	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %				4	5	4	3	3	0	0	3	3
Cap, veh/h				127	283	365	403	2370	0	0	1101	273
Arrive On Green				0.23	0.23	0.23	0.23	0.67	0.00	0.00	0.39	0.39
Sat Flow, veh/h				558	1240	1601	1767	3618	0	0	2883	693
Grp Volume(v), veh/h				245	0	407	407	907	0	0	521	509
Grp Sat Flow(s),veh/h/ln				1798	0	1601	1767	1763	0	0	1763	1721
Q Serve(g_s), s				11.0	0.0	20.5	20.5	10.2	0.0	0.0	22.9	22.9
Cycle Q Clear(g_c), s				11.0	0.0	20.5	20.5	10.2	0.0	0.0	22.9	22.9
Prop In Lane				0.31		1.00	1.00		0.00	0.00		0.40
Lane Grp Cap(c), veh/h				410	0	365	403	2370	0	0	695	679
V/C Ratio(X)				0.60	0.00	1.12	1.01	0.38	0.00	0.00	0.75	0.75
Avail Cap(c_a), veh/h				410	0	365	403	2370	0	0	695	679
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				31.1	0.0	34.7	34.8	6.5	0.0	0.0	23.4	23.4
Incr Delay (d2), s/veh				2.4	0.0	82.3	47.7	0.5	0.0	0.0	7.3	7.4
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				4.9	0.0	16.1	13.9	3.4	0.0	0.0	10.5	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				33.5	0.0	117.0	82.4	7.0	0.0	0.0	30.7	30.9
LnGrp LOS				C	A	F	F	A	A	A	C	C
Approach Vol, veh/h					652			1314			1030	
Approach Delay, s/veh					85.6			30.3			30.8	
Approach LOS					F			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	65.0		25.0	40.0		25.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	60.5		20.5	35.5		20.5
Max Q Clear Time (g_c+I1), s	12.2		22.5	24.9		22.5
Green Ext Time (p_c), s	8.1		0.0	5.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	9	193	0	0	0	0	1063	175	338	525	0
Future Volume (veh/h)	134	9	193	0	0	0	0	1063	175	338	525	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
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	1900	1781	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	154	10	222				0	1222	201	371	577	0
Peak Hour Factor	0.87	0.87	0.87				0.87	0.87	0.87	0.91	0.91	0.91
Percent Heavy Veh, %	0	8	0				0	2	2	2	2	0
Cap, veh/h	279	18	263				0	1555	693	415	2567	0
Arrive On Green	0.17	0.17	0.17				0.00	0.44	0.44	0.23	0.72	0.00
Sat Flow, veh/h	1598	104	1510				0	3647	1583	1781	3647	0
Grp Volume(v), veh/h	164	0	222				0	1222	201	371	577	0
Grp Sat Flow(s),veh/h/ln	1702	0	1510				0	1777	1583	1781	1777	0
Q Serve(g_s), s	7.7	0.0	12.4				0.0	25.7	7.1	17.6	4.7	0.0
Cycle Q Clear(g_c), s	7.7	0.0	12.4				0.0	25.7	7.1	17.6	4.7	0.0
Prop In Lane	0.94		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	297	0	263				0	1555	693	415	2567	0
V/C Ratio(X)	0.55	0.00	0.84				0.00	0.79	0.29	0.89	0.22	0.00
Avail Cap(c_a), veh/h	351	0	312				0	1555	693	562	2567	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9	0.0	34.8				0.0	21.0	15.8	32.4	4.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	16.4				0.0	4.1	1.1	13.3	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
%ile BackOfQ(50%),veh/ln	3.2	0.0	5.7				0.0	10.9	2.7	8.9	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	0.0	51.2				0.0	25.1	16.9	45.6	4.2	0.0
LnGrp LOS	C	A	D				A	C	B	D	A	A
Approach Vol, veh/h		386						1423			948	
Approach Delay, s/veh		44.1						23.9			20.4	
Approach LOS		D						C			C	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	24.8	42.7	19.7	67.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	27.5	31.0	18.0	63.0
Max Q Clear Time (g_c+I1), s	19.6	27.7	14.4	6.7
Green Ext Time (p_c), s	0.8	2.5	0.8	4.6

Intersection Summary	
HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	166	24	50	32	166	3	691	35	149	434	13
Future Volume (veh/h)	64	166	24	50	32	166	3	691	35	149	434	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	178	26	54	35	180	3	768	39	160	467	14
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	273	373	54	299	62	317	501	1339	68	495	1774	53
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.01	0.39	0.39	0.12	0.50	0.50
Sat Flow, veh/h	1162	1591	232	1174	263	1353	1781	3440	175	1781	3522	105
Grp Volume(v), veh/h	69	0	204	54	0	215	3	397	410	160	235	246
Grp Sat Flow(s),veh/h/ln	1162	0	1823	1174	0	1616	1781	1777	1838	1781	1777	1851
Q Serve(g_s), s	2.9	0.0	5.1	2.2	0.0	6.2	0.1	9.2	9.3	2.4	4.0	4.0
Cycle Q Clear(g_c), s	9.1	0.0	5.1	7.3	0.0	6.2	0.1	9.2	9.3	2.4	4.0	4.0
Prop In Lane	1.00		0.13	1.00		0.84	1.00		0.10	1.00		0.06
Lane Grp Cap(c), veh/h	273	0	427	299	0	379	501	692	715	495	895	932
V/C Ratio(X)	0.25	0.00	0.48	0.18	0.00	0.57	0.01	0.57	0.57	0.32	0.26	0.26
Avail Cap(c_a), veh/h	408	0	640	436	0	568	731	692	715	534	895	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	0.00	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	21.8	0.0	17.4	20.5	0.0	17.8	9.7	12.6	12.7	7.5	7.5	7.5
Incr Delay (d2), s/veh	0.5	0.0	0.8	0.3	0.0	1.3	0.0	3.4	3.3	0.4	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	0.8	0.0	2.0	0.6	0.0	2.3	0.0	3.6	3.7	0.7	1.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	0.0	18.2	20.8	0.0	19.1	9.7	16.1	16.0	7.9	8.2	8.2
LnGrp LOS	C	A	B	C	A	B	A	B	B	A	A	A
Approach Vol, veh/h		273			269			810			641	
Approach Delay, s/veh		19.2			19.5			16.0			8.1	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	25.0		16.8	4.8	31.0		16.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	20.5		18.5	7.1	20.9		18.5
Max Q Clear Time (g_c+I1), s	11.1	11.3		11.1	2.1	6.0		9.3
Green Ext Time (p_c), s	0.1	3.3		0.8	0.0	2.4		1.0

Intersection Summary		
HCM 6th Ctrl Delay	14.4	
HCM 6th LOS	B	

Intersection	
Intersection Delay, s/veh	60.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	71	440	276	89	284	0	0	323	98
Future Vol, veh/h	0	0	0	71	440	276	89	284	0	0	323	98
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	0	0	81	500	314	113	359	0	0	367	111
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	75.3	64.8	29.4
HCM LOS	F	F	D

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	24%	24%	0%	0%	0%
Vol Thru, %	76%	76%	44%	100%	0%
Vol Right, %	0%	0%	56%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	373	291	496	323	98
LT Vol	89	71	0	0	0
Through Vol	284	220	220	323	0
RT Vol	0	0	276	0	98
Lane Flow Rate	472	331	564	367	111
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.98	0.707	1.122	0.789	0.218
Departure Headway (Hd)	7.722	7.693	7.167	8.028	7.304
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	472	470	507	455	494
Service Time	5.722	5.432	4.906	5.728	5.004
HCM Lane V/C Ratio	1	0.704	1.112	0.807	0.225
HCM Control Delay	64.8	27	103.6	34.7	12
HCM Lane LOS	F	D	F	D	B
HCM 95th-tile Q	12.5	5.5	18.8	7	0.8

Intersection	
Intersection Delay, s/veh	65.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	142	125	71	71	40	3	64	324	130	6	215	17
Future Vol, veh/h	142	125	71	71	40	3	64	324	130	6	215	17
Peak Hour Factor	0.97	0.97	0.97	0.88	0.88	0.88	0.78	0.78	0.78	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	146	129	73	81	45	3	82	415	167	8	269	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	25.1	14.9	117.9	19.8
HCM LOS	D	B	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	42%	62%	3%
Vol Thru, %	63%	37%	35%	90%
Vol Right, %	25%	21%	3%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	518	338	114	238
LT Vol	64	142	71	6
Through Vol	324	125	40	215
RT Vol	130	71	3	17
Lane Flow Rate	664	348	130	298
Geometry Grp	1	1	1	1
Degree of Util (X)	1.172	0.683	0.286	0.575
Departure Headway (Hd)	6.355	7.491	8.537	7.351
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	571	484	424	494
Service Time	4.4	5.491	6.537	5.351
HCM Lane V/C Ratio	1.163	0.719	0.307	0.603
HCM Control Delay	117.9	25.1	14.9	19.8
HCM Lane LOS	F	D	B	C
HCM 95th-tile Q	22.9	5.1	1.2	3.6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	612	23	135	540	171	40	216	137	80	88	26
Future Volume (veh/h)	94	612	23	135	540	171	40	216	137	80	88	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	1.00		0.99
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	1826	1826	1826	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	680	26	157	628	199	48	260	165	88	97	29
Peak Hour Factor	0.90	0.90	0.90	0.86	0.86	0.86	0.83	0.83	0.83	0.91	0.91	0.91
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	2	2	2
Cap, veh/h	182	1019	39	213	823	260	110	322	190	224	225	55
Arrive On Green	0.10	0.30	0.30	0.12	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1739	3405	130	1767	2611	826	104	1005	594	393	701	172
Grp Volume(v), veh/h	104	346	360	157	424	403	473	0	0	214	0	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1801	1767	1763	1675	1703	0	0	1266	0	0
Q Serve(g_s), s	3.0	9.1	9.1	4.5	11.3	11.3	7.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.0	9.1	9.1	4.5	11.3	11.3	13.5	0.0	0.0	6.2	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.49	0.10		0.35	0.41		0.14
Lane Grp Cap(c), veh/h	182	519	539	213	556	528	622	0	0	503	0	0
V/C Ratio(X)	0.57	0.67	0.67	0.74	0.76	0.76	0.76	0.00	0.00	0.43	0.00	0.00
Avail Cap(c_a), veh/h	234	651	675	289	712	676	681	0	0	550	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.2	15.9	16.0	22.1	16.0	16.1	16.5	0.0	0.0	13.8	0.0	0.0
Incr Delay (d2), s/veh	2.8	1.8	1.8	6.3	3.7	3.9	4.6	0.0	0.0	0.6	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	1.2	3.1	3.2	2.0	4.1	3.9	5.2	0.0	0.0	1.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	17.8	17.7	28.4	19.7	20.0	21.1	0.0	0.0	14.4	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	C	A	A	B	A	A
Approach Vol, veh/h		810			984			473			214	
Approach Delay, s/veh		18.7			21.2			21.1			14.4	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	20.1		21.2	9.9	20.9		21.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.5	19.5		18.5	7.0	21.0		18.5				
Max Q Clear Time (g_c+I1), s	6.3	11.1		8.2	5.0	13.3		15.5				
Green Ext Time (p_c), s	0.1	2.5		0.9	0.0	2.9		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		19.8
HCM 6th LOS		B

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	15	30	290	182	19
Future Vol, veh/h	9	15	30	290	182	19
Conflicting Peds, #/hr	0	0	2	0	0	2
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	56	56	74	74	65	65
Heavy Vehicles, %	10	10	2	2	2	2
Mvmt Flow	16	27	41	392	280	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	771	297	311	0	-	0
Stage 1	297	-	-	-	-	-
Stage 2	474	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.12	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.218	-	-	-
Pot Cap-1 Maneuver	357	724	1249	-	-	-
Stage 1	736	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	341	723	1247	-	-	-
Mov Cap-2 Maneuver	341	-	-	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	609	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1247	-	509	-	-
HCM Lane V/C Ratio	0.033	-	0.084	-	-
HCM Control Delay (s)	8	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Intersection Delay, s/veh	23.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	397	15	166	219	3	11	3	217	18	4	1
Future Vol, veh/h	1	397	15	166	219	3	11	3	217	18	4	1
Peak Hour Factor	0.86	0.86	0.86	0.83	0.83	0.83	0.92	0.92	0.92	0.36	0.36	0.36
Heavy Vehicles, %	3	34	3	5	38	10	4	4	4	33	33	33
Mvmt Flow	1	462	17	200	264	4	12	3	236	50	11	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	27.1	27.4	14.2	12.6
HCM LOS	D	D	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	0%	43%	78%
Vol Thru, %	1%	96%	56%	17%
Vol Right, %	94%	4%	1%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	231	413	388	23
LT Vol	11	1	166	18
Through Vol	3	397	219	4
RT Vol	217	15	3	1
Lane Flow Rate	251	480	467	64
Geometry Grp	1	1	1	1
Degree of Util (X)	0.439	0.785	0.782	0.144
Departure Headway (Hd)	6.3	5.883	6.025	8.112
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	570	615	598	441
Service Time	4.351	3.927	4.069	6.185
HCM Lane V/C Ratio	0.44	0.78	0.781	0.145
HCM Control Delay	14.2	27.1	27.4	12.6
HCM Lane LOS	B	D	D	B
HCM 95th-tile Q	2.2	7.5	7.4	0.5



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	5	23	258	0	0	11	977	290	178	978	1
Future Volume (veh/h)	3	5	23	258	0	0	11	977	290	178	978	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1900	1900	1900	1811	1811	1811	1826	1826	1826
Adj Flow Rate, veh/h	4	7	31	315	0	0	12	1039	309	189	1040	1
Peak Hour Factor	0.75	0.75	0.75	0.82	0.82	0.82	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	5	5	5
Cap, veh/h	41	71	97	480	0	214	37	1205	740	233	1646	2
Arrive On Green	0.06	0.06	0.06	0.13	0.00	0.00	0.02	0.35	0.35	0.13	0.46	0.46
Sat Flow, veh/h	679	1188	1610	3619	0	1610	1725	3441	1533	1739	3556	3
Grp Volume(v), veh/h	11	0	31	315	0	0	12	1039	309	189	507	534
Grp Sat Flow(s),veh/h/ln	1866	0	1610	1810	0	1610	1725	1721	1533	1739	1735	1825
Q Serve(g_s), s	0.3	0.0	1.0	4.6	0.0	0.0	0.4	15.7	7.3	5.9	12.4	12.4
Cycle Q Clear(g_c), s	0.3	0.0	1.0	4.6	0.0	0.0	0.4	15.7	7.3	5.9	12.4	12.4
Prop In Lane	0.36		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	112	0	97	480	0	214	37	1205	740	233	803	845
V/C Ratio(X)	0.10	0.00	0.32	0.66	0.00	0.00	0.33	0.86	0.42	0.81	0.63	0.63
Avail Cap(c_a), veh/h	235	0	202	1170	0	520	217	1205	740	234	803	845
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	25.1	22.9	0.0	0.0	26.9	16.8	9.3	23.4	11.4	11.4
Incr Delay (d2), s/veh	0.4	0.0	1.9	1.5	0.0	0.0	5.1	8.3	1.7	19.0	3.8	3.6
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	0.4	1.9	0.0	0.0	0.2	6.7	3.1	3.5	4.7	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.1	0.0	27.0	24.5	0.0	0.0	31.9	25.1	11.1	42.4	15.1	14.9
LnGrp LOS	C	A	C	C	A	A	C	C	B	D	B	B
Approach Vol, veh/h		42			315			1360			1230	
Approach Delay, s/veh		26.5			24.5			22.0			19.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	24.0		7.8	5.7	30.3		11.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	19.5		7.0	7.0	20.0		18.0
Max Q Clear Time (g_c+I1), s	17.9	17.7		3.0	2.4	14.4		6.6
Green Ext Time (p_c), s	0.0	1.4		0.0	0.0	3.1		0.8

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	90.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	158	191	940	161	226	1124
Future Vol, veh/h	158	191	940	161	226	1124
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	87	87
Heavy Vehicles, %	9	9	10	9	9	10
Mvmt Flow	172	208	1011	173	260	1292

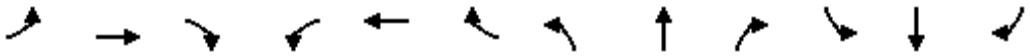
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2264	592	0	0	1184	0
Stage 1	1098	-	-	-	-	-
Stage 2	1166	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.28	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	~ 31	432	-	-	548	-
Stage 1	266	-	-	-	-	-
Stage 2	245	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 16	432	-	-	548	-
Mov Cap-2 Maneuver	~ 86	-	-	-	-	-
Stage 1	266	-	-	-	-	-
Stage 2	~ 129	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 731.6	0	2.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	153	548	-
HCM Lane V/C Ratio	-	-	2.479	0.474	-
HCM Control Delay (s)	-	-	$ 731.6	17.3	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	32.6	2.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

EXISTING + PROJECT SPECIFIC PLAN SCENARIO TWO



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	201	146	379	192	13	79	3	104	19	16	4
Future Volume (veh/h)	0	201	146	379	192	13	79	3	104	19	16	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1648	1648	1298	1796	1868	1796	1856	1930	1856	1870	1945	1870
Adj Flow Rate, veh/h	0	245	178	436	221	15	89	3	117	33	28	7
Peak Hour Factor	0.82	0.82	0.82	0.87	0.87	0.87	0.89	0.89	0.89	0.57	0.57	0.57
Percent Heavy Veh, %	17	17	44	7	7	7	3	3	3	2	2	2
Cap, veh/h	0	345	228	336	170	12	249	42	253	296	234	50
Arrive On Green	0.00	0.21	0.21	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	0	1648	1089	1169	593	40	545	147	880	695	815	173
Grp Volume(v), veh/h	0	245	178	672	0	0	209	0	0	68	0	0
Grp Sat Flow(s),veh/h/ln	0	1648	1089	1802	0	0	1571	0	0	1683	0	0
Q Serve(g_s), s	0.0	7.7	8.6	16.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.7	8.6	16.0	0.0	0.0	5.8	0.0	0.0	1.5	0.0	0.0
Prop In Lane	0.00		1.00	0.65		0.02	0.43		0.56	0.49		0.10
Lane Grp Cap(c), veh/h	0	345	228	518	0	0	544	0	0	580	0	0
V/C Ratio(X)	0.00	0.71	0.78	1.30	0.00	0.00	0.38	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	0	474	313	518	0	0	544	0	0	580	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)	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	20.4	20.8	19.8	0.0	0.0	16.1	0.0	0.0	14.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.0	8.3	147.6	0.0	0.0	2.1	0.0	0.0	0.4	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	2.8	2.4	26.8	0.0	0.0	2.3	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.4	29.1	167.5	0.0	0.0	18.2	0.0	0.0	15.1	0.0	0.0
LnGrp LOS	A	C	C	F	A	A	B	A	A	B	A	A
Approach Vol, veh/h		423			672			209			68	
Approach Delay, s/veh		25.8			167.5			18.2			15.1	
Approach LOS		C			F			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.7		20.0		20.0		20.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0				
Max Q Clear Time (g_c+I1), s		10.6		3.5		18.0		7.8				
Green Ext Time (p_c), s		1.0		0.2		0.0		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		93.5
HCM 6th LOS		F

Intersection	
Intersection Delay, s/veh	109
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	434	72	56	113	5	37	77	25	124	324	0
Future Vol, veh/h	1	434	72	56	113	5	37	77	25	124	324	0
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	8	18	8	2	5	2	5	5	4	2	5	2
Mvmt Flow	1	499	83	67	136	6	45	93	30	149	390	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	154.3	20.8	16.7	122.9
HCM LOS	F	C	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	32%	0%	0%	33%	0%	28%
Vol Thru, %	68%	0%	86%	67%	0%	72%
Vol Right, %	0%	100%	14%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	114	25	507	169	5	448
LT Vol	37	0	1	56	0	124
Through Vol	77	0	434	113	0	324
RT Vol	0	25	72	0	5	0
Lane Flow Rate	137	30	583	204	6	540
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.337	0.067	1.246	0.485	0.013	1.16
Departure Headway (Hd)	9.995	9.09	8.246	9.626	8.773	8.436
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	363	396	443	377	410	437
Service Time	7.695	6.79	6.246	7.326	6.473	6.436
HCM Lane V/C Ratio	0.377	0.076	1.316	0.541	0.015	1.236
HCM Control Delay	17.7	12.4	154.3	21.1	11.6	122.9
HCM Lane LOS	C	B	F	C	B	F
HCM 95th-tile Q	1.5	0.2	22.5	2.6	0	18.5

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	252	52	31	0	0	0	40	52	1	84	0
Future Vol, veh/h	34	252	52	31	0	0	0	40	52	1	84	0
Peak Hour Factor	0.78	0.78	0.78	0.64	0.64	0.64	0.88	0.88	0.88	0.63	0.63	0.63
Heavy Vehicles, %	11	24	11	12	12	12	3	3	6	2	2	2
Mvmt Flow	44	323	67	48	0	0	0	45	59	2	133	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.7	9	8.9	9.6
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	10%	100%	1%
Vol Thru, %	43%	75%	0%	99%
Vol Right, %	57%	15%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	92	338	31	85
LT Vol	0	34	31	1
Through Vol	40	252	0	84
RT Vol	52	52	0	0
Lane Flow Rate	105	433	48	135
Geometry Grp	1	1	1	1
Degree of Util (X)	0.144	0.564	0.073	0.197
Departure Headway (Hd)	4.975	4.682	5.44	5.247
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	714	767	652	679
Service Time	3.055	2.738	3.526	3.323
HCM Lane V/C Ratio	0.147	0.565	0.074	0.199
HCM Control Delay	8.9	13.7	9	9.6
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.5	3.6	0.2	0.7

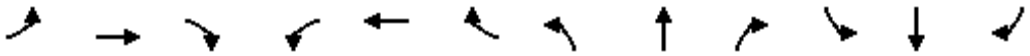
Intersection	
Int Delay, s/veh	10.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	0	311	13	18	517	5	114	1	189	4	0	24
Future Vol, veh/h	0	311	13	18	517	5	114	1	189	4	0	24
Conflicting Peds, #/hr	5	0	1	1	0	5	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	115	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	87	87	87	89	89	89	92	92	92
Heavy Vehicles, %	4	13	4	6	9	6	46	11	11	4	4	4
Mvmt Flow	0	379	16	21	594	6	128	1	212	4	0	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	605	0	-	380	0	0	1032	1027	381	1131	1024	602
Stage 1	-	-	-	-	-	-	380	380	-	644	644	-
Stage 2	-	-	-	-	-	-	652	647	-	487	380	-
Critical Hdwy	4.14	-	-	4.16	-	-	7.56	6.61	6.31	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.61	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.61	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.254	-	-	3.914	4.099	3.399	3.536	4.036	3.336
Pot Cap-1 Maneuver	963	-	0	1157	-	-	175	226	647	179	233	496
Stage 1	-	-	0	-	-	-	562	598	-	458	465	-
Stage 2	-	-	0	-	-	-	391	453	-	558	610	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	958	-	-	1156	-	-	162	219	646	117	225	494
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	219	-	117	225	-
Stage 1	-	-	-	-	-	-	561	597	-	456	450	-
Stage 2	-	-	-	-	-	-	360	439	-	374	609	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	39.3	16.7
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	162	646	958	-	1156	-	-	338
HCM Lane V/C Ratio	0.798	0.329	-	-	0.018	-	-	0.09
HCM Control Delay (s)	81.9	13.3	0	-	8.2	0	-	16.7
HCM Lane LOS	F	B	A	-	A	A	-	C
HCM 95th %tile Q(veh)	5.2	1.4	0	-	0.1	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	578	0	0	416	428	0	0	0	330	0	105
Future Volume (veh/h)	164	578	0	0	416	428	0	0	0	330	0	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1767	1767	1767	1678	1737	1737	1900	1900	1900	1826	1826	1826
Adj Flow Rate, veh/h	195	688	0	0	507	0	0	0	0	244	177	118
Peak Hour Factor	0.84	0.84	0.84	0.82	0.82	0.82	0.92	0.92	0.92	0.89	0.89	0.89
Percent Heavy Veh, %	9	9	9	15	11	11	0	0	0	5	5	5
Cap, veh/h	264	1773	0	4	846		0	485	0	627	259	173
Arrive On Green	0.16	0.53	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	1682	3445	0	1598	3387	0	0	1900	0	1739	1016	677
Grp Volume(v), veh/h	195	688	0	0	507	0	0	0	0	244	0	295
Grp Sat Flow(s),veh/h/ln	1682	1678	0	1598	1650	0	0	1900	0	1739	0	1694
Q Serve(g_s), s	4.3	4.8	0.0	0.0	5.3	0.0	0.0	0.0	0.0	4.8	0.0	6.2
Cycle Q Clear(g_c), s	4.3	4.8	0.0	0.0	5.3	0.0	0.0	0.0	0.0	4.8	0.0	6.2
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.40
Lane Grp Cap(c), veh/h	264	1773	0	4	846		0	485	0	627	0	432
V/C Ratio(X)	0.74	0.39	0.00	0.00	0.60		0.00	0.00	0.00	0.39	0.00	0.68
Avail Cap(c_a), veh/h	407	1882	0	285	1640		0	872	0	981	0	777
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	5.5	0.0	0.0	12.8	0.0	0.0	0.0	0.0	12.7	0.0	13.2
Incr Delay (d2), s/veh	4.0	0.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.4	0.0	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	1.6	0.8	0.0	0.0	1.4	0.0	0.0	0.0	0.0	1.6	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	5.6	0.0	0.0	13.5	0.0	0.0	0.0	0.0	13.0	0.0	15.1
LnGrp LOS	B	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		883			507	A		0			539	
Approach Delay, s/veh		8.8			13.5			0.0			14.2	
Approach LOS		A			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	24.7		14.5	10.7	14.1		14.5				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	22.0		18.0	9.5	19.5		18.0				
Max Q Clear Time (g_c+I1), s	0.0	6.8		8.2	6.3	7.3		0.0				
Green Ext Time (p_c), s	0.0	3.9		1.9	0.2	2.4		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			11.5									
HCM 6th LOS			B									

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	39.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	106	479	6	13	283	3	6	22	16	295	37	179
Future Vol, veh/h	106	479	6	13	283	3	6	22	16	295	37	179
Peak Hour Factor	0.95	0.95	0.95	0.77	0.77	0.77	0.77	0.77	0.77	0.82	0.82	0.82
Heavy Vehicles, %	20	18	20	5	4	5	2	2	2	2	2	2
Mvmt Flow	112	504	6	17	368	4	8	29	21	360	45	218
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	33.7	47.6	13	43.2
HCM LOS	D	E	B	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	21%	0%	31%	0%	4%	0%	89%	0%
Vol Thru, %	79%	0%	69%	98%	96%	0%	11%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	28	16	346	246	296	3	332	179
LT Vol	6	0	106	0	13	0	295	0
Through Vol	22	0	240	240	283	0	37	0
RT Vol	0	16	0	6	0	3	0	179
Lane Flow Rate	36	21	364	258	384	4	405	218
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.097	0.051	0.842	0.583	0.883	0.008	0.938	0.434
Departure Headway (Hd)	9.641	8.794	8.336	8.125	8.271	7.508	8.341	7.161
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	371	406	433	444	438	476	433	502
Service Time	7.425	6.577	6.096	5.885	6.033	5.27	6.091	4.91
HCM Lane V/C Ratio	0.097	0.052	0.841	0.581	0.877	0.008	0.935	0.434
HCM Control Delay	13.5	12.1	42.2	21.7	48	10.3	58.3	15.3
HCM Lane LOS	B	B	E	C	E	B	F	C
HCM 95th-tile Q	0.3	0.2	8.1	3.6	9.2	0	10.7	2.2

Intersection	
Int Delay, s/veh	118.8

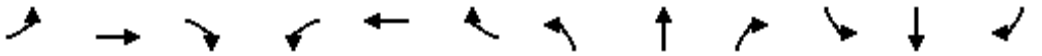
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	184	632	422	99	154	20
Future Vol, veh/h	184	632	422	99	154	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	84	84	76	76
Heavy Vehicles, %	13	12	4	5	12	12
Mvmt Flow	209	718	502	118	203	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1325	-	203	0	-	0
Stage 1	203	-	-	-	-	-
Stage 2	1122	-	-	-	-	-
Critical Hdwy	6.53	-	4.14	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	-	2.236	-	-	-
Pot Cap-1 Maneuver	~ 163	0	1357	-	-	0
Stage 1	805	0	-	-	-	0
Stage 2	296	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 103	-	1357	-	-	-
Mov Cap-2 Maneuver	~ 103	-	-	-	-	-
Stage 1	507	-	-	-	-	-
Stage 2	296	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 564.3	7.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1357	-	103	-	-
HCM Lane V/C Ratio	0.37	-	2.03	-	-
HCM Control Delay (s)	9.2	-	$ 564.3	0	-
HCM Lane LOS	A	-	F	A	-
HCM 95th %tile Q(veh)	1.7	-	17.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	754	27	24	529	342	27	51	51	470	27	288
Future Volume (veh/h)	128	754	27	24	529	342	27	51	51	470	27	288
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	147	867	31	27	601	389	41	77	77	566	33	347
Peak Hour Factor	0.87	0.87	0.87	0.88	0.88	0.88	0.66	0.66	0.66	0.83	0.83	0.83
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	185	1046	455	69	777	336	466	223	223	563	590	655
Arrive On Green	0.11	0.30	0.30	0.04	0.24	0.24	0.06	0.25	0.25	0.16	0.35	0.35
Sat Flow, veh/h	1753	3497	1523	1654	3300	1428	1781	886	886	1598	1678	1434
Grp Volume(v), veh/h	147	867	31	27	601	389	41	0	154	566	33	347
Grp Sat Flow(s),veh/h/ln	1753	1749	1523	1654	1650	1428	1781	0	1772	1598	1678	1434
Q Serve(g_s), s	5.2	14.7	0.9	1.0	10.8	15.0	1.0	0.0	4.5	10.0	0.8	11.0
Cycle Q Clear(g_c), s	5.2	14.7	0.9	1.0	10.8	15.0	1.0	0.0	4.5	10.0	0.8	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	185	1046	455	69	777	336	466	0	445	563	590	655
V/C Ratio(X)	0.80	0.83	0.07	0.39	0.77	1.16	0.09	0.00	0.35	1.01	0.06	0.53
Avail Cap(c_a), veh/h	220	1046	455	182	777	336	561	0	445	563	590	655
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	1.00	1.00
Uniform Delay (d), s/veh	27.8	20.8	16.0	29.7	22.8	24.4	15.6	0.0	19.6	19.6	13.7	12.4
Incr Delay (d2), s/veh	15.6	5.7	0.1	3.6	4.9	98.7	0.1	0.0	2.1	39.4	0.2	3.1
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	2.8	5.9	0.3	0.4	4.2	13.9	0.4	0.0	2.0	10.0	0.3	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	26.5	16.0	33.3	27.6	123.1	15.7	0.0	21.7	58.9	13.8	15.5
LnGrp LOS	D	C	B	C	C	F	B	A	C	F	B	B
Approach Vol, veh/h		1045			1017			195			946	
Approach Delay, s/veh		28.6			64.3			20.4			41.4	
Approach LOS		C			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	23.0	7.6	26.4	10.7	19.0	14.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	16.0	7.0	19.0	8.0	15.0	10.0	16.0
Max Q Clear Time (g_c+I1), s	3.0	16.7	3.0	13.0	7.2	17.0	12.0	6.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	658.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	147	1	291	2	558	138	231	749	6
Future Vol, veh/h	0	0	0	147	1	291	2	558	138	231	749	6
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
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	92	92	92	87	87	87	72	72	72	90	90	90
Heavy Vehicles, %	0	0	0	16	16	40	14	7	14	55	7	13
Mvmt Flow	0	0	0	169	1	334	3	775	192	257	832	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1746	2325	422	1807	2232	484	841	0	0	967	0	0
Stage 1	1352	1352	-	877	877	-	-	-	-	-	-	-
Stage 2	394	973	-	930	1355	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.82	6.82	7.7	4.38	-	-	5.2	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.66	4.16	3.7	2.34	-	-	2.75	-	-
Pot Cap-1 Maneuver	56	38	586	~ 42	35	439	718	-	-	458	-	-
Stage 1	161	220	-	282	333	-	-	-	-	-	-	-
Stage 2	608	333	-	261	192	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	7	17	585	~ 23	15	439	717	-	-	458	-	-
Mov Cap-2 Maneuver	7	17	-	~ 23	15	-	-	-	-	-	-	-
Stage 1	160	96	-	281	332	-	-	-	-	-	-	-
Stage 2	144	332	-	~ 115	84	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 3340.4	0	5.3
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	717	-	-	-	62	458	-	-
HCM Lane V/C Ratio	0.004	-	-	-	8.139	0.56	-	-
HCM Control Delay (s)	10	-	-	$	$ 3340.4	22.4	-	-
HCM Lane LOS	B	-	-	A	F	C	-	-
HCM 95th %tile Q(veh)	0	-	-	-	58.6	3.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

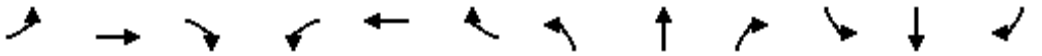
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	2	21	8	0	18	60	807	27	33	700	31
Future Vol, veh/h	5	2	21	8	0	18	60	807	27	33	700	31
Conflicting Peds, #/hr	7	0	0	0	0	7	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	-	0	140	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	75	75	75	93	93	93	85	85	85
Heavy Vehicles, %	15	15	15	25	25	25	8	5	8	14	8	14
Mvmt Flow	6	3	27	11	0	24	65	868	29	39	824	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1491	1947	430	1505	-	456	860	0	0	897	0	0
Stage 1	920	920	-	1013	-	-	-	-	-	-	-	-
Stage 2	571	1027	-	492	-	-	-	-	-	-	-	-
Critical Hdwy	7.8	6.8	7.2	8	-	7.4	4.26	-	-	4.38	-	-
Critical Hdwy Stg 1	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4.15	3.45	3.75	-	3.55	2.28	-	-	2.34	-	-
Pot Cap-1 Maneuver	76	55	539	67	0	493	740	-	-	682	-	-
Stage 1	267	320	-	217	0	-	-	-	-	-	-	-
Stage 2	442	283	-	471	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	64	47	539	55	-	490	740	-	-	682	-	-
Mov Cap-2 Maneuver	64	47	-	55	-	-	-	-	-	-	-	-
Stage 1	244	302	-	198	-	-	-	-	-	-	-	-
Stage 2	381	258	-	419	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.7	35.1	0.7	0.5
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	740	-	-	175	55	490	682	-	-
HCM Lane V/C Ratio	0.087	-	-	0.203	0.194	0.049	0.057	-	-
HCM Control Delay (s)	10.3	-	-	30.7	85.6	12.7	10.6	-	-
HCM Lane LOS	B	-	-	D	F	B	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.7	0.6	0.2	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	192	70	115	64	204	14	744	157	253	563	9
Future Volume (veh/h)	19	192	70	115	64	204	14	744	157	253	563	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1870	1870	1870	1781	1707	1853	1856	1856	1856	1781	1781	1781
Adj Flow Rate, veh/h	23	234	85	147	82	262	14	767	162	281	626	10
Peak Hour Factor	0.82	0.82	0.82	0.78	0.78	0.78	0.97	0.97	0.97	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	8	13	8	3	3	3	8	8	8
Cap, veh/h	66	283	103	183	490	451	43	962	427	371	1233	20
Arrive On Green	0.04	0.22	0.22	0.11	0.29	0.29	0.02	0.27	0.27	0.11	0.36	0.36
Sat Flow, veh/h	1781	1309	476	1697	1707	1570	1767	3526	1566	3291	3409	54
Grp Volume(v), veh/h	23	0	319	147	82	262	14	767	162	281	311	325
Grp Sat Flow(s),veh/h/ln	1781	0	1785	1697	1707	1570	1767	1763	1566	1646	1692	1771
Q Serve(g_s), s	0.8	0.0	10.6	5.3	2.2	8.9	0.5	12.5	5.2	5.1	8.9	8.9
Cycle Q Clear(g_c), s	0.8	0.0	10.6	5.3	2.2	8.9	0.5	12.5	5.2	5.1	8.9	8.9
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	66	0	386	183	490	451	43	962	427	371	612	641
V/C Ratio(X)	0.35	0.00	0.83	0.80	0.17	0.58	0.33	0.80	0.38	0.76	0.51	0.51
Avail Cap(c_a), veh/h	201	0	518	205	509	468	199	1108	492	371	612	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	0.00	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	29.1	0.0	23.2	27.0	16.6	18.9	29.8	21.0	18.3	26.7	15.5	15.5
Incr Delay (d2), s/veh	3.1	0.0	8.0	18.6	0.2	1.7	4.4	3.7	0.6	8.6	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	0.4	0.0	4.9	2.8	0.8	2.9	0.2	4.9	1.7	2.2	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.3	0.0	31.2	45.6	16.7	20.6	34.1	24.6	18.8	35.3	18.5	18.3
LnGrp LOS	C	A	C	D	B	C	C	C	B	D	B	B
Approach Vol, veh/h		342			491			943			917	
Approach Delay, s/veh		31.3			27.5			23.8			23.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	21.4	11.2	17.9	6.0	26.9	6.8	22.3
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	7.0	19.5	7.5	18.0	7.0	19.5	7.0	18.5
Max Q Clear Time (g_c+I1), s	7.1	14.5	7.3	12.6	2.5	10.9	2.8	10.9
Green Ext Time (p_c), s	0.0	2.3	0.0	0.8	0.0	2.2	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	25.3
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	71	57	15	52	18	20	642	79	32	697	75
Future Volume (veh/h)	78	71	57	15	52	18	20	642	79	32	697	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
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	1870	1945	1870	1870	1870	1870	1930	1856	1856	1796	1796	1796
Adj Flow Rate, veh/h	98	89	71	18	63	22	25	802	99	37	810	87
Peak Hour Factor	0.80	0.80	0.80	0.82	0.82	0.82	0.80	0.80	0.80	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	7	7	7
Cap, veh/h	98	63	503	79	210	503	74	1202	148	94	1225	132
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.38	0.38	0.05	0.40	0.40
Sat Flow, veh/h	0	195	1556	0	649	1556	1838	3157	390	1711	3100	333
Grp Volume(v), veh/h	187	0	71	81	0	22	25	448	453	37	446	451
Grp Sat Flow(s),veh/h/ln	195	0	1556	649	0	1556	1838	1763	1784	1711	1706	1726
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	0.5	0.7	11.8	11.8	1.2	12.0	12.0
Cycle Q Clear(g_c), s	18.1	0.0	1.8	18.1	0.0	0.5	0.7	11.8	11.8	1.2	12.0	12.0
Prop In Lane	0.52		1.00	0.22		1.00	1.00		0.22	1.00		0.19
Lane Grp Cap(c), veh/h	161	0	503	289	0	503	74	671	679	94	674	682
V/C Ratio(X)	1.16	0.00	0.14	0.28	0.00	0.04	0.34	0.67	0.67	0.40	0.66	0.66
Avail Cap(c_a), veh/h	161	0	503	289	0	503	233	671	679	217	674	682
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	0.0	13.4	14.6	0.0	13.0	26.1	14.4	14.4	25.6	13.9	13.9
Incr Delay (d2), s/veh	120.7	0.0	0.1	0.5	0.0	0.0	2.7	5.2	5.1	2.7	5.0	5.0
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	7.5	0.0	0.6	0.7	0.0	0.2	0.4	5.1	5.2	0.5	4.5	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	141.9	0.0	13.5	15.2	0.0	13.0	28.8	19.6	19.5	28.2	18.9	18.9
LnGrp LOS	F	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		258			103			926			934	
Approach Delay, s/veh		106.6			14.7			19.8			19.3	
Approach LOS		F			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	25.8		22.6	6.8	26.6		22.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.3		18.1	7.1	21.3		18.1
Max Q Clear Time (g_c+I1), s	13.2	13.8		20.1	2.7	14.0		20.1
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	3.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	65	100	484	182	435	0	0	788	107
Future Volume (veh/h)	0	0	0	65	100	484	182	435	0	0	788	107
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1841	1841	0	0	1811	1811
Adj Flow Rate, veh/h				68	105	509	209	500	0	0	949	129
Peak Hour Factor				0.95	0.95	0.95	0.87	0.87	0.87	0.83	0.83	0.83
Percent Heavy Veh, %				2	2	2	4	4	0	0	6	6
Cap, veh/h				204	315	467	243	2157	0	0	1302	177
Arrive On Green				0.28	0.28	0.28	0.14	0.62	0.00	0.00	0.43	0.43
Sat Flow, veh/h				721	1113	1648	1753	3589	0	0	3133	413
Grp Volume(v), veh/h				173	0	509	209	500	0	0	537	541
Grp Sat Flow(s),veh/h/ln				1834	0	1648	1753	1749	0	0	1721	1735
Q Serve(g_s), s				6.7	0.0	25.5	10.5	5.8	0.0	0.0	23.3	23.4
Cycle Q Clear(g_c), s				6.7	0.0	25.5	10.5	5.8	0.0	0.0	23.3	23.4
Prop In Lane				0.39		1.00	1.00		0.00	0.00		0.24
Lane Grp Cap(c), veh/h				520	0	467	243	2157	0	0	736	742
V/C Ratio(X)				0.33	0.00	1.09	0.86	0.23	0.00	0.00	0.73	0.73
Avail Cap(c_a), veh/h				520	0	467	263	2157	0	0	736	742
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				25.5	0.0	32.3	37.9	7.7	0.0	0.0	21.4	21.4
Incr Delay (d2), s/veh				0.4	0.0	68.1	22.6	0.3	0.0	0.0	6.3	6.2
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				2.9	0.0	18.6	6.0	2.0	0.0	0.0	10.2	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				25.9	0.0	100.4	60.5	8.0	0.0	0.0	27.7	27.6
LnGrp LOS				C	A	F	E	A	A	A	C	C
Approach Vol, veh/h					682			709			1078	
Approach Delay, s/veh					81.5			23.5			27.6	
Approach LOS					F			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	60.0		17.0	43.0		30.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	55.5		13.5	37.5		25.5
Max Q Clear Time (g_c+I1), s	7.8		12.5	25.4		27.5
Green Ext Time (p_c), s	3.8		0.1	5.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	41.3
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	0	176	0	0	0	0	432	204	431	439	0
Future Volume (veh/h)	195	0	176	0	0	0	0	432	204	431	439	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				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	1900	1856	1900				0	1856	1856	1841	1841	0
Adj Flow Rate, veh/h	241	0	217				0	497	234	490	499	0
Peak Hour Factor	0.81	0.81	0.81				0.87	0.87	0.87	0.88	0.88	0.88
Percent Heavy Veh, %	0	3	0				0	3	3	4	4	0
Cap, veh/h	306	0	267				0	1280	571	539	2528	0
Arrive On Green	0.17	0.00	0.17				0.00	0.36	0.36	0.31	0.72	0.00
Sat Flow, veh/h	1767	0	1543				0	3618	1572	1753	3589	0
Grp Volume(v), veh/h	241	0	217				0	497	234	490	499	0
Grp Sat Flow(s),veh/h/ln	1767	0	1543				0	1763	1572	1753	1749	0
Q Serve(g_s), s	11.3	0.0	11.7				0.0	9.0	9.6	23.2	4.0	0.0
Cycle Q Clear(g_c), s	11.3	0.0	11.7				0.0	9.0	9.6	23.2	4.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	306	0	267				0	1280	571	539	2528	0
V/C Ratio(X)	0.79	0.00	0.81				0.00	0.39	0.41	0.91	0.20	0.00
Avail Cap(c_a), veh/h	378	0	330				0	1280	571	781	2528	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.2	0.0	34.4				0.0	20.4	20.6	28.8	3.9	0.0
Incr Delay (d2), s/veh	8.6	0.0	11.8				0.0	0.9	2.2	10.9	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
%ile BackOfQ(50%),veh/ln	5.5	0.0	5.2				0.0	3.7	3.8	11.0	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.9	0.0	46.2				0.0	21.3	22.8	39.6	4.0	0.0
LnGrp LOS	D	A	D				A	C	C	D	A	A
Approach Vol, veh/h		458						731			989	
Approach Delay, s/veh		44.5						21.8			21.7	
Approach LOS		D						C			C	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	11.1	35.9	19.5	67.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	38.5	19.5	18.5	62.5
Max Q Clear Time (g_c+I1), s	25.2	11.6	13.7	6.0
Green Ext Time (p_c), s	1.4	2.6	1.2	3.9

Intersection Summary	
HCM 6th Ctrl Delay	26.5
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	69	21	69	57	133	4	379	12	149	405	12
Future Volume (veh/h)	22	69	21	69	57	133	4	379	12	149	405	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	36	113	34	78	64	149	4	403	13	162	440	13
Peak Hour Factor	0.61	0.61	0.61	0.89	0.89	0.89	0.94	0.94	0.94	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	257	299	90	321	107	250	522	1386	45	658	1778	52
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.01	0.40	0.40	0.12	0.51	0.51
Sat Flow, veh/h	1159	1375	414	1228	494	1149	1767	3485	112	1753	3468	102
Grp Volume(v), veh/h	36	0	147	78	0	213	4	203	213	162	222	231
Grp Sat Flow(s),veh/h/ln	1159	0	1788	1228	0	1643	1767	1763	1834	1753	1749	1821
Q Serve(g_s), s	1.5	0.0	3.6	3.0	0.0	6.0	0.1	4.0	4.1	2.3	3.6	3.7
Cycle Q Clear(g_c), s	7.5	0.0	3.6	6.6	0.0	6.0	0.1	4.0	4.1	2.3	3.6	3.7
Prop In Lane	1.00		0.23	1.00		0.70	1.00		0.06	1.00		0.06
Lane Grp Cap(c), veh/h	257	0	389	321	0	358	522	701	730	658	897	934
V/C Ratio(X)	0.14	0.00	0.38	0.24	0.00	0.60	0.01	0.29	0.29	0.25	0.25	0.25
Avail Cap(c_a), veh/h	421	0	642	495	0	590	765	701	730	698	897	934
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	17.2	20.0	0.0	18.1	9.1	10.6	10.6	5.9	7.0	7.0
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.4	0.0	1.6	0.0	1.0	1.0	0.2	0.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.4	0.8	0.0	2.2	0.0	1.5	1.5	0.6	1.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	17.8	20.4	0.0	19.7	9.1	11.6	11.6	6.1	7.7	7.6
LnGrp LOS	C	A	B	C	A	B	A	B	B	A	A	A
Approach Vol, veh/h		183			291			420			615	
Approach Delay, s/veh		18.6			19.9			11.6			7.3	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	25.0		15.7	4.9	30.9		15.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	20.5		18.5	7.5	20.5		18.5
Max Q Clear Time (g_c+I1), s	4.3	6.1		9.5	2.1	5.7		8.6
Green Ext Time (p_c), s	0.1	2.0		0.6	0.0	2.2		1.1

Intersection Summary		
HCM 6th Ctrl Delay		12.3
HCM 6th LOS		B

Intersection	
Intersection Delay, s/veh	22.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	93	461	63	39	196	0	0	297	132
Future Vol, veh/h	0	0	0	93	461	63	39	196	0	0	297	132
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.75	0.75	0.75	0.87	0.87	0.87
Heavy Vehicles, %	0	0	0	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	0	0	107	530	72	52	261	0	0	341	152
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	24.4	22	20.4
HCM LOS	C	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	29%	0%	0%	0%
Vol Thru, %	83%	71%	79%	100%	0%
Vol Right, %	0%	0%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	235	324	294	297	132
LT Vol	39	93	0	0	0
Through Vol	196	231	231	297	0
RT Vol	0	0	63	0	132
Lane Flow Rate	313	372	337	341	152
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.63	0.736	0.64	0.682	0.273
Departure Headway (Hd)	7.242	7.124	6.825	7.194	6.477
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	498	506	526	498	551
Service Time	5.314	4.898	4.598	4.975	4.258
HCM Lane V/C Ratio	0.629	0.735	0.641	0.685	0.276
HCM Control Delay	22	27.4	21.1	24.2	11.7
HCM Lane LOS	C	D	C	C	B
HCM 95th-tile Q	4.3	6.1	4.5	5.1	1.1

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	81	28	80	66	30	6	32	113	36	4	237	34
Future Vol, veh/h	81	28	80	66	30	6	32	113	36	4	237	34
Peak Hour Factor	0.77	0.77	0.77	0.83	0.83	0.83	0.74	0.74	0.74	0.81	0.81	0.81
Heavy Vehicles, %	4	4	4	2	2	2	4	4	4	2	2	2
Mvmt Flow	105	36	104	80	36	7	43	153	49	5	293	42
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.2	10.8	11.9	13.8
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	43%	65%	1%
Vol Thru, %	62%	15%	29%	86%
Vol Right, %	20%	42%	6%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	181	189	102	275
LT Vol	32	81	66	4
Through Vol	113	28	30	237
RT Vol	36	80	6	34
Lane Flow Rate	245	245	123	340
Geometry Grp	1	1	1	1
Degree of Util (X)	0.375	0.383	0.208	0.505
Departure Headway (Hd)	5.519	5.624	6.09	5.351
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	648	638	586	672
Service Time	3.576	3.683	4.16	3.403
HCM Lane V/C Ratio	0.378	0.384	0.21	0.506
HCM Control Delay	11.9	12.2	10.8	13.8
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.7	1.8	0.8	2.9



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	630	21	73	374	30	29	84	131	91	99	35
Future Volume (veh/h)	36	630	21	73	374	30	29	84	131	91	99	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	0.99		0.98	0.99		0.97
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	1811	1811	1811	1811	1811	1811	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	43	759	25	92	473	38	42	122	190	106	115	41
Peak Hour Factor	0.83	0.83	0.83	0.79	0.79	0.79	0.69	0.69	0.69	0.86	0.86	0.86
Percent Heavy Veh, %	6	6	6	6	6	6	3	3	3	3	3	3
Cap, veh/h	110	1083	36	180	1154	92	119	187	254	241	232	68
Arrive On Green	0.06	0.32	0.32	0.10	0.36	0.36	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1725	3396	112	1725	3214	257	113	645	879	460	804	235
Grp Volume(v), veh/h	43	384	400	92	252	259	354	0	0	262	0	0
Grp Sat Flow(s),veh/h/ln	1725	1721	1787	1725	1721	1751	1638	0	0	1499	0	0
Q Serve(g_s), s	1.1	9.2	9.2	2.4	5.2	5.2	2.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	9.2	9.2	2.4	5.2	5.2	9.0	0.0	0.0	6.5	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.15	0.12		0.54	0.40		0.16
Lane Grp Cap(c), veh/h	110	549	570	180	618	629	560	0	0	541	0	0
V/C Ratio(X)	0.39	0.70	0.70	0.51	0.41	0.41	0.63	0.00	0.00	0.48	0.00	0.00
Avail Cap(c_a), veh/h	261	744	773	276	759	772	732	0	0	692	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.1	14.0	14.0	19.9	11.3	11.3	15.0	0.0	0.0	14.0	0.0	0.0
Incr Delay (d2), s/veh	2.2	1.8	1.8	2.2	0.4	0.4	1.2	0.0	0.0	0.7	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	0.4	2.9	3.0	0.9	1.5	1.5	2.9	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	15.8	15.8	22.1	11.7	11.7	16.2	0.0	0.0	14.7	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		827			603			354			262	
Approach Delay, s/veh		16.2			13.3			16.2			14.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	19.5		18.1	7.5	21.4		18.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	20.3		18.7	7.1	20.7		18.7
Max Q Clear Time (g_c+I1), s	4.4	11.2		8.5	3.1	7.2		11.0
Green Ext Time (p_c), s	0.0	3.0		1.1	0.0	2.3		1.3

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	12	0	109	95	1
Future Vol, veh/h	0	12	0	109	95	1
Conflicting Peds, #/hr	1	0	5	0	0	5
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	53	53	67	67
Heavy Vehicles, %	2	2	4	4	3	3
Mvmt Flow	0	48	0	206	142	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	355	148	148	0	-	0
Stage 1	148	-	-	-	-	-
Stage 2	207	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.14	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.236	-	-	-
Pot Cap-1 Maneuver	643	899	1421	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	637	895	1414	-	-	-
Mov Cap-2 Maneuver	637	-	-	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	824	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1414	-	895	-	-
HCM Lane V/C Ratio	-	-	0.054	-	-
HCM Control Delay (s)	0	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	218	2	67	243	14	6	3	118	8	3	3
Future Vol, veh/h	7	218	2	67	243	14	6	3	118	8	3	3
Peak Hour Factor	0.74	0.74	0.74	0.84	0.84	0.84	0.71	0.71	0.71	0.50	0.50	0.50
Heavy Vehicles, %	18	45	18	5	32	10	10	10	5	23	23	23
Mvmt Flow	9	295	3	80	289	17	8	4	166	16	6	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.7	13.9	10.3	9.8
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	3%	21%	57%
Vol Thru, %	2%	96%	75%	21%
Vol Right, %	93%	1%	4%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	127	227	324	14
LT Vol	6	7	67	8
Through Vol	3	218	243	3
RT Vol	118	2	14	3
Lane Flow Rate	179	307	386	28
Geometry Grp	1	1	1	1
Degree of Util (X)	0.265	0.454	0.542	0.05
Departure Headway (Hd)	5.335	5.323	5.056	6.415
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	673	678	717	557
Service Time	3.373	3.351	3.056	4.465
HCM Lane V/C Ratio	0.266	0.453	0.538	0.05
HCM Control Delay	10.3	12.7	13.9	9.8
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	1.1	2.4	3.3	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	6	299	1	0	12	608	344	67	872	5
Future Volume (veh/h)	2	0	6	299	1	0	12	608	344	67	872	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1648	1648	1648	1885	1885	1885	1781	1781	1781	1752	1752	1752
Adj Flow Rate, veh/h	3	0	10	333	0	0	13	676	382	85	1104	6
Peak Hour Factor	0.63	0.63	0.63	0.90	0.90	0.90	0.90	0.90	0.90	0.79	0.79	0.79
Percent Heavy Veh, %	17	17	17	1	1	1	8	8	8	10	10	10
Cap, veh/h	36	0	32	514	0	229	39	1312	801	160	1562	8
Arrive On Green	0.02	0.00	0.02	0.14	0.00	0.00	0.02	0.39	0.39	0.10	0.46	0.46
Sat Flow, veh/h	1570	0	1397	3591	0	1598	1697	3385	1510	1668	3394	18
Grp Volume(v), veh/h	3	0	10	333	0	0	13	676	382	85	541	569
Grp Sat Flow(s),veh/h/ln	1570	0	1397	1795	0	1598	1697	1692	1510	1668	1664	1748
Q Serve(g_s), s	0.1	0.0	0.4	4.5	0.0	0.0	0.4	7.8	8.2	2.5	13.4	13.4
Cycle Q Clear(g_c), s	0.1	0.0	0.4	4.5	0.0	0.0	0.4	7.8	8.2	2.5	13.4	13.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	36	0	32	514	0	229	39	1312	801	160	766	805
V/C Ratio(X)	0.08	0.00	0.31	0.65	0.00	0.00	0.33	0.52	0.48	0.53	0.71	0.71
Avail Cap(c_a), veh/h	214	0	190	1266	0	563	231	1312	801	227	766	805
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	0.0	24.7	20.8	0.0	0.0	24.7	12.0	7.6	22.1	11.1	11.1
Incr Delay (d2), s/veh	1.0	0.0	5.3	1.4	0.0	0.0	4.9	1.4	2.0	2.7	5.4	5.2
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	0.2	1.8	0.0	0.0	0.2	2.7	3.4	1.0	5.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.5	0.0	30.0	22.2	0.0	0.0	29.6	13.5	9.6	24.9	16.5	16.3
LnGrp LOS	C	A	C	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		13			333			1071			1195	
Approach Delay, s/veh		29.0			22.2			12.3			17.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	24.4		5.7	5.7	28.1		11.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.0	19.9		7.0	7.0	19.9		18.1
Max Q Clear Time (g_c+I1), s	4.5	10.2		2.4	2.4	15.4		6.5
Green Ext Time (p_c), s	0.0	4.3		0.0	0.0	2.8		0.9

Intersection Summary		
HCM 6th Ctrl Delay		15.8
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	77.9

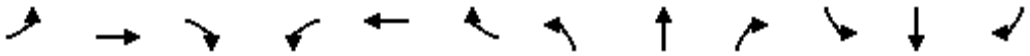
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	124	113	647	201	261	861
Future Vol, veh/h	124	113	647	201	261	861
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	72	72	90	90
Heavy Vehicles, %	31	31	14	31	31	13
Mvmt Flow	135	123	899	279	290	957

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2098	589	0	0	1178	0
Stage 1	1039	-	-	-	-	-
Stage 2	1059	-	-	-	-	-
Critical Hdwy	7.42	7.52	-	-	4.72	-
Critical Hdwy Stg 1	6.42	-	-	-	-	-
Critical Hdwy Stg 2	6.42	-	-	-	-	-
Follow-up Hdwy	3.81	3.61	-	-	2.51	-
Pot Cap-1 Maneuver	~ 31	386	-	-	449	-
Stage 1	244	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 11	386	-	-	449	-
Mov Cap-2 Maneuver	~ 61	-	-	-	-	-
Stage 1	244	-	-	-	-	-
Stage 2	~ 84	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 781	0	6.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	102	449	-
HCM Lane V/C Ratio	-	-	2.526	0.646	-
HCM Control Delay (s)	-	-	$ 781	26.5	-
HCM Lane LOS	-	-	F	D	-
HCM 95th %tile Q(veh)	-	-	23.6	4.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	325	224	276	170	10	100	5	100	8	5	3
Future Volume (veh/h)	1	325	224	276	170	10	100	5	100	8	5	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	0.99		0.99	1.00		0.97
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	1767	1767	1652	1826	1899	1826	1796	1868	1796	1870	1945	1870
Adj Flow Rate, veh/h	1	361	249	294	181	11	119	6	119	12	8	5
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.84	0.84	0.84	0.65	0.65	0.65
Percent Heavy Veh, %	9	9	21	5	5	5	7	7	7	2	2	2
Cap, veh/h	1	432	338	305	188	11	265	40	203	272	175	89
Arrive On Green	0.25	0.25	0.25	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	5	1761	1377	1110	683	42	630	146	739	657	639	324
Grp Volume(v), veh/h	362	0	249	486	0	0	244	0	0	25	0	0
Grp Sat Flow(s),veh/h/ln	1766	0	1377	1835	0	0	1515	0	0	1621	0	0
Q Serve(g_s), s	11.3	0.0	9.7	15.2	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.3	0.0	9.7	15.2	0.0	0.0	7.9	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.00		1.00	0.60		0.02	0.49		0.49	0.48		0.20
Lane Grp Cap(c), veh/h	433	0	338	504	0	0	508	0	0	536	0	0
V/C Ratio(X)	0.84	0.00	0.74	0.96	0.00	0.00	0.48	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	485	0	378	504	0	0	508	0	0	536	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)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.9	0.0	20.3	20.9	0.0	0.0	18.1	0.0	0.0	15.5	0.0	0.0
Incr Delay (d2), s/veh	11.1	0.0	6.6	31.2	0.0	0.0	3.2	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	3.3	9.9	0.0	0.0	3.1	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	0.0	26.9	52.0	0.0	0.0	21.4	0.0	0.0	15.7	0.0	0.0
LnGrp LOS	C	A	C	D	A	A	C	A	A	B	A	A
Approach Vol, veh/h		611			486			244			25	
Approach Delay, s/veh		29.9			52.0			21.4			15.7	
Approach LOS		C			D			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.3		20.0		20.0		20.0				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0				
Max Q Clear Time (g_c+I1), s		13.3		2.6		17.2		9.9				
Green Ext Time (p_c), s		0.8		0.0		0.0		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			36.0									
HCM 6th LOS			D									

Intersection	
Intersection Delay, s/veh	130.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	331	95	52	110	8	48	265	8	128	419	0
Future Vol, veh/h	1	331	95	52	110	8	48	265	8	128	419	0
Peak Hour Factor	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles, %	6	16	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	1	372	107	56	118	9	53	291	9	139	455	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	116.1	22.3	45.1	225.9
HCM LOS	F	C	E	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	15%	0%	0%	32%	0%	23%
Vol Thru, %	85%	0%	78%	68%	0%	77%
Vol Right, %	0%	100%	22%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	313	8	427	162	8	547
LT Vol	48	0	1	52	0	128
Through Vol	265	0	331	110	0	419
RT Vol	0	8	95	0	8	0
Lane Flow Rate	344	9	480	174	9	595
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.826	0.019	1.127	0.458	0.021	1.415
Departure Headway (Hd)	9.959	9.142	9.488	11.05	10.141	9.081
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	368	394	389	329	355	404
Service Time	7.659	6.842	7.488	8.75	7.841	7.081
HCM Lane V/C Ratio	0.935	0.023	1.234	0.529	0.025	1.473
HCM Control Delay	45.9	12	116.1	22.8	13.1	225.9
HCM Lane LOS	E	B	F	C	B	F
HCM 95th-tile Q	7.4	0.1	16	2.3	0.1	28.1

Intersection	
Intersection Delay, s/veh	14.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	320	14	36	0	7	0	108	95	0	91	0
Future Vol, veh/h	44	320	14	36	0	7	0	108	95	0	91	0
Peak Hour Factor	0.77	0.77	0.77	0.83	0.83	0.83	0.90	0.90	0.90	0.89	0.89	0.89
Heavy Vehicles, %	5	20	5	8	8	8	3	3	3	3	3	3
Mvmt Flow	57	416	18	43	0	8	0	120	106	0	102	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	18.1	9.3	11	10
HCM LOS	C	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	12%	84%	0%
Vol Thru, %	53%	85%	0%	100%
Vol Right, %	47%	4%	16%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	203	378	43	91
LT Vol	0	44	36	0
Through Vol	108	320	0	91
RT Vol	95	14	7	0
Lane Flow Rate	226	491	52	102
Geometry Grp	1	1	1	1
Degree of Util (X)	0.332	0.684	0.083	0.164
Departure Headway (Hd)	5.291	5.013	5.752	5.775
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	679	727	622	620
Service Time	3.331	3.013	3.797	3.822
HCM Lane V/C Ratio	0.333	0.675	0.084	0.165
HCM Control Delay	11	18.1	9.3	10
HCM Lane LOS	B	C	A	A
HCM 95th-tile Q	1.5	5.4	0.3	0.6

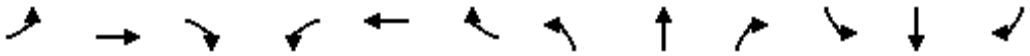
Intersection	
Int Delay, s/veh	10.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	3	401	31	12	377	4	119	0	296	7	0	38
Future Vol, veh/h	3	401	31	12	377	4	119	0	296	7	0	38
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	5	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	115	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	93	93	93	90	90	90	91	91	91
Heavy Vehicles, %	4	8	4	3	9	3	48	5	5	9	9	9
Mvmt Flow	3	451	35	13	405	4	132	0	329	8	0	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	421	0	-	451	0	0	911	904	456	1072	902	419
Stage 1	-	-	-	-	-	-	457	457	-	445	445	-
Stage 2	-	-	-	-	-	-	454	447	-	627	457	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.58	6.55	6.25	7.19	6.59	6.29
Critical Hdwy Stg 1	-	-	-	-	-	-	6.58	5.55	-	6.19	5.59	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.58	5.55	-	6.19	5.59	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.932	4.045	3.345	3.581	4.081	3.381
Pot Cap-1 Maneuver	1127	-	0	1104	-	-	212	274	598	192	270	619
Stage 1	-	-	0	-	-	-	504	563	-	579	563	-
Stage 2	-	-	0	-	-	-	506	568	-	460	556	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1114	-	-	1104	-	-	195	266	595	83	262	612
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	266	-	83	262	-
Stage 1	-	-	-	-	-	-	502	561	-	570	548	-
Stage 2	-	-	-	-	-	-	464	553	-	204	554	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	28.9	19
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	195	595	1114	-	1104	-	-	307
HCM Lane V/C Ratio	0.678	0.553	0.003	-	0.012	-	-	0.161
HCM Control Delay (s)	55.3	18.3	8.2	0	8.3	0	-	19
HCM Lane LOS	F	C	A	A	A	A	-	C
HCM 95th %tile Q(veh)	4.1	3.4	0	-	0	-	-	0.6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	773	0	0	577	676	0	0	0	316	0	170
Future Volume (veh/h)	175	773	0	0	577	676	0	0	0	316	0	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1841	1841	1841	1811	1841	1841	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	180	797	0	0	679	0	0	0	0	273	115	191
Peak Hour Factor	0.97	0.97	0.97	0.85	0.85	0.85	0.92	0.92	0.92	0.89	0.89	0.89
Percent Heavy Veh, %	4	4	4	6	4	4	0	0	0	3	3	3
Cap, veh/h	252	1908	0	4	1040		0	488	0	621	161	268
Arrive On Green	0.14	0.55	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	1753	3589	0	1725	3589	0	0	1900	0	1767	627	1041
Grp Volume(v), veh/h	180	797	0	0	679	0	0	0	0	273	0	306
Grp Sat Flow(s),veh/h/ln	1753	1749	0	1725	1749	0	0	1900	0	1767	0	1668
Q Serve(g_s), s	4.2	5.8	0.0	0.0	7.3	0.0	0.0	0.0	0.0	5.8	0.0	7.2
Cycle Q Clear(g_c), s	4.2	5.8	0.0	0.0	7.3	0.0	0.0	0.0	0.0	5.8	0.0	7.2
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.62
Lane Grp Cap(c), veh/h	252	1908	0	4	1040		0	488	0	621	0	429
V/C Ratio(X)	0.71	0.42	0.00	0.00	0.65		0.00	0.00	0.00	0.44	0.00	0.71
Avail Cap(c_a), veh/h	297	1908	0	280	1762		0	794	0	906	0	697
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	5.8	0.0	0.0	13.2	0.0	0.0	0.0	0.0	14.1	0.0	14.6
Incr Delay (d2), s/veh	6.5	0.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.5	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	1.8	1.1	0.0	0.0	2.1	0.0	0.0	0.0	0.0	2.0	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.1	5.9	0.0	0.0	13.9	0.0	0.0	0.0	0.0	14.5	0.0	16.8
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		977			679	A		0			579	
Approach Delay, s/veh		9.3			13.9			0.0			15.7	
Approach LOS		A			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	27.5		15.6	10.7	16.8		15.6				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	22.0		18.0	7.3	21.7		18.0				
Max Q Clear Time (g_c+I1), s	0.0	7.8		9.2	6.2	9.3		0.0				
Green Ext Time (p_c), s	0.0	4.5		1.9	0.1	3.4		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		12.3	
HCM 6th LOS		B	

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	87.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	136	706	8	23	203	7	3	194	11	296	72	206
Future Vol, veh/h	136	706	8	23	203	7	3	194	11	296	72	206
Peak Hour Factor	0.88	0.88	0.88	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86
Heavy Vehicles, %	7	6	7	3	3	3	6	6	6	2	2	2
Mvmt Flow	155	802	9	27	242	8	3	216	12	344	84	240
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	134.5	31.1	24.4	64.6
HCM LOS	F	D	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	2%	0%	28%	0%	10%	0%	80%	0%
Vol Thru, %	98%	0%	72%	98%	90%	0%	20%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	197	11	489	361	226	7	368	206
LT Vol	3	0	136	0	23	0	296	0
Through Vol	194	0	353	353	203	0	72	0
RT Vol	0	11	0	8	0	7	0	206
Lane Flow Rate	219	12	556	410	269	8	428	240
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.573	0.03	1.322	0.956	0.692	0.02	1.05	0.515
Departure Headway (Hd)	9.93	9.188	8.906	8.727	9.768	8.983	9.219	8.074
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	366	392	411	418	371	401	398	450
Service Time	7.63	6.888	6.606	6.427	7.468	6.683	6.919	5.774
HCM Lane V/C Ratio	0.598	0.031	1.353	0.981	0.725	0.02	1.075	0.533
HCM Control Delay	25.1	12.2	186.8	63.6	31.7	11.9	90.1	19
HCM Lane LOS	D	B	F	F	D	B	F	C
HCM 95th-tile Q	3.4	0.1	24.5	11.1	5	0.1	13.7	2.9

Intersection	
Int Delay, s/veh	72.9

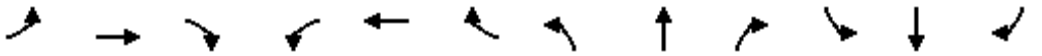
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	274	678	141	276	63
Future Vol, veh/h	70	274	678	141	276	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	96	96	84	84
Heavy Vehicles, %	22	20	2	2	2	2
Mvmt Flow	79	308	706	147	329	75

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1888	-	329	0	-	0
Stage 1	329	-	-	-	-	-
Stage 2	1559	-	-	-	-	-
Critical Hdwy	6.62	-	4.12	-	-	-
Critical Hdwy Stg 1	5.62	-	-	-	-	-
Critical Hdwy Stg 2	5.62	-	-	-	-	-
Follow-up Hdwy	3.698	-	2.218	-	-	-
Pot Cap-1 Maneuver	~ 68	0	1231	-	-	0
Stage 1	686	0	-	-	-	0
Stage 2	171	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 29	-	1231	-	-	-
Mov Cap-2 Maneuver	~ 29	-	-	-	-	-
Stage 1	292	-	-	-	-	-
Stage 2	171	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 1062	9.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1231	-	29	-	-
HCM Lane V/C Ratio	0.574	-	2.712	-	-
HCM Control Delay (s)	11.8	-	$ 1062	0	-
HCM Lane LOS	B	-	F	A	-
HCM 95th %tile Q(veh)	3.8	-	9.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	840	48	41	954	516	32	102	26	207	75	267
Future Volume (veh/h)	201	840	48	41	954	516	32	102	26	207	75	267
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.99	1.00		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	218	913	52	50	1163	629	43	136	35	235	85	303
Peak Hour Factor	0.92	0.92	0.92	0.82	0.82	0.82	0.75	0.75	0.75	0.88	0.88	0.88
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	225	1321	581	110	1108	475	430	340	88	441	476	602
Arrive On Green	0.13	0.38	0.38	0.06	0.31	0.31	0.06	0.23	0.23	0.10	0.27	0.27
Sat Flow, veh/h	1753	3469	1525	1767	3526	1512	1781	1489	383	1668	1752	1500
Grp Volume(v), veh/h	218	913	52	50	1163	629	43	0	171	235	85	303
Grp Sat Flow(s),veh/h/ln	1753	1735	1525	1767	1763	1512	1781	0	1873	1668	1752	1500
Q Serve(g_s), s	8.7	15.5	1.5	1.9	22.0	22.0	1.2	0.0	5.4	7.0	2.6	10.6
Cycle Q Clear(g_c), s	8.7	15.5	1.5	1.9	22.0	22.0	1.2	0.0	5.4	7.0	2.6	10.6
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	225	1321	581	110	1108	475	430	0	428	441	476	602
V/C Ratio(X)	0.97	0.69	0.09	0.46	1.05	1.32	0.10	0.00	0.40	0.53	0.18	0.50
Avail Cap(c_a), veh/h	225	1321	581	177	1108	475	508	0	428	441	476	602
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	1.00	1.00
Uniform Delay (d), s/veh	30.4	18.2	13.9	31.7	24.0	24.0	18.3	0.0	22.9	18.3	19.5	15.8
Incr Delay (d2), s/veh	50.5	1.6	0.1	2.9	41.0	159.7	0.1	0.0	2.8	1.2	0.8	3.0
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	6.5	5.5	0.5	0.8	14.2	28.3	0.5	0.0	2.6	2.8	1.1	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.9	19.8	14.0	34.6	65.0	183.7	18.4	0.0	25.7	19.6	20.3	18.8
LnGrp LOS	F	B	B	C	F	F	B	A	C	B	C	B
Approach Vol, veh/h		1183			1842			214			623	
Approach Delay, s/veh		30.8			104.7			24.2			19.3	
Approach LOS		C			F			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	30.6	8.0	23.0	13.0	26.0	11.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	24.0	7.0	16.0	9.0	22.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	3.9	17.5	3.2	12.6	10.7	24.0	9.0	7.4
Green Ext Time (p_c), s	0.0	3.1	0.0	0.5	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	63.8
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	3804.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	1	138	1	281	2	792	196	343	1018	0
Future Vol, veh/h	0	1	1	138	1	281	2	792	196	343	1018	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	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	87	87	87	93	93	93	87	87	87
Heavy Vehicles, %	2	2	2	10	10	44	10	5	10	45	3	6
Mvmt Flow	0	1	1	159	1	323	2	852	211	394	1170	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2389	3025	585	2336	2920	532	1170	0	0	1063	0	0
Stage 1	1958	1958	-	962	962	-	-	-	-	-	-	-
Stage 2	431	1067	-	1374	1958	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.7	6.7	7.78	4.3	-	-	5	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.6	4.1	3.74	2.3	-	-	2.65	-	-
Pot Cap-1 Maneuver	18	13	454	~ 17	13	397	549	-	-	447	-	-
Stage 1	66	108	-	260	315	-	-	-	-	-	-	-
Stage 2	573	297	-	~ 143	99	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	1	2	454	~ 3	2	397	549	-	-	447	-	-
Mov Cap-2 Maneuver	1	2	-	~ 3	2	-	-	-	-	-	-	-
Stage 1	66	13	-	259	314	-	-	-	-	-	-	-
Stage 2	106	296	-	~ 16	12	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 1282.6	$ 24493.7	0	12.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	549	-	-	4	9	447	-	-
HCM Lane V/C Ratio	0.004	-	-	0.543	53.64	0.882	-	-
HCM Control Delay (s)	11.6	-	-	$ 1282.6	$ 24493.7	49	-	-
HCM Lane LOS	B	-	-	F	F	E	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	62.1	9.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

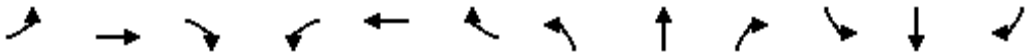
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	0	60	8	0	5	7	815	6	5	964	8
Future Vol, veh/h	31	0	60	8	0	5	7	815	6	5	964	8
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	-	0	140	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	67	67	67	90	90	90	92	92	92
Heavy Vehicles, %	3	3	3	27	27	27	9	5	9	6	3	6
Mvmt Flow	39	0	75	12	0	7	8	906	7	5	1048	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1532	1992	529	1460	-	457	1057	0	0	913	0	0
Stage 1	1063	1063	-	926	-	-	-	-	-	-	-	-
Stage 2	469	929	-	534	-	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	8.04	-	7.44	4.28	-	-	4.22	-	-
Critical Hdwy Stg 1	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.77	-	3.57	2.29	-	-	2.26	-	-
Pot Cap-1 Maneuver	79	59	492	72	0	488	615	-	-	718	-	-
Stage 1	237	296	-	244	0	-	-	-	-	-	-	-
Stage 2	541	342	-	439	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	77	58	492	60	-	488	615	-	-	718	-	-
Mov Cap-2 Maneuver	77	58	-	60	-	-	-	-	-	-	-	-
Stage 1	234	294	-	241	-	-	-	-	-	-	-	-
Stage 2	526	338	-	369	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	58.7	53.6	0.1	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	615	-	-	173	60	488	718	-	-
HCM Lane V/C Ratio	0.013	-	-	0.658	0.199	0.015	0.008	-	-
HCM Control Delay (s)	10.9	-	-	58.7	79.3	12.5	10.1	-	-
HCM Lane LOS	B	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	3.8	0.7	0	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	134	34	171	132	155	48	614	158	436	811	23
Future Volume (veh/h)	20	134	34	171	132	155	48	614	158	436	811	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
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	1870	1870	1870	1826	1781	1899	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	26	172	44	194	150	176	53	675	174	474	882	25
Peak Hour Factor	0.78	0.78	0.78	0.88	0.88	0.88	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	8	5	4	4	4	3	3	3
Cap, veh/h	178	220	56	233	334	302	113	1002	445	582	1372	39
Arrive On Green	0.10	0.15	0.15	0.13	0.19	0.19	0.06	0.29	0.29	0.17	0.39	0.39
Sat Flow, veh/h	1781	1437	368	1739	1781	1609	1753	3497	1552	3428	3500	99
Grp Volume(v), veh/h	26	0	216	194	150	176	53	675	174	474	444	463
Grp Sat Flow(s),veh/h/ln	1781	0	1804	1739	1781	1609	1753	1749	1552	1714	1763	1837
Q Serve(g_s), s	0.9	0.0	8.1	7.6	5.2	7.0	2.0	12.0	6.3	9.3	14.4	14.4
Cycle Q Clear(g_c), s	0.9	0.0	8.1	7.6	5.2	7.0	2.0	12.0	6.3	9.3	14.4	14.4
Prop In Lane	1.00		0.20	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	178	0	276	233	334	302	113	1002	445	582	691	720
V/C Ratio(X)	0.15	0.00	0.78	0.83	0.45	0.58	0.47	0.67	0.39	0.81	0.64	0.64
Avail Cap(c_a), veh/h	178	0	463	235	521	470	175	1002	445	709	691	720
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	28.6	29.6	25.3	26.0	31.7	22.1	20.1	28.1	17.3	17.3
Incr Delay (d2), s/veh	0.4	0.0	4.8	21.5	0.9	1.8	3.0	1.8	0.6	6.1	4.6	4.4
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	0.4	0.0	3.7	4.3	2.1	2.6	0.9	4.6	2.1	3.9	5.7	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	0.0	33.4	51.1	26.2	27.8	34.7	23.9	20.7	34.1	21.9	21.7
LnGrp LOS	C	A	C	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		242			520			902			1381	
Approach Delay, s/veh		33.0			36.0			23.9			26.0	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	24.6	13.9	15.2	9.0	32.0	11.5	17.6
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	14.5	20.0	9.5	18.0	7.0	27.5	7.0	20.5
Max Q Clear Time (g_c+I1), s	11.3	14.0	9.6	10.1	4.0	16.4	2.9	9.0
Green Ext Time (p_c), s	0.6	2.4	0.0	0.7	0.0	3.8	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	191	52	33	55	37	37	876	103	50	833	56
Future Volume (veh/h)	102	191	52	33	55	37	37	876	103	50	833	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.97	1.00		0.95
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	1870	1945	1870	1870	1870	1870	1914	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	106	199	54	42	71	47	39	922	108	56	926	62
Peak Hour Factor	0.96	0.96	0.96	0.78	0.78	0.78	0.95	0.95	0.95	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	4	4	4	2	2	2
Cap, veh/h	85	104	484	87	109	492	103	1174	138	129	1311	88
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.06	0.37	0.37	0.07	0.39	0.39
Sat Flow, veh/h	0	327	1524	0	344	1549	1823	3144	368	1781	3368	226
Grp Volume(v), veh/h	305	0	54	113	0	47	39	513	517	56	489	499
Grp Sat Flow(s),veh/h/ln	327	0	1524	344	0	1549	1823	1749	1763	1781	1777	1817
Q Serve(g_s), s	0.0	0.0	1.4	0.0	0.0	1.2	1.2	14.8	14.8	1.7	13.2	13.2
Cycle Q Clear(g_c), s	18.1	0.0	1.4	18.1	0.0	1.2	1.2	14.8	14.8	1.7	13.2	13.2
Prop In Lane	0.35		1.00	0.37		1.00	1.00		0.21	1.00		0.12
Lane Grp Cap(c), veh/h	189	0	484	196	0	492	103	653	659	129	692	707
V/C Ratio(X)	1.62	0.00	0.11	0.58	0.00	0.10	0.38	0.79	0.79	0.44	0.71	0.71
Avail Cap(c_a), veh/h	189	0	484	196	0	492	227	653	659	222	692	707
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	13.8	16.0	0.0	13.7	25.9	15.8	15.8	25.3	14.7	14.7
Incr Delay (d2), s/veh	300.3	0.0	0.1	4.1	0.0	0.1	2.3	9.2	9.1	2.3	6.0	5.9
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	18.2	0.0	0.5	1.2	0.0	0.4	0.6	6.9	7.0	0.7	5.3	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	319.7	0.0	13.9	20.2	0.0	13.8	28.2	25.0	25.0	27.6	20.7	20.5
LnGrp LOS	F	A	B	C	A	B	C	C	C	C	C	C
Approach Vol, veh/h		359			160			1069			1044	
Approach Delay, s/veh		273.7			18.3			25.1			21.0	
Approach LOS		F			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.6	25.8		22.6	7.7	26.7		22.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.3		18.1	7.1	21.3		18.1
Max Q Clear Time (g_c+I1), s	3.7	16.8		20.1	3.2	15.2		20.1
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	2.9		0.0

Intersection Summary		
HCM 6th Ctrl Delay		57.0
HCM 6th LOS		E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	70	160	381	352	778	0	0	755	188
Future Volume (veh/h)	0	0	0	70	160	381	352	778	0	0	755	188
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1841	1826	1914	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				74	170	405	387	855	0	0	821	204
Peak Hour Factor				0.94	0.94	0.94	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %				4	5	4	3	3	0	0	3	3
Cap, veh/h				124	285	365	403	2370	0	0	1101	273
Arrive On Green				0.23	0.23	0.23	0.23	0.67	0.00	0.00	0.39	0.39
Sat Flow, veh/h				545	1253	1601	1767	3618	0	0	2883	693
Grp Volume(v), veh/h				244	0	405	387	855	0	0	519	506
Grp Sat Flow(s),veh/h/ln				1799	0	1601	1767	1763	0	0	1763	1721
Q Serve(g_s), s				10.9	0.0	20.5	19.5	9.4	0.0	0.0	22.7	22.7
Cycle Q Clear(g_c), s				10.9	0.0	20.5	19.5	9.4	0.0	0.0	22.7	22.7
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.40
Lane Grp Cap(c), veh/h				410	0	365	403	2370	0	0	695	679
V/C Ratio(X)				0.60	0.00	1.11	0.96	0.36	0.00	0.00	0.75	0.75
Avail Cap(c_a), veh/h				410	0	365	403	2370	0	0	695	679
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				31.0	0.0	34.7	34.4	6.4	0.0	0.0	23.4	23.4
Incr Delay (d2), s/veh				2.3	0.0	80.4	34.8	0.4	0.0	0.0	7.1	7.3
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				4.9	0.0	15.9	12.0	3.1	0.0	0.0	10.4	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				33.4	0.0	115.1	69.2	6.8	0.0	0.0	30.5	30.7
LnGrp LOS				C	A	F	E	A	A	A	C	C
Approach Vol, veh/h					649			1242			1025	
Approach Delay, s/veh					84.4			26.2			30.6	
Approach LOS					F			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	65.0		25.0	40.0		25.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	60.5		20.5	35.5		20.5
Max Q Clear Time (g_c+I1), s	11.4		21.5	24.7		22.5
Green Ext Time (p_c), s	7.5		0.0	5.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.7
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	9	193	0	0	0	0	1004	172	336	521	0
Future Volume (veh/h)	130	9	193	0	0	0	0	1004	172	336	521	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
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	1900	1781	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	149	10	222				0	1154	198	369	573	0
Peak Hour Factor	0.87	0.87	0.87				0.87	0.87	0.87	0.91	0.91	0.91
Percent Heavy Veh, %	0	8	0				0	2	2	2	2	0
Cap, veh/h	278	19	263				0	1559	694	414	2568	0
Arrive On Green	0.17	0.17	0.17				0.00	0.44	0.44	0.23	0.72	0.00
Sat Flow, veh/h	1595	107	1510				0	3647	1583	1781	3647	0
Grp Volume(v), veh/h	159	0	222				0	1154	198	369	573	0
Grp Sat Flow(s),veh/h/ln	1702	0	1510				0	1777	1583	1781	1777	0
Q Serve(g_s), s	7.4	0.0	12.4				0.0	23.5	7.0	17.5	4.7	0.0
Cycle Q Clear(g_c), s	7.4	0.0	12.4				0.0	23.5	7.0	17.5	4.7	0.0
Prop In Lane	0.94		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	297	0	263				0	1559	694	414	2568	0
V/C Ratio(X)	0.54	0.00	0.84				0.00	0.74	0.29	0.89	0.22	0.00
Avail Cap(c_a), veh/h	351	0	312				0	1559	694	562	2568	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.8	0.0	34.9				0.0	20.3	15.7	32.4	4.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	16.4				0.0	3.2	1.0	13.1	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
%ile BackOfQ(50%),veh/ln	3.1	0.0	5.7				0.0	9.8	2.6	8.8	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.3	0.0	51.3				0.0	23.5	16.7	45.5	4.2	0.0
LnGrp LOS	C	A	D				A	C	B	D	A	A
Approach Vol, veh/h		381						1352			942	
Approach Delay, s/veh		44.2						22.5			20.4	
Approach LOS		D						C			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.7	42.8		19.7		67.5
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	27.5	31.0		18.0		63.0
Max Q Clear Time (g_c+I1), s	19.5	25.5		14.4		6.7
Green Ext Time (p_c), s	0.8	3.7		0.8		4.5

Intersection Summary	
HCM 6th Ctrl Delay	24.9
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	165	24	50	36	155	3	664	35	148	431	14
Future Volume (veh/h)	62	165	24	50	36	155	3	664	35	148	431	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	177	26	54	39	168	3	738	39	159	463	15
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	364	53	293	70	302	506	1346	71	509	1781	58
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.01	0.39	0.39	0.12	0.51	0.51
Sat Flow, veh/h	1171	1589	233	1175	306	1317	1781	3432	181	1781	3512	114
Grp Volume(v), veh/h	67	0	203	54	0	207	3	382	395	159	234	244
Grp Sat Flow(s),veh/h/ln	1171	0	1823	1175	0	1623	1781	1777	1836	1781	1777	1849
Q Serve(g_s), s	2.8	0.0	5.1	2.2	0.0	5.9	0.1	8.7	8.7	2.3	3.9	3.9
Cycle Q Clear(g_c), s	8.7	0.0	5.1	7.2	0.0	5.9	0.1	8.7	8.7	2.3	3.9	3.9
Prop In Lane	1.00		0.13	1.00		0.81	1.00		0.10	1.00		0.06
Lane Grp Cap(c), veh/h	274	0	417	293	0	372	506	697	720	509	901	938
V/C Ratio(X)	0.24	0.00	0.49	0.18	0.00	0.56	0.01	0.55	0.55	0.31	0.26	0.26
Avail Cap(c_a), veh/h	420	0	645	440	0	574	738	697	720	550	901	938
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.7	0.0	17.5	20.6	0.0	17.8	9.5	12.3	12.3	7.2	7.3	7.3
Incr Delay (d2), s/veh	0.5	0.0	0.9	0.3	0.0	1.3	0.0	3.1	3.0	0.3	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	0.7	0.0	2.0	0.6	0.0	2.2	0.0	3.4	3.5	0.6	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.1	0.0	18.4	20.9	0.0	19.1	9.5	15.4	15.3	7.6	8.0	8.0
LnGrp LOS	C	A	B	C	A	B	A	B	B	A	A	A
Approach Vol, veh/h		270			261			780			637	
Approach Delay, s/veh		19.3			19.5			15.3			7.9	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	25.0		16.5	4.8	31.0		16.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	20.5		18.5	7.1	20.9		18.5
Max Q Clear Time (g_c+I1), s	4.3	10.7		10.7	2.1	5.9		9.2
Green Ext Time (p_c), s	0.1	3.3		0.8	0.0	2.4		1.0

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	51.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	73	443	258	88	262	0	0	321	97
Future Vol, veh/h	0	0	0	73	443	258	88	262	0	0	321	97
Peak Hour Factor	0.92	0.92	0.92	0.88	0.88	0.88	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	0	0	83	503	293	111	332	0	0	365	110
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	63.7	51.1	28.4
HCM LOS	F	F	D

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	25%	25%	0%	0%	0%
Vol Thru, %	75%	75%	46%	100%	0%
Vol Right, %	0%	0%	54%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	350	295	480	321	97
LT Vol	88	73	0	0	0
Through Vol	262	222	222	321	0
RT Vol	0	0	258	0	97
Lane Flow Rate	443	335	545	365	110
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.916	0.705	1.071	0.779	0.214
Departure Headway (Hd)	7.678	7.589	7.075	7.925	7.202
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	474	475	512	460	502
Service Time	5.678	5.336	4.822	5.625	4.902
HCM Lane V/C Ratio	0.935	0.705	1.064	0.793	0.219
HCM Control Delay	51.1	26.6	86.5	33.4	11.9
HCM Lane LOS	F	D	F	D	B
HCM 95th-tile Q	10.5	5.5	16.7	6.8	0.8

Intersection	
Intersection Delay, s/veh	52.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	141	114	71	71	41	3	63	303	122	6	213	18
Future Vol, veh/h	141	114	71	71	41	3	63	303	122	6	213	18
Peak Hour Factor	0.97	0.97	0.97	0.88	0.88	0.88	0.78	0.78	0.78	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	118	73	81	47	3	81	388	156	8	266	23
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	23.2	14.6	91.8	19
HCM LOS	C	B	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	43%	62%	3%
Vol Thru, %	62%	35%	36%	90%
Vol Right, %	25%	22%	3%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	488	326	115	237
LT Vol	63	141	71	6
Through Vol	303	114	41	213
RT Vol	122	71	3	18
Lane Flow Rate	626	336	131	296
Geometry Grp	1	1	1	1
Degree of Util (X)	1.099	0.655	0.286	0.563
Departure Headway (Hd)	6.324	7.335	8.286	7.172
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	576	497	436	507
Service Time	4.324	5.335	6.286	5.172
HCM Lane V/C Ratio	1.087	0.676	0.3	0.584
HCM Control Delay	91.8	23.2	14.6	19
HCM Lane LOS	F	C	B	C
HCM 95th-tile Q	19.2	4.7	1.2	3.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	621	23	134	538	98	39	186	140	45	88	23
Future Volume (veh/h)	87	621	23	134	538	98	39	186	140	45	88	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	1.00		0.99
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	1826	1826	1826	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	690	26	156	626	114	47	224	169	49	97	25
Peak Hour Factor	0.90	0.90	0.90	0.86	0.86	0.86	0.83	0.83	0.83	0.91	0.91	0.91
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	2	2	2
Cap, veh/h	182	969	36	222	905	164	115	294	204	188	331	73
Arrive On Green	0.10	0.28	0.28	0.13	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1739	3407	128	1767	2962	538	108	934	650	297	1053	231
Grp Volume(v), veh/h	97	351	365	156	372	368	440	0	0	171	0	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1801	1767	1763	1737	1691	0	0	1582	0	0
Q Serve(g_s), s	2.6	8.9	8.9	4.1	9.1	9.1	5.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.6	8.9	8.9	4.1	9.1	9.1	11.7	0.0	0.0	3.5	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.31	0.11		0.38	0.29		0.15
Lane Grp Cap(c), veh/h	182	493	512	222	538	531	613	0	0	592	0	0
V/C Ratio(X)	0.53	0.71	0.71	0.70	0.69	0.69	0.72	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	248	690	717	306	755	744	718	0	0	684	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.8	15.7	15.7	20.5	15.0	15.0	15.5	0.0	0.0	12.7	0.0	0.0
Incr Delay (d2), s/veh	2.4	2.0	2.0	4.3	1.6	1.6	2.9	0.0	0.0	0.3	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	1.0	3.0	3.1	1.7	3.0	3.0	4.2	0.0	0.0	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	17.8	17.7	24.8	16.6	16.6	18.3	0.0	0.0	13.0	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		813			896			440			171	
Approach Delay, s/veh		18.4			18.0			18.3			13.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	18.4		19.9	9.6	19.5		19.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.5	19.5		18.5	7.0	21.0		18.5
Max Q Clear Time (g_c+I1), s	6.1	10.9		5.5	4.6	11.1		13.7
Green Ext Time (p_c), s	0.1	2.6		0.7	0.0	3.0		1.2

Intersection Summary		
HCM 6th Ctrl Delay		17.8
HCM 6th LOS		B

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	9	12	204	114	9
Future Vol, veh/h	7	9	12	204	114	9
Conflicting Peds, #/hr	0	0	2	0	0	2
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	56	56	74	74	65	65
Heavy Vehicles, %	10	10	2	2	2	2
Mvmt Flow	13	16	16	276	175	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	492	184	191	0	-	0
Stage 1	184	-	-	-	-	-
Stage 2	308	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.12	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.218	-	-	-
Pot Cap-1 Maneuver	522	838	1383	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	513	836	1380	-	-	-
Mov Cap-2 Maneuver	513	-	-	-	-	-
Stage 1	816	-	-	-	-	-
Stage 2	727	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1380	-	655	-	-
HCM Lane V/C Ratio	0.012	-	0.044	-	-
HCM Control Delay (s)	7.6	0	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	16
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	371	15	95	205	3	11	2	181	19	4	1
Future Vol, veh/h	1	371	15	95	205	3	11	2	181	19	4	1
Peak Hour Factor	0.86	0.86	0.86	0.83	0.83	0.83	0.92	0.92	0.92	0.36	0.36	0.36
Heavy Vehicles, %	3	40	3	5	43	10	4	4	4	33	33	33
Mvmt Flow	1	431	17	114	247	4	12	2	197	53	11	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	18.8	15.8	11.7	11.5
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	0%	31%	79%
Vol Thru, %	1%	96%	68%	17%
Vol Right, %	93%	4%	1%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	194	387	303	24
LT Vol	11	1	95	19
Through Vol	2	371	205	4
RT Vol	181	15	3	1
Lane Flow Rate	211	450	365	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.336	0.672	0.568	0.136
Departure Headway (Hd)	5.73	5.372	5.597	7.363
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	622	671	643	490
Service Time	3.812	3.437	3.665	5.363
HCM Lane V/C Ratio	0.339	0.671	0.568	0.137
HCM Control Delay	11.7	18.8	15.8	11.5
HCM Lane LOS	B	C	C	B
HCM 95th-tile Q	1.5	5.2	3.6	0.5



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	5	23	257	0	0	11	923	288	157	937	1
Future Volume (veh/h)	3	5	23	257	0	0	11	923	288	157	937	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1900	1900	1900	1811	1811	1811	1826	1826	1826
Adj Flow Rate, veh/h	4	7	31	313	0	0	12	982	306	167	997	1
Peak Hour Factor	0.75	0.75	0.75	0.82	0.82	0.82	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	5	5	5
Cap, veh/h	41	72	97	481	0	214	37	1229	751	209	1621	2
Arrive On Green	0.06	0.06	0.06	0.13	0.00	0.00	0.02	0.36	0.36	0.12	0.46	0.46
Sat Flow, veh/h	679	1188	1610	3619	0	1610	1725	3441	1533	1739	3556	4
Grp Volume(v), veh/h	11	0	31	313	0	0	12	982	306	167	486	512
Grp Sat Flow(s),veh/h/ln	1866	0	1610	1810	0	1610	1725	1721	1533	1739	1735	1825
Q Serve(g_s), s	0.3	0.0	1.0	4.5	0.0	0.0	0.4	14.0	6.9	5.1	11.6	11.6
Cycle Q Clear(g_c), s	0.3	0.0	1.0	4.5	0.0	0.0	0.4	14.0	6.9	5.1	11.6	11.6
Prop In Lane	0.36		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	113	0	97	481	0	214	37	1229	751	209	791	832
V/C Ratio(X)	0.10	0.00	0.32	0.65	0.00	0.00	0.33	0.80	0.41	0.80	0.62	0.62
Avail Cap(c_a), veh/h	239	0	206	1193	0	531	221	1229	751	239	791	832
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	0.0	24.6	22.5	0.0	0.0	26.3	15.8	8.9	23.4	11.2	11.2
Incr Delay (d2), s/veh	0.4	0.0	1.9	1.5	0.0	0.0	5.0	5.5	1.6	15.5	3.6	3.4
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	0.1	0.0	0.4	1.9	0.0	0.0	0.2	5.7	3.0	2.8	4.4	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	0.0	26.4	24.0	0.0	0.0	31.4	21.3	10.5	38.9	14.8	14.6
LnGrp LOS	C	A	C	C	A	A	C	C	B	D	B	B
Approach Vol, veh/h		42			313			1300			1165	
Approach Delay, s/veh		26.0			24.0			18.9			18.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.1	24.0		7.8	5.7	29.4		11.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	19.5		7.0	7.0	20.0		18.0
Max Q Clear Time (g_c+I1), s	7.1	16.0		3.0	2.4	13.6		6.5
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	3.3		0.8

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	223.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	204	159	887	186	276	1156
Future Vol, veh/h	204	159	887	186	276	1156
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	87	87
Heavy Vehicles, %	22	22	10	22	22	10
Mvmt Flow	222	173	954	200	317	1329

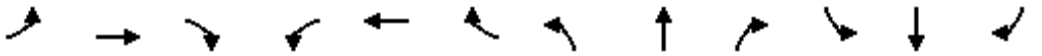
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2353	577	0	0	1154	0
Stage 1	1054	-	-	-	-	-
Stage 2	1299	-	-	-	-	-
Critical Hdwy	7.24	7.34	-	-	4.54	-
Critical Hdwy Stg 1	6.24	-	-	-	-	-
Critical Hdwy Stg 2	6.24	-	-	-	-	-
Follow-up Hdwy	3.72	3.52	-	-	2.42	-
Pot Cap-1 Maneuver	~ 23	413	-	-	499	-
Stage 1	256	-	-	-	-	-
Stage 2	~ 185	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 8	413	-	-	499	-
Mov Cap-2 Maneuver	~ 51	-	-	-	-	-
Stage 1	256	-	-	-	-	-
Stage 2	~ 68	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 1790.8	0	4.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	83	499	-
HCM Lane V/C Ratio	-	-	4.754	0.636	-
HCM Control Delay (s)	-	-	$ 1790.8	24	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	42.4	4.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HORIZON YEAR 2040 BASELINE (WITHOUT PROJECT)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	190	92	404	210	14	84	3	111	20	17	4
Future Volume (veh/h)	0	190	92	404	210	14	84	3	111	20	17	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1722	1722	1791	1796	1868	1796	1856	1930	1856	1870	1945	1870
Adj Flow Rate, veh/h	0	207	100	439	228	15	91	3	121	22	18	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	12	12	12	7	7	7	3	3	3	2	2	2
Cap, veh/h	4	402	186	547	2048	134	235	27	171	263	185	31
Arrive On Green	0.00	0.19	0.19	0.32	0.61	0.61	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1640	2162	1003	1711	3381	221	548	141	888	658	960	162
Grp Volume(v), veh/h	0	155	152	439	119	124	215	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1640	1636	1529	1711	1775	1827	1578	0	0	1780	0	0
Q Serve(g_s), s	0.0	3.4	3.6	9.3	1.1	1.1	3.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.4	3.6	9.3	1.1	1.1	5.0	0.0	0.0	0.8	0.0	0.0
Prop In Lane	1.00		0.66	1.00		0.12	0.42		0.56	0.50		0.09
Lane Grp Cap(c), veh/h	4	304	284	547	1075	1107	433	0	0	479	0	0
V/C Ratio(X)	0.00	0.51	0.54	0.80	0.11	0.11	0.50	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	289	782	731	1679	2255	2322	913	0	0	960	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	14.5	14.6	12.4	3.3	3.3	14.9	0.0	0.0	13.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	1.6	2.8	0.0	0.0	0.9	0.0	0.0	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	1.1	1.1	2.9	0.1	0.1	1.7	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.9	16.2	15.2	3.4	3.4	15.8	0.0	0.0	13.3	0.0	0.0
LnGrp LOS	A	B	B	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		307			682			215			44	
Approach Delay, s/veh		16.0			11.0			15.8			13.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.7	11.4		11.7	0.0	28.1		11.7				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	39.0	19.0		20.0	7.0	50.5		20.0				
Max Q Clear Time (g_c+I1), s	11.3	5.6		2.8	0.0	3.1		7.0				
Green Ext Time (p_c), s	1.4	1.4		0.1	0.0	1.4		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		13.1	
HCM 6th LOS		B	

Intersection	
Intersection Delay, s/veh	79.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	399	77	60	120	5	40	84	27	132	349	0
Future Vol, veh/h	1	399	77	60	120	5	40	84	27	132	349	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	8	8	8	2	2	2	3	3	3	2	2	2
Mvmt Flow	1	434	84	65	130	5	43	91	29	143	379	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	98	19.4	15.7	103.3
HCM LOS	F	C	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	32%	0%	0%	33%	0%	27%
Vol Thru, %	68%	0%	84%	67%	0%	73%
Vol Right, %	0%	100%	16%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	27	477	180	5	481
LT Vol	40	0	1	60	0	132
Through Vol	84	0	399	120	0	349
RT Vol	0	27	77	0	5	0
Lane Flow Rate	135	29	518	196	5	523
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.327	0.064	1.092	0.463	0.012	1.108
Departure Headway (Hd)	9.416	8.516	8.059	9.194	8.29	8.066
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	384	423	456	395	434	455
Service Time	7.116	6.216	6.059	6.894	5.99	6.066
HCM Lane V/C Ratio	0.352	0.069	1.136	0.496	0.012	1.149
HCM Control Delay	16.6	11.8	98	19.6	11.1	103.3
HCM Lane LOS	C	B	F	C	B	F
HCM 95th-tile Q	1.4	0.2	16.3	2.4	0	17

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	216	55	33	0	0	0	42	55	1	90	0
Future Vol, veh/h	36	216	55	33	0	0	0	42	55	1	90	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	11	11	11	12	12	12	3	3	3	2	2	2
Mvmt Flow	39	235	60	36	0	0	0	46	60	1	98	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.9	8.5	8.4	8.8
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	12%	100%	1%
Vol Thru, %	43%	70%	0%	99%
Vol Right, %	57%	18%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	97	307	33	91
LT Vol	0	36	33	1
Through Vol	42	216	0	90
RT Vol	55	55	0	0
Lane Flow Rate	105	334	36	99
Geometry Grp	1	1	1	1
Degree of Util (X)	0.135	0.421	0.052	0.136
Departure Headway (Hd)	4.621	4.539	5.186	4.948
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	774	791	688	723
Service Time	2.664	2.572	3.234	2.992
HCM Lane V/C Ratio	0.136	0.422	0.052	0.137
HCM Control Delay	8.4	10.9	8.5	8.8
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.5	2.1	0.2	0.5

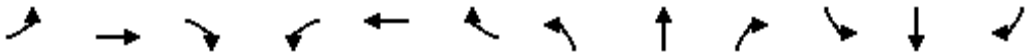
Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	308	14	19	534	5	69	1	202	4	0	26
Future Vol, veh/h	0	308	14	19	534	5	69	1	202	4	0	26
Conflicting Peds, #/hr	5	0	1	1	0	5	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	-	-	-	115	-	-	-
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, %	4	4	4	6	6	6	11	11	11	4	4	4
Mvmt Flow	0	335	15	21	580	5	75	1	220	4	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	590	0	-	336	0	0	668	968	170	799	966	298
Stage 1	-	-	-	-	-	-	336	336	-	630	630	-
Stage 2	-	-	-	-	-	-	332	632	-	169	336	-
Critical Hdwy	4.18	-	-	4.22	-	-	7.72	6.72	7.12	7.58	6.58	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.58	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.58	5.58	-
Follow-up Hdwy	2.24	-	-	2.26	-	-	3.61	4.11	3.41	3.54	4.04	3.34
Pot Cap-1 Maneuver	968	-	0	1192	-	-	327	238	817	273	250	692
Stage 1	-	-	0	-	-	-	627	618	-	431	468	-
Stage 2	-	-	0	-	-	-	631	450	-	810	635	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	963	-	-	1191	-	-	309	232	815	195	244	689
Mov Cap-2 Maneuver	-	-	-	-	-	-	309	232	-	195	244	-
Stage 1	-	-	-	-	-	-	626	617	-	429	457	-
Stage 2	-	-	-	-	-	-	594	440	-	590	634	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	13.4	12.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	308	815	963	-	1191	-	-	515
HCM Lane V/C Ratio	0.247	0.269	-	-	0.017	-	-	0.063
HCM Control Delay (s)	20.5	11	0	-	8.1	-	-	12.5
HCM Lane LOS	C	B	A	-	A	-	-	B
HCM 95th %tile Q(veh)	1	1.1	0	-	0.1	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	648	0	0	463	457	0	0	0	352	0	152
Future Volume (veh/h)	198	648	0	0	463	457	0	0	0	352	0	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1722	1722	1722	1678	1678	1678	1900	1900	1900	1826	1826	1826
Adj Flow Rate, veh/h	215	704	0	0	503	0	0	0	0	274	153	165
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	12	12	12	15	15	15	0	0	0	5	5	5
Cap, veh/h	274	1737	0	4	834		0	525	0	644	221	238
Arrive On Green	0.17	0.53	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.28	0.28	0.28
Sat Flow, veh/h	1640	3358	0	1598	3272	0	0	1900	0	1739	798	860
Grp Volume(v), veh/h	215	704	0	0	503	0	0	0	0	274	0	318
Grp Sat Flow(s),veh/h/ln	1640	1636	0	1598	1594	0	0	1900	0	1739	0	1658
Q Serve(g_s), s	5.5	5.7	0.0	0.0	6.1	0.0	0.0	0.0	0.0	6.0	0.0	7.6
Cycle Q Clear(g_c), s	5.5	5.7	0.0	0.0	6.1	0.0	0.0	0.0	0.0	6.0	0.0	7.6
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.52
Lane Grp Cap(c), veh/h	274	1737	0	4	834		0	525	0	644	0	458
V/C Ratio(X)	0.78	0.41	0.00	0.00	0.60		0.00	0.00	0.00	0.43	0.00	0.69
Avail Cap(c_a), veh/h	651	3227	0	254	2385		0	1142	0	1208	0	996
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	6.2	0.0	0.0	14.3	0.0	0.0	0.0	0.0	13.7	0.0	14.3
Incr Delay (d2), s/veh	4.9	0.2	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.4	0.0	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	2.1	1.1	0.0	0.0	1.7	0.0	0.0	0.0	0.0	2.0	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	6.3	0.0	0.0	15.0	0.0	0.0	0.0	0.0	14.2	0.0	16.2
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		919			503	A		0			592	
Approach Delay, s/veh		10.1			15.0			0.0			15.2	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	27.4		16.7	11.9	15.5		16.7				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	43.5		26.5	17.5	33.0		26.5				
Max Q Clear Time (g_c+I1), s	0.0	7.7		9.6	7.5	8.1		0.0				
Green Ext Time (p_c), s	0.0	5.2		2.6	0.4	3.1		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		12.8	
HCM 6th LOS		B	

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	44
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	113	534	6	14	343	3	6	28	17	315	40	191
Future Vol, veh/h	113	534	6	14	343	3	6	28	17	315	40	191
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	20	20	20	5	5	5	0	0	0	2	2	2
Mvmt Flow	123	580	7	15	373	3	7	30	18	342	43	208
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	46.2	50.9	13.1	39.6
HCM LOS	E	F	B	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	18%	0%	30%	0%	4%	0%	89%	0%
Vol Thru, %	82%	0%	70%	98%	96%	0%	11%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	17	380	273	357	3	355	191
LT Vol	6	0	113	0	14	0	315	0
Through Vol	28	0	267	267	343	0	40	0
RT Vol	0	17	0	6	0	3	0	191
Lane Flow Rate	37	18	413	297	388	3	386	208
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.1	0.046	0.951	0.669	0.9	0.007	0.907	0.42
Departure Headway (Hd)	9.71	8.882	8.292	8.122	8.348	7.605	8.465	7.285
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	368	402	438	445	435	470	428	494
Service Time	7.488	6.66	6.052	5.883	6.11	5.367	6.214	5.033
HCM Lane V/C Ratio	0.101	0.045	0.943	0.667	0.892	0.006	0.902	0.421
HCM Control Delay	13.6	12.1	60.8	25.9	51.2	10.4	52.8	15.2
HCM Lane LOS	B	B	F	D	F	B	F	C
HCM 95th-tile Q	0.3	0.1	11.1	4.8	9.6	0	9.8	2.1

Intersection	
Int Delay, s/veh	133.1

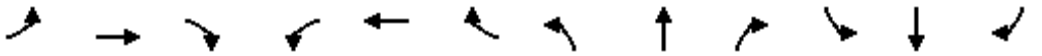
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	196	694	482	105	164	22
Future Vol, veh/h	196	694	482	105	164	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	13	13	5	5	12	12
Mvmt Flow	213	754	524	114	178	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1340	-	178	0	-	0
Stage 1	178	-	-	-	-	-
Stage 2	1162	-	-	-	-	-
Critical Hdwy	6.53	-	4.15	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	-	2.245	-	-	-
Pot Cap-1 Maneuver	~ 159	0	1380	-	-	0
Stage 1	827	0	-	-	-	0
Stage 2	283	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 99	-	1380	-	-	-
Mov Cap-2 Maneuver	~ 99	-	-	-	-	-
Stage 1	513	-	-	-	-	-
Stage 2	283	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 620.5	7.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1380	-	99	-	-
HCM Lane V/C Ratio	0.38	-	2.152	-	-
HCM Control Delay (s)	9.2	-	$ 620.5	0	-
HCM Lane LOS	A	-	F	A	-
HCM 95th %tile Q(veh)	1.8	-	18.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	804	28	26	564	365	28	54	54	502	28	328
Future Volume (veh/h)	168	804	28	26	564	365	28	54	54	502	28	328
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1678
Adj Flow Rate, veh/h	183	874	30	28	613	397	30	59	59	546	30	357
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	15
Cap, veh/h	222	1164	508	68	816	354	265	84	84	644	629	713
Arrive On Green	0.13	0.33	0.33	0.04	0.25	0.25	0.04	0.10	0.10	0.32	0.37	0.37
Sat Flow, veh/h	1753	3497	1527	1654	3300	1430	1781	885	885	1598	1678	1422
Grp Volume(v), veh/h	183	874	30	28	613	397	30	0	118	546	30	357
Grp Sat Flow(s),veh/h/ln	1753	1749	1527	1654	1650	1430	1781	0	1771	1598	1678	1422
Q Serve(g_s), s	7.8	17.1	1.0	1.3	13.2	19.0	1.1	0.0	5.0	22.2	0.9	12.8
Cycle Q Clear(g_c), s	7.8	17.1	1.0	1.3	13.2	19.0	1.1	0.0	5.0	22.2	0.9	12.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	222	1164	508	68	816	354	265	0	168	644	629	713
V/C Ratio(X)	0.83	0.75	0.06	0.41	0.75	1.12	0.11	0.00	0.70	0.85	0.05	0.50
Avail Cap(c_a), veh/h	274	1164	508	151	816	354	420	0	369	690	721	791
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	1.00	1.00
Uniform Delay (d), s/veh	32.7	22.8	17.4	35.9	26.7	28.9	29.0	0.0	33.7	18.5	15.3	12.8
Incr Delay (d2), s/veh	15.4	2.8	0.0	4.0	3.9	85.1	0.2	0.0	5.2	9.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	6.7	0.4	0.6	5.1	14.5	0.5	0.0	2.3	9.1	0.3	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.1	25.6	17.5	39.9	30.6	114.0	29.2	0.0	38.9	27.7	15.3	13.3
LnGrp LOS	D	C	B	D	C	F	C	A	D	C	B	B
Approach Vol, veh/h		1087			1038			148			933	
Approach Delay, s/veh		29.1			62.8			36.9			21.8	
Approach LOS		C			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	29.6	7.3	32.8	13.7	23.0	28.8	11.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	24.0	10.0	33.0	12.0	19.0	27.0	16.0
Max Q Clear Time (g_c+I1), s	3.3	19.1	3.1	14.8	9.8	21.0	24.2	7.0
Green Ext Time (p_c), s	0.0	2.4	0.0	1.4	0.1	0.0	0.6	0.3

Intersection Summary	
HCM 6th Ctrl Delay	38.3
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	55	1	137	2	620	50	100	922	6
Future Vol, veh/h	0	0	0	55	1	137	2	620	50	100	922	6
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	100	-	-	100	-	-
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	16	16	16	14	14	14	13	13	13
Mvmt Flow	0	0	0	60	1	149	2	674	54	109	1002	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1568	1958	507	1424	1934	364	1011	0	0	728	0	0
Stage 1	1226	1226	-	705	705	-	-	-	-	-	-	-
Stage 2	342	732	-	719	1229	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.82	6.82	7.22	4.38	-	-	4.36	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.66	4.16	3.46	2.34	-	-	2.33	-	-
Pot Cap-1 Maneuver	76	64	516	84	56	594	613	-	-	802	-	-
Stage 1	192	253	-	362	405	-	-	-	-	-	-	-
Stage 2	652	430	-	355	222	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	50	55	515	75	48	594	612	-	-	802	-	-
Mov Cap-2 Maneuver	50	55	-	75	48	-	-	-	-	-	-	-
Stage 1	191	218	-	361	404	-	-	-	-	-	-	-
Stage 2	486	429	-	307	191	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	53.9	0	1
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	612	-	-	-	74	594	802	-	-
HCM Lane V/C Ratio	0.004	-	-	-	0.823	0.251	0.136	-	-
HCM Control Delay (s)	10.9	-	-	0	153.7	13.1	10.2	-	-
HCM Lane LOS	B	-	-	A	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	-	4	1	0.5	-	-

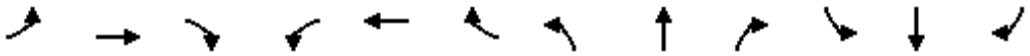
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	2	23	6	0	15	70	1013	41	66	917	36
Future Vol, veh/h	7	2	23	6	0	15	70	1013	41	66	917	36
Conflicting Peds, #/hr	7	0	0	0	0	7	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	-	0	140	-	-	170	-	-
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, %	15	15	15	25	25	25	8	8	8	14	14	14
Mvmt Flow	8	2	25	7	0	16	76	1101	45	72	997	39

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1871	2459	518	1920	-	580	1036	0	0	1146	0	0
Stage 1	1161	1161	-	1276	-	-	-	-	-	-	-	-
Stage 2	710	1298	-	644	-	-	-	-	-	-	-	-
Critical Hdwy	7.8	6.8	7.2	8	-	7.4	4.26	-	-	4.38	-	-
Critical Hdwy Stg 1	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4.15	3.45	3.75	-	3.55	2.28	-	-	2.34	-	-
Pot Cap-1 Maneuver	38	25	470	31	0	404	632	-	-	541	-	-
Stage 1	187	242	-	145	0	-	-	-	-	-	-	-
Stage 2	362	207	-	377	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	30	19	470	22	-	401	632	-	-	541	-	-
Mov Cap-2 Maneuver	30	19	-	22	-	-	-	-	-	-	-	-
Stage 1	165	210	-	128	-	-	-	-	-	-	-	-
Stage 2	303	182	-	306	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	76.6	75.1	0.7	0.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	632	-	-	83	22	401	541	-	-
HCM Lane V/C Ratio	0.12	-	-	0.419	0.296	0.041	0.133	-	-
HCM Control Delay (s)	11.5	-	-	76.6	226.9	14.4	12.7	-	-
HCM Lane LOS	B	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.7	0.9	0.1	0.5	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	271	81	130	73	258	17	891	188	361	744	20
Future Volume (veh/h)	28	271	81	130	73	258	17	891	188	361	744	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1870	1870	1870	1707	1707	1776	1841	1841	1841	1707	1707	1707
Adj Flow Rate, veh/h	30	295	88	141	79	280	18	968	204	392	809	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	13	13	13	4	4	4	13	13	13
Cap, veh/h	74	311	93	170	492	433	50	1108	492	461	1401	38
Arrive On Green	0.04	0.22	0.22	0.10	0.29	0.29	0.03	0.32	0.32	0.15	0.43	0.43
Sat Flow, veh/h	1781	1383	413	1626	1707	1505	1753	3497	1554	3155	3225	88
Grp Volume(v), veh/h	30	0	383	141	79	280	18	968	204	392	407	424
Grp Sat Flow(s),veh/h/ln	1781	0	1796	1626	1707	1505	1753	1749	1554	1577	1622	1691
Q Serve(g_s), s	1.4	0.0	18.2	7.4	3.0	14.1	0.9	22.7	8.9	10.5	16.4	16.4
Cycle Q Clear(g_c), s	1.4	0.0	18.2	7.4	3.0	14.1	0.9	22.7	8.9	10.5	16.4	16.4
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	74	0	404	170	492	433	50	1108	492	461	705	735
V/C Ratio(X)	0.41	0.00	0.95	0.83	0.16	0.65	0.36	0.87	0.41	0.85	0.58	0.58
Avail Cap(c_a), veh/h	144	0	404	178	492	433	142	1190	529	491	705	735
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	0.0	33.1	38.1	23.0	27.0	41.3	28.0	23.3	36.1	18.5	18.5
Incr Delay (d2), s/veh	3.5	0.0	31.7	25.9	0.2	3.3	4.4	7.1	0.6	12.8	1.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	11.1	4.0	1.1	5.1	0.4	9.7	3.1	4.6	5.6	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.0	0.0	64.8	64.0	23.2	30.3	45.7	35.0	23.8	48.9	19.7	19.6
LnGrp LOS	D	A	E	E	C	C	D	D	C	D	B	B
Approach Vol, veh/h		413			500			1190			1223	
Approach Delay, s/veh		63.3			38.7			33.3			29.0	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	32.0	13.6	24.0	7.0	42.2	8.1	29.5
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	13.5	29.5	9.5	19.5	7.0	36.0	7.0	22.0
Max Q Clear Time (g_c+I1), s	12.5	24.7	9.4	20.2	2.9	18.4	3.4	16.1
Green Ext Time (p_c), s	0.2	2.8	0.0	0.0	0.0	4.3	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	36.2
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	91	65	18	61	23	23	824	127	50	881	89
Future Volume (veh/h)	94	91	65	18	61	23	23	824	127	50	881	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		0.98
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	1870	1945	1870	1870	1870	1870	1899	1826	1826	1752	1752	1752
Adj Flow Rate, veh/h	102	99	71	20	66	25	25	896	138	54	958	97
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	10	10	10
Cap, veh/h	342	202	145	280	249	94	75	1368	211	124	1484	150
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.04	0.45	0.45	0.07	0.49	0.49
Sat Flow, veh/h	1296	1043	748	1208	1284	486	1809	3011	464	1668	3044	308
Grp Volume(v), veh/h	102	0	170	20	0	91	25	516	518	54	524	531
Grp Sat Flow(s),veh/h/ln	1296	0	1790	1208	0	1770	1809	1735	1741	1668	1664	1687
Q Serve(g_s), s	3.5	0.0	4.1	0.7	0.0	2.1	0.7	11.2	11.2	1.5	11.5	11.5
Cycle Q Clear(g_c), s	5.7	0.0	4.1	4.8	0.0	2.1	0.7	11.2	11.2	1.5	11.5	11.5
Prop In Lane	1.00		0.42	1.00		0.27	1.00		0.27	1.00		0.18
Lane Grp Cap(c), veh/h	342	0	347	280	0	343	75	788	791	124	812	823
V/C Ratio(X)	0.30	0.00	0.49	0.07	0.00	0.27	0.34	0.65	0.65	0.43	0.65	0.65
Avail Cap(c_a), veh/h	637	0	754	555	0	746	279	1658	1663	326	1659	1682
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	0.0	17.5	19.6	0.0	16.7	22.7	10.3	10.3	21.5	9.3	9.3
Incr Delay (d2), s/veh	0.5	0.0	1.1	0.1	0.0	0.4	2.6	0.9	0.9	2.4	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	1.0	0.0	1.7	0.2	0.0	0.8	0.3	3.7	3.7	0.6	2.8	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	0.0	18.6	19.7	0.0	17.1	25.3	11.2	11.2	23.9	10.2	10.2
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		272			111			1059			1109	
Approach Delay, s/veh		18.9			17.6			11.6			10.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	26.6		13.9	6.5	28.2		13.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	9.5	46.5		20.5	7.5	48.5		20.5
Max Q Clear Time (g_c+I1), s	13.5	13.2		7.7	2.7	13.5		6.8
Green Ext Time (p_c), s	0.0	8.9		1.1	0.0	7.5		0.4

Intersection Summary		
HCM 6th Ctrl Delay		12.3
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	89	117	555	228	541	0	0	939	164
Future Volume (veh/h)	0	0	0	89	117	555	228	541	0	0	939	164
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1811	1811	0	0	1781	1781
Adj Flow Rate, veh/h				97	127	603	248	588	0	0	1021	178
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	6	6	0	0	8	8
Cap, veh/h				217	285	452	284	2135	0	0	1162	202
Arrive On Green				0.27	0.27	0.27	0.16	0.62	0.00	0.00	0.40	0.40
Sat Flow, veh/h				793	1038	1648	1725	3532	0	0	2969	501
Grp Volume(v), veh/h				224	0	603	248	588	0	0	599	600
Grp Sat Flow(s),veh/h/ln				1831	0	1648	1725	1721	0	0	1692	1689
Q Serve(g_s), s				8.7	0.0	23.5	12.0	6.7	0.0	0.0	28.0	28.1
Cycle Q Clear(g_c), s				8.7	0.0	23.5	12.0	6.7	0.0	0.0	28.0	28.1
Prop In Lane				0.43		1.00	1.00		0.00	0.00		0.30
Lane Grp Cap(c), veh/h				502	0	452	284	2135	0	0	683	682
V/C Ratio(X)				0.45	0.00	1.33	0.87	0.28	0.00	0.00	0.88	0.88
Avail Cap(c_a), veh/h				502	0	452	312	2310	0	0	741	739
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				25.7	0.0	31.1	34.9	7.4	0.0	0.0	23.6	23.6
Incr Delay (d2), s/veh				0.6	0.0	164.5	21.6	0.1	0.0	0.0	11.0	11.3
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				3.8	0.0	29.6	6.6	2.2	0.0	0.0	12.6	12.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				26.3	0.0	195.6	56.5	7.5	0.0	0.0	34.6	34.9
LnGrp LOS				C	A	F	E	A	A	A	C	C
Approach Vol, veh/h					827			836			1199	
Approach Delay, s/veh					149.7			22.0			34.8	
Approach LOS					F			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	57.7		18.6	39.1		28.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	57.5		15.5	37.5		23.5
Max Q Clear Time (g_c+I1), s	8.7		14.0	30.1		25.5
Green Ext Time (p_c), s	4.7		0.1	4.4		0.0

Intersection Summary		
HCM 6th Ctrl Delay		64.3
HCM 6th LOS		E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	282	0	230	0	0	0	0	495	242	505	497	0
Future Volume (veh/h)	282	0	230	0	0	0	0	495	242	505	497	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				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	1900	1841	1900				0	1841	1841	1826	1826	0
Adj Flow Rate, veh/h	307	0	250				0	538	263	549	540	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	0				0	4	4	5	5	0
Cap, veh/h	383	0	335				0	803	358	614	2251	0
Arrive On Green	0.22	0.00	0.22				0.00	0.23	0.23	0.35	0.65	0.00
Sat Flow, veh/h	1753	0	1533				0	3589	1560	1739	3561	0
Grp Volume(v), veh/h	307	0	250				0	538	263	549	540	0
Grp Sat Flow(s),veh/h/ln	1753	0	1533				0	1749	1560	1739	1735	0
Q Serve(g_s), s	11.2	0.0	10.3				0.0	9.5	10.6	20.2	4.4	0.0
Cycle Q Clear(g_c), s	11.2	0.0	10.3				0.0	9.5	10.6	20.2	4.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	383	0	335				0	803	358	614	2251	0
V/C Ratio(X)	0.80	0.00	0.75				0.00	0.67	0.73	0.89	0.24	0.00
Avail Cap(c_a), veh/h	466	0	407				0	1084	483	962	3226	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.1	0.0	24.7				0.0	23.8	24.2	20.7	4.9	0.0
Incr Delay (d2), s/veh	8.1	0.0	6.0				0.0	1.0	3.8	7.1	0.1	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	5.3	0.0	4.1				0.0	3.8	4.1	8.7	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.2	0.0	30.7				0.0	24.8	28.0	27.8	5.0	0.0
LnGrp LOS	C	A	C				A	C	C	C	A	A
Approach Vol, veh/h		557						801			1089	
Approach Delay, s/veh		32.1						25.8			16.5	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	28.4	20.0		19.3		48.5
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	37.5	21.0		18.0		63.0
Max Q Clear Time (g_c+I1), s	22.2	12.6		13.2		6.4
Green Ext Time (p_c), s	1.7	3.0		1.5		4.2

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	76	24	53	81	180	5	444	13	222	471	16
Future Volume (veh/h)	28	76	24	53	81	180	5	444	13	222	471	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	0.99		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	30	83	26	58	88	196	5	483	14	241	512	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	296	357	112	451	134	298	403	846	24	568	1361	45
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.01	0.24	0.24	0.16	0.39	0.39
Sat Flow, veh/h	1089	1361	426	1272	511	1138	1767	3497	101	1753	3453	115
Grp Volume(v), veh/h	30	0	109	58	0	284	5	243	254	241	259	270
Grp Sat Flow(s),veh/h/ln	1089	0	1787	1272	0	1648	1767	1763	1836	1753	1749	1819
Q Serve(g_s), s	1.0	0.0	1.9	1.5	0.0	6.2	0.1	4.9	4.9	3.5	4.3	4.3
Cycle Q Clear(g_c), s	7.2	0.0	1.9	3.5	0.0	6.2	0.1	4.9	4.9	3.5	4.3	4.3
Prop In Lane	1.00		0.24	1.00		0.69	1.00		0.06	1.00		0.06
Lane Grp Cap(c), veh/h	296	0	468	451	0	432	403	426	444	568	689	717
V/C Ratio(X)	0.10	0.00	0.23	0.13	0.00	0.66	0.01	0.57	0.57	0.42	0.38	0.38
Avail Cap(c_a), veh/h	496	0	797	684	0	735	693	795	827	732	931	969
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	11.7	13.1	0.0	13.3	11.3	13.5	13.5	7.8	8.7	8.7
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.1	0.0	1.7	0.0	1.2	1.2	0.5	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	0.2	0.0	0.7	0.4	0.0	2.1	0.0	1.7	1.7	0.9	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	0.0	12.0	13.2	0.0	15.0	11.4	14.7	14.6	8.3	9.0	9.0
LnGrp LOS	B	A	B	B	A	B	B	B	B	A	A	A
Approach Vol, veh/h		139			342			502			770	
Approach Delay, s/veh		13.0			14.7			14.6			8.8	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	14.3		15.1	4.9	20.4		15.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.3	18.2		18.0	7.0	21.5		18.0				
Max Q Clear Time (g_c+I1), s	15.5	6.9		9.2	2.1	6.3		8.2				
Green Ext Time (p_c), s	0.3	2.2		0.4	0.0	2.7		1.4				

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	106	541	83	44	223	0	0	330	161
Future Volume (veh/h)	0	0	0	106	541	83	44	223	0	0	330	161
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.95
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				1900	1841	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				115	588	90	48	242	0	0	359	175
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	4	0	2	2	0	0	2	2
Cap, veh/h				171	913	147	122	886	0	0	589	474
Arrive On Green				0.34	0.34	0.34	0.07	0.47	0.00	0.00	0.31	0.31
Sat Flow, veh/h				495	2649	425	1781	1870	0	0	1870	1505
Grp Volume(v), veh/h				422	0	371	48	242	0	0	359	175
Grp Sat Flow(s),veh/h/ln				1816	0	1753	1781	1870	0	0	1870	1505
Q Serve(g_s), s				9.8	0.0	8.7	1.3	3.9	0.0	0.0	8.1	4.5
Cycle Q Clear(g_c), s				9.8	0.0	8.7	1.3	3.9	0.0	0.0	8.1	4.5
Prop In Lane				0.27		0.24	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				626	0	604	122	886	0	0	589	474
V/C Ratio(X)				0.67	0.00	0.61	0.39	0.27	0.00	0.00	0.61	0.37
Avail Cap(c_a), veh/h				1227	0	1184	305	1791	0	0	1301	1047
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				13.9	0.0	13.5	22.1	7.9	0.0	0.0	14.4	13.2
Incr Delay (d2), s/veh				1.3	0.0	1.0	2.1	0.2	0.0	0.0	1.0	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				3.6	0.0	3.1	0.6	1.3	0.0	0.0	3.1	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.1	0.0	14.5	24.2	8.1	0.0	0.0	15.4	13.7
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					793			290			534	
Approach Delay, s/veh					14.9			10.7			14.9	
Approach LOS					B			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	28.0		7.9	20.1		21.6
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	47.5		8.5	34.5		33.5
Max Q Clear Time (g_c+I1), s	5.9		3.3	10.1		11.8
Green Ext Time (p_c), s	1.5		0.0	2.9		5.3

Intersection Summary		
HCM 6th Ctrl Delay		14.1
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	43	82	75	41	10	36	136	41	5	268	36
Future Volume (veh/h)	144	43	82	75	41	10	36	136	41	5	268	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	0.98		0.96	0.97		0.96
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	1841	1841	1841	1870	1945	1870	1841	1914	1841	1870	1945	1870
Adj Flow Rate, veh/h	157	47	89	82	45	11	39	148	45	5	291	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	2	2	2	4	4	4	2	2	2
Cap, veh/h	411	122	144	473	231	43	205	435	117	137	584	77
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	656	381	453	826	724	134	146	1238	333	9	1660	220
Grp Volume(v), veh/h	293	0	0	138	0	0	232	0	0	335	0	0
Grp Sat Flow(s),veh/h/ln	1490	0	0	1684	0	0	1718	0	0	1889	0	0
Q Serve(g_s), s	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.4	0.0	0.0	1.4	0.0	0.0	2.6	0.0	0.0	3.8	0.0	0.0
Prop In Lane	0.54		0.30	0.59		0.08	0.17		0.19	0.01		0.12
Lane Grp Cap(c), veh/h	677	0	0	747	0	0	758	0	0	798	0	0
V/C Ratio(X)	0.43	0.00	0.00	0.18	0.00	0.00	0.31	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	1668	0	0	1763	0	0	1582	0	0	1754	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)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.7	0.0	0.0	6.8	0.0	0.0	6.6	0.0	0.0	7.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.4	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	1.0	0.0	0.0	0.4	0.0	0.0	0.6	0.0	0.0	0.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.2	0.0	0.0	6.9	0.0	0.0	6.8	0.0	0.0	7.3	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		293			138			232			335	
Approach Delay, s/veh		8.2			6.9			6.8			7.3	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	14.1	13.2	14.1	13.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	23.5	27.5	23.5	27.5
Max Q Clear Time (g_c+I1), s	4.6	6.4	5.8	3.4
Green Ext Time (p_c), s	1.4	1.9	1.8	0.8

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	839	24	109	436	33	32	95	176	63	107	30
Future Volume (veh/h)	41	839	24	109	436	33	32	95	176	63	107	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.99		0.98	0.99		0.97
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	1752	1752	1752	1752	1752	1752	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	45	912	26	118	474	36	35	103	191	68	116	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	10	10	10	4	4	4	4	4	4
Cap, veh/h	106	1239	35	177	1307	99	99	157	254	179	272	65
Arrive On Green	0.06	0.38	0.38	0.11	0.42	0.42	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1668	3302	94	1668	3125	236	95	575	929	340	995	240
Grp Volume(v), veh/h	45	460	478	118	252	258	329	0	0	217	0	0
Grp Sat Flow(s),veh/h/ln	1668	1664	1732	1668	1664	1697	1600	0	0	1575	0	0
Q Serve(g_s), s	1.4	13.1	13.1	3.7	5.7	5.7	3.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	13.1	13.1	3.7	5.7	5.7	10.2	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.14	0.11		0.58	0.31		0.15
Lane Grp Cap(c), veh/h	106	624	650	177	696	710	509	0	0	516	0	0
V/C Ratio(X)	0.43	0.74	0.74	0.67	0.36	0.36	0.65	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	222	1081	1125	416	1274	1300	854	0	0	836	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.8	14.8	14.8	23.6	11.0	11.0	18.2	0.0	0.0	16.6	0.0	0.0
Incr Delay (d2), s/veh	2.7	1.7	1.6	4.2	0.3	0.3	1.4	0.0	0.0	0.5	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	0.6	4.1	4.3	1.5	1.6	1.7	3.5	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.5	16.5	16.5	27.9	11.3	11.3	19.6	0.0	0.0	17.1	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		983			628			329			217	
Approach Delay, s/veh		17.0			14.4			19.6			17.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.3	25.1		19.5	8.0	27.5		19.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	13.7	35.7		27.1	7.3	42.1		27.1
Max Q Clear Time (g_c+I1), s	15.7	15.1		7.8	3.4	7.7		12.2
Green Ext Time (p_c), s	0.1	5.5		1.2	0.0	2.9		1.8

Intersection Summary	
HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	95	85	1
Future Vol, veh/h	0	4	0	95	85	1
Conflicting Peds, #/hr	1	0	5	0	0	5
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, %	2	2	4	4	3	3
Mvmt Flow	0	4	0	103	92	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	202	98	98	0	-	0
Stage 1	98	-	-	-	-	-
Stage 2	104	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.14	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.236	-	-	-
Pot Cap-1 Maneuver	787	958	1483	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	779	953	1476	-	-	-
Mov Cap-2 Maneuver	779	-	-	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	915	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1476	-	953	-	-
HCM Lane V/C Ratio	-	-	0.005	-	-
HCM Control Delay (s)	0	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	178	2	100	192	20	6	4	104	8	4	4
Future Vol, veh/h	7	178	2	100	192	20	6	4	104	8	4	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	18	18	18	10	10	10	10	10	10	23	23	23
Mvmt Flow	8	193	2	109	209	22	7	4	113	9	4	4
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay	9.4	9.3	9.3	9.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	5%	100%	0%	0%	100%	0%	0%	50%
Vol Thru, %	4%	0%	100%	97%	0%	100%	76%	25%
Vol Right, %	91%	0%	0%	3%	0%	0%	24%	25%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	114	7	119	61	100	128	84	16
LT Vol	6	7	0	0	100	0	0	8
Through Vol	4	0	119	59	0	128	64	4
RT Vol	104	0	0	2	0	0	20	4
Lane Flow Rate	124	8	129	67	109	139	91	17
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.183	0.013	0.198	0.102	0.174	0.203	0.129	0.031
Departure Headway (Hd)	5.322	6.04	5.536	5.513	5.766	5.263	5.095	6.379
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	672	591	646	647	621	679	701	558
Service Time	3.078	3.797	3.293	3.27	3.517	3.014	2.846	4.151
HCM Lane V/C Ratio	0.185	0.014	0.2	0.104	0.176	0.205	0.13	0.03
HCM Control Delay	9.3	8.9	9.7	8.9	9.7	9.4	8.6	9.4
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.7	0	0.7	0.3	0.6	0.8	0.4	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	8	339	1	0	13	678	391	63	1104	6
Future Volume (veh/h)	2	0	8	339	1	0	13	678	391	63	1104	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1648	1648	1648	1885	1885	1885	1781	1781	1781	1752	1752	1752
Adj Flow Rate, veh/h	2	0	9	369	0	0	14	737	425	68	1200	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	17	17	17	1	1	1	8	8	8	10	10	10
Cap, veh/h	31	0	27	542	0	241	42	1432	866	137	1630	10
Arrive On Green	0.02	0.00	0.02	0.15	0.00	0.00	0.02	0.42	0.42	0.08	0.48	0.48
Sat Flow, veh/h	1570	0	1397	3591	0	1598	1697	3385	1510	1668	3393	20
Grp Volume(v), veh/h	2	0	9	369	0	0	14	737	425	68	589	618
Grp Sat Flow(s),veh/h/ln	1570	0	1397	1795	0	1598	1697	1692	1510	1668	1664	1748
Q Serve(g_s), s	0.1	0.0	0.4	5.4	0.0	0.0	0.5	8.9	9.3	2.2	15.8	15.8
Cycle Q Clear(g_c), s	0.1	0.0	0.4	5.4	0.0	0.0	0.5	8.9	9.3	2.2	15.8	15.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	31	0	27	542	0	241	42	1432	866	137	800	840
V/C Ratio(X)	0.06	0.00	0.33	0.68	0.00	0.00	0.34	0.51	0.49	0.50	0.74	0.74
Avail Cap(c_a), veh/h	198	0	176	1185	0	527	214	2258	1235	292	1191	1251
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	0.0	26.8	22.3	0.0	0.0	26.6	11.8	7.0	24.4	11.6	11.6
Incr Delay (d2), s/veh	0.9	0.0	6.7	1.5	0.0	0.0	4.7	0.3	0.4	2.8	1.3	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	0.0	0.0	0.2	2.2	0.0	0.0	0.2	2.9	3.7	0.9	5.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	0.0	33.6	23.8	0.0	0.0	31.3	12.1	7.4	27.2	12.9	12.9
LnGrp LOS	C	A	C	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		11			369			1176			1275	
Approach Delay, s/veh		32.5			23.8			10.6			13.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	28.0		5.6	5.9	31.2		12.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	9.7	37.0		7.0	7.0	39.7		18.3
Max Q Clear Time (g_c+I1), s	4.2	11.3		2.4	2.5	17.8		7.4
Green Ext Time (p_c), s	0.1	7.6		0.0	0.0	8.9		1.0

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

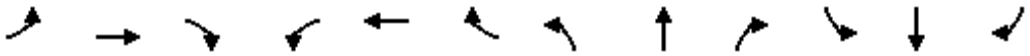
Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	57	25	733	22	10	958
Future Vol, veh/h	57	25	733	22	10	958
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	27	797	24	11	1041

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1352	411	0	0	821	0
Stage 1	809	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	141	590	-	-	804	-
Stage 1	398	-	-	-	-	-
Stage 2	546	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	139	590	-	-	804	-
Mov Cap-2 Maneuver	139	-	-	-	-	-
Stage 1	398	-	-	-	-	-
Stage 2	538	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	42.8	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	181	804	-
HCM Lane V/C Ratio	-	-	0.492	0.014	-
HCM Control Delay (s)	-	-	42.8	9.5	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	2.4	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	335	196	296	185	10	108	5	108	9	5	3
Future Volume (veh/h)	1	335	196	296	185	10	108	5	108	9	5	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.98
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	1841	1841	1914	1826	1899	1826	1796	1868	1796	1900	1976	1900
Adj Flow Rate, veh/h	1	364	213	322	201	11	117	5	117	10	5	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	5	5	5	7	7	7	0	0	0
Cap, veh/h	4	591	340	414	1748	95	257	30	159	291	139	61
Arrive On Green	0.00	0.28	0.28	0.24	0.50	0.50	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1753	2126	1222	1739	3478	189	636	139	743	773	649	284
Grp Volume(v), veh/h	1	298	279	322	104	108	239	0	0	18	0	0
Grp Sat Flow(s),veh/h/ln	1753	1749	1600	1739	1804	1863	1518	0	0	1706	0	0
Q Serve(g_s), s	0.0	6.6	6.8	7.7	1.3	1.4	5.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.6	6.8	7.7	1.3	1.4	6.5	0.0	0.0	0.3	0.0	0.0
Prop In Lane	1.00		0.76	1.00		0.10	0.49		0.49	0.56		0.17
Lane Grp Cap(c), veh/h	4	486	445	414	907	937	446	0	0	491	0	0
V/C Ratio(X)	0.25	0.61	0.63	0.78	0.11	0.12	0.54	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	296	1063	972	1135	1949	2013	864	0	0	919	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.1	14.0	14.0	15.8	5.8	5.8	16.2	0.0	0.0	13.9	0.0	0.0
Incr Delay (d2), s/veh	30.7	1.3	1.5	3.2	0.1	0.1	1.0	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	2.2	2.1	2.8	0.3	0.3	2.1	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.8	15.2	15.5	19.0	5.9	5.9	17.2	0.0	0.0	13.9	0.0	0.0
LnGrp LOS	D	B	B	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		578			534			239			18	
Approach Delay, s/veh		15.4			13.8			17.2			13.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.6	16.4		13.5	4.6	26.3		13.5				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	29.0	27.0		22.0	7.5	48.0		22.0				
Max Q Clear Time (g_c+I1), s	9.7	8.8		2.3	2.0	3.4		8.5				
Green Ext Time (p_c), s	0.9	3.2		0.0	0.0	1.2		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			15.1									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	151.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	310	102	56	118	9	52	286	9	137	451	0
Future Vol, veh/h	1	310	102	56	118	9	52	286	9	137	451	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	6	6	6	4	4	4	1	1	1	1	1	1
Mvmt Flow	1	337	111	61	128	10	57	311	10	149	490	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	102.8	24.7	56.1	281.3
HCM LOS	F	C	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	15%	0%	0%	32%	0%	23%
Vol Thru, %	85%	0%	75%	68%	0%	77%
Vol Right, %	0%	100%	25%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	338	9	413	174	9	588
LT Vol	52	0	1	56	0	137
Through Vol	286	0	310	118	0	451
RT Vol	0	9	102	0	9	0
Lane Flow Rate	367	10	449	189	10	639
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.894	0.022	1.079	0.509	0.024	1.545
Departure Headway (Hd)	10.174	9.355	10.024	11.373	10.461	9.217
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	360	385	368	320	344	403
Service Time	7.874	7.055	8.024	9.073	8.161	7.217
HCM Lane V/C Ratio	1.019	0.026	1.22	0.591	0.029	1.586
HCM Control Delay	57.3	12.3	102.8	25.3	13.4	281.3
HCM Lane LOS	F	B	F	D	B	F
HCM 95th-tile Q	8.8	0.1	14	2.7	0.1	33.4

Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	284	15	38	0	8	0	116	102	0	98	0
Future Vol, veh/h	47	284	15	38	0	8	0	116	102	0	98	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	5	5	8	8	8	3	3	3	3	3	3
Mvmt Flow	51	309	16	41	0	9	0	126	111	0	107	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.1	9	10.3	9.5
HCM LOS	B	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	14%	83%	0%
Vol Thru, %	53%	82%	0%	100%
Vol Right, %	47%	4%	17%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	218	346	46	98
LT Vol	0	47	38	0
Through Vol	116	284	0	98
RT Vol	102	15	8	0
Lane Flow Rate	237	376	50	107
Geometry Grp	1	1	1	1
Degree of Util (X)	0.322	0.511	0.077	0.161
Departure Headway (Hd)	4.887	4.896	5.563	5.44
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	727	730	647	664
Service Time	2.974	2.982	3.569	3.44
HCM Lane V/C Ratio	0.326	0.515	0.077	0.161
HCM Control Delay	10.3	13.1	9	9.5
HCM Lane LOS	B	B	A	A
HCM 95th-tile Q	1.4	2.9	0.2	0.6

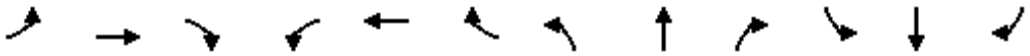
Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	416	33	13	382	4	69	0	318	8	0	41
Future Vol, veh/h	3	416	33	13	382	4	69	0	318	8	0	41
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	5	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	-	-	-	115	-	-	-
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, %	4	4	4	3	3	3	5	5	5	9	9	9
Mvmt Flow	3	452	36	14	415	4	75	0	346	9	0	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	431	0	-	452	0	0	694	917	231	694	915	222
Stage 1	-	-	-	-	-	-	458	458	-	457	457	-
Stage 2	-	-	-	-	-	-	236	459	-	237	458	-
Critical Hdwy	4.18	-	-	4.16	-	-	7.6	6.6	7	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.6	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.6	-	6.68	5.68	-
Follow-up Hdwy	2.24	-	-	2.23	-	-	3.55	4.05	3.35	3.59	4.09	3.39
Pot Cap-1 Maneuver	1111	-	0	1098	-	-	324	265	762	316	259	760
Stage 1	-	-	0	-	-	-	544	558	-	535	549	-
Stage 2	-	-	0	-	-	-	737	557	-	725	548	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1098	-	-	1098	-	-	301	258	758	167	252	751
Mov Cap-2 Maneuver	-	-	-	-	-	-	301	258	-	167	252	-
Stage 1	-	-	-	-	-	-	542	556	-	528	536	-
Stage 2	-	-	-	-	-	-	684	544	-	391	546	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	15	13.5
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	301	758	1098	-	1098	-	-	478
HCM Lane V/C Ratio	0.249	0.456	0.003	-	0.013	-	-	0.111
HCM Control Delay (s)	20.9	13.7	8.3	-	8.3	-	-	13.5
HCM Lane LOS	C	B	A	-	A	-	-	B
HCM 95th %tile Q(veh)	1	2.4	0	-	0	-	-	0.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	875	0	0	632	725	0	0	0	339	0	210
Future Volume (veh/h)	208	875	0	0	632	725	0	0	0	339	0	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1811	1811	1811	1811	1811	1811	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	226	951	0	0	687	0	0	0	0	298	98	228
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	6	6	0	0	0	3	3	3
Cap, veh/h	283	1929	0	3	1054		0	512	0	620	133	311
Arrive On Green	0.16	0.56	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.27	0.27	0.27
Sat Flow, veh/h	1725	3532	0	1725	3532	0	0	1900	0	1767	495	1153
Grp Volume(v), veh/h	226	951	0	0	687	0	0	0	0	298	0	326
Grp Sat Flow(s),veh/h/ln	1725	1721	0	1725	1721	0	0	1900	0	1767	0	1648
Q Serve(g_s), s	6.3	8.4	0.0	0.0	8.7	0.0	0.0	0.0	0.0	7.4	0.0	9.0
Cycle Q Clear(g_c), s	6.3	8.4	0.0	0.0	8.7	0.0	0.0	0.0	0.0	7.4	0.0	9.0
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.70
Lane Grp Cap(c), veh/h	283	1929	0	3	1054		0	512	0	620	0	444
V/C Ratio(X)	0.80	0.49	0.00	0.00	0.65		0.00	0.00	0.00	0.48	0.00	0.73
Avail Cap(c_a), veh/h	472	3199	0	241	2738		0	893	0	974	0	774
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.1	6.7	0.0	0.0	15.0	0.0	0.0	0.0	0.0	16.1	0.0	16.6
Incr Delay (d2), s/veh	5.1	0.2	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.6	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	2.5	1.9	0.0	0.0	2.7	0.0	0.0	0.0	0.0	2.7	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	6.9	0.0	0.0	15.7	0.0	0.0	0.0	0.0	16.6	0.0	19.0
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		1177			687	A		0			624	
Approach Delay, s/veh		10.4			15.7			0.0			17.9	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	32.0		18.0	12.7	19.3		18.0				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	46.5		23.5	13.7	39.8		23.5				
Max Q Clear Time (g_c+I1), s	0.0	10.4		11.0	8.3	10.7		0.0				
Green Ext Time (p_c), s	0.0	7.6		2.5	0.3	4.6		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		13.7
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	106.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	146	779	9	25	245	8	3	208	11	318	77	221
Future Vol, veh/h	146	779	9	25	245	8	3	208	11	318	77	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	7	7	7	3	3	3	6	6	6	2	2	2
Mvmt Flow	159	847	10	27	266	9	3	226	12	346	84	240
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	168.5	38.1	26.8	72
HCM LOS	F	E	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	1%	0%	27%	0%	9%	0%	81%	0%
Vol Thru, %	99%	0%	73%	98%	91%	0%	19%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	211	11	536	399	270	8	395	221
LT Vol	3	0	146	0	25	0	318	0
Through Vol	208	0	390	390	245	0	77	0
RT Vol	0	11	0	9	0	8	0	221
Lane Flow Rate	229	12	582	433	293	9	429	240
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.614	0.03	1.424	1.041	0.769	0.021	1.084	0.533
Departure Headway (Hd)	10.088	9.346	9.142	8.983	9.91	9.129	9.365	8.217
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	360	385	402	407	367	394	391	442
Service Time	7.788	7.046	6.842	6.683	7.61	6.829	7.065	5.917
HCM Lane V/C Ratio	0.636	0.031	1.448	1.064	0.798	0.023	1.097	0.543
HCM Control Delay	27.6	12.3	229.6	86.4	38.9	12	101.1	19.9
HCM Lane LOS	D	B	F	F	E	B	F	C
HCM 95th-tile Q	3.9	0.1	28.3	13.6	6.3	0.1	14.7	3.1

Intersection	
Int Delay, s/veh	165.2

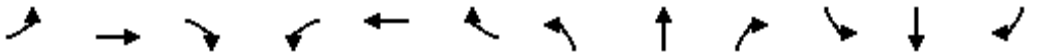
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	75	307	772	151	296	67
Future Vol, veh/h	75	307	772	151	296	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	22	22	2	2	2	2
Mvmt Flow	82	334	839	164	322	73

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2164	-	322	0	-	0
Stage 1	322	-	-	-	-	-
Stage 2	1842	-	-	-	-	-
Critical Hdwy	6.62	-	4.12	-	-	-
Critical Hdwy Stg 1	5.62	-	-	-	-	-
Critical Hdwy Stg 2	5.62	-	-	-	-	-
Follow-up Hdwy	3.698	-	2.218	-	-	-
Pot Cap-1 Maneuver	~ 45	0	1238	-	-	0
Stage 1	692	0	-	-	-	0
Stage 2	122	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 14	-	1238	-	-	-
Mov Cap-2 Maneuver	~ 14	-	-	-	-	-
Stage 1	223	-	-	-	-	-
Stage 2	122	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 2708	11.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1238	-	14	-	-
HCM Lane V/C Ratio	0.678	-	5.823	-	-
HCM Control Delay (s)	13.8	-	$ 2708	0	-
HCM Lane LOS	B	-	F	A	-
HCM 95th %tile Q(veh)	5.7	-	11.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	902	52	44	1024	554	34	109	28	222	81	300
Future Volume (veh/h)	260	902	52	44	1024	554	34	109	28	222	81	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	0.99		0.99	0.99		0.99
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	1826	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1752
Adj Flow Rate, veh/h	283	980	57	48	1113	602	37	118	30	241	88	326
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	10	10	10
Cap, veh/h	323	1731	764	101	1306	562	294	183	47	350	346	566
Arrive On Green	0.19	0.50	0.50	0.06	0.37	0.37	0.05	0.12	0.12	0.12	0.20	0.20
Sat Flow, veh/h	1739	3469	1530	1767	3526	1517	1781	1491	379	1668	1752	1471
Grp Volume(v), veh/h	283	980	57	48	1113	602	37	0	148	241	88	326
Grp Sat Flow(s),veh/h/ln	1739	1735	1530	1767	1763	1517	1781	0	1870	1668	1752	1471
Q Serve(g_s), s	12.8	16.0	1.6	2.1	23.5	30.0	1.4	0.0	6.1	10.0	3.4	14.2
Cycle Q Clear(g_c), s	12.8	16.0	1.6	2.1	23.5	30.0	1.4	0.0	6.1	10.0	3.4	14.2
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	323	1731	764	101	1306	562	294	0	230	350	346	566
V/C Ratio(X)	0.88	0.57	0.07	0.48	0.85	1.07	0.13	0.00	0.64	0.69	0.25	0.58
Avail Cap(c_a), veh/h	386	1756	775	153	1306	562	427	0	369	350	346	566
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	1.00	1.00
Uniform Delay (d), s/veh	32.1	14.2	10.6	37.0	23.5	25.5	28.4	0.0	33.8	25.7	27.5	19.8
Incr Delay (d2), s/veh	17.4	0.4	0.0	3.5	5.6	58.7	0.2	0.0	3.0	5.6	0.4	1.4
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	6.5	5.4	0.5	1.0	9.6	19.2	0.6	0.0	2.9	4.3	1.4	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.5	14.6	10.6	40.5	29.1	84.2	28.6	0.0	36.8	31.3	27.8	21.2
LnGrp LOS	D	B	B	D	C	F	C	A	D	C	C	C
Approach Vol, veh/h		1320			1763			185			655	
Approach Delay, s/veh		21.9			48.2			35.2			25.8	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	44.4	8.0	20.0	19.1	34.0	14.0	14.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	41.0	10.0	16.0	18.0	30.0	10.0	16.0
Max Q Clear Time (g_c+I1), s	4.1	18.0	3.4	16.2	14.8	32.0	12.0	8.1
Green Ext Time (p_c), s	0.0	6.9	0.0	0.0	0.3	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	35.0
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	34.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	1	49	1	171	2	969	107	209	1148	0
Future Vol, veh/h	0	1	1	49	1	171	2	969	107	209	1148	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	-	-	-	-	-	0	100	-	-	100	-	-
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, %	2	2	2	10	10	10	10	10	10	6	6	6
Mvmt Flow	0	1	1	53	1	186	2	1053	116	227	1248	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2233	2875	624	2194	2817	585	1248	0	0	1169	0	0
Stage 1	1702	1702	-	1115	1115	-	-	-	-	-	-	-
Stage 2	531	1173	-	1079	1702	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.7	6.7	7.1	4.3	-	-	4.22	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.6	4.1	3.4	2.3	-	-	2.26	-	-
Pot Cap-1 Maneuver	23	16	428	~ 23	16	435	512	-	-	571	-	-
Stage 1	95	146	-	208	265	-	-	-	-	-	-	-
Stage 2	500	264	-	219	134	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	8	10	428	~ 15	10	435	512	-	-	571	-	-
Mov Cap-2 Maneuver	8	10	-	~ 15	10	-	-	-	-	-	-	-
Stage 1	95	88	-	207	264	-	-	-	-	-	-	-
Stage 2	284	263	-	130	81	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	205.9	$ 398.5	0	2.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	512	-	-	20	15	435	571	-	-
HCM Lane V/C Ratio	0.004	-	-	0.109	3.623	0.427	0.398	-	-
HCM Control Delay (s)	12.1	-	-	205.9	$ 1695.3	19.3	15.4	-	-
HCM Lane LOS	B	-	-	F	F	C	C	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	7.6	2.1	1.9	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	15.2

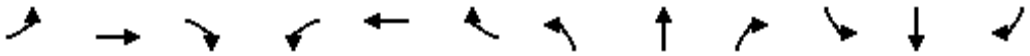
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	70	12	0	7	8	1041	7	13	1262	8
Future Vol, veh/h	37	0	70	12	0	7	8	1041	7	13	1262	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	0	140	-	-	170	-	-
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, %	3	3	3	27	27	27	9	9	9	6	6	6
Mvmt Flow	40	0	76	13	0	8	9	1132	8	14	1372	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1989	2563	691	1868	-	570	1381	0	0	1140	0	0
Stage 1	1405	1405	-	1154	-	-	-	-	-	-	-	-
Stage 2	584	1158	-	714	-	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	8.04	-	7.44	4.28	-	-	4.22	-	-
Critical Hdwy Stg 1	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.77	-	3.57	2.29	-	-	2.26	-	-
Pot Cap-1 Maneuver	~ 36	25	385	34	0	406	457	-	-	586	-	-
Stage 1	145	202	-	172	0	-	-	-	-	-	-	-
Stage 2	462	267	-	336	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 34	24	385	26	-	406	457	-	-	586	-	-
Mov Cap-2 Maneuver	~ 34	24	-	26	-	-	-	-	-	-	-	-
Stage 1	142	197	-	169	-	-	-	-	-	-	-	-
Stage 2	444	262	-	263	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 319.3	157.2	0.1	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	457	-	-	84	26	406	586	-	-
HCM Lane V/C Ratio	0.019	-	-	1.385	0.502	0.019	0.024	-	-
HCM Control Delay (s)	13	-	-	$ 319.3	240.7	14	11.3	-	-
HCM Lane LOS	B	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	8.9	1.5	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	143	39	212	176	222	53	785	174	532	959	33
Future Volume (veh/h)	34	143	39	212	176	222	53	785	174	532	959	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
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	1870	1870	1870	1781	1781	1853	1811	1811	1811	1841	1841	1841
Adj Flow Rate, veh/h	37	155	42	230	191	241	58	853	189	578	1042	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	8	8	8	6	6	6	4	4	4
Cap, veh/h	157	196	53	266	369	325	110	978	434	663	1433	49
Arrive On Green	0.09	0.14	0.14	0.16	0.21	0.21	0.06	0.28	0.28	0.19	0.42	0.42
Sat Flow, veh/h	1781	1417	384	1697	1781	1570	1725	3441	1527	3401	3448	119
Grp Volume(v), veh/h	37	0	197	230	191	241	58	853	189	578	528	550
Grp Sat Flow(s),veh/h/ln	1781	0	1801	1697	1781	1570	1725	1721	1527	1700	1749	1818
Q Serve(g_s), s	1.5	0.0	8.4	10.5	7.6	11.5	2.6	18.8	8.1	13.1	20.2	20.2
Cycle Q Clear(g_c), s	1.5	0.0	8.4	10.5	7.6	11.5	2.6	18.8	8.1	13.1	20.2	20.2
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	157	0	249	266	369	325	110	978	434	663	727	756
V/C Ratio(X)	0.24	0.00	0.79	0.86	0.52	0.74	0.53	0.87	0.44	0.87	0.73	0.73
Avail Cap(c_a), veh/h	157	0	407	281	541	477	154	1041	462	713	740	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	0.00	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	33.8	0.0	33.2	32.7	28.0	29.6	36.1	27.1	23.3	31.1	19.5	19.5
Incr Delay (d2), s/veh	0.8	0.0	5.6	22.4	1.1	3.5	3.9	7.9	0.7	10.9	3.5	3.4
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	0.7	0.0	3.9	5.7	3.1	4.3	1.1	8.0	2.7	5.9	7.6	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	0.0	38.9	55.2	29.2	33.0	40.1	35.1	24.0	42.0	23.0	22.9
LnGrp LOS	C	A	D	E	C	C	D	D	C	D	C	C
Approach Vol, veh/h		234			662			1100			1656	
Approach Delay, s/veh		38.2			39.6			33.4			29.6	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	27.1	17.0	15.5	9.6	37.6	11.5	21.0
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	16.7	24.1	13.2	18.0	7.1	33.7	7.0	24.2
Max Q Clear Time (g_c+I1), s	15.1	20.8	12.5	10.4	4.6	22.2	3.5	13.5
Green Ext Time (p_c), s	0.4	1.8	0.0	0.6	0.0	4.8	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	204	60	37	63	54	46	1024	119	54	995	71
Future Volume (veh/h)	128	204	60	37	63	54	46	1024	119	54	995	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.97	1.00		0.98	1.00		0.96
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	1870	1945	1870	1870	1870	1870	1884	1811	1811	1856	1856	1856
Adj Flow Rate, veh/h	139	222	65	40	68	59	50	1113	129	59	1082	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	6	6	6	3	3	3
Cap, veh/h	331	342	100	218	218	189	115	1496	173	125	1628	116
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.06	0.48	0.48	0.07	0.49	0.49
Sat Flow, veh/h	1236	1428	418	1077	910	789	1794	3100	359	1767	3327	237
Grp Volume(v), veh/h	139	0	287	40	0	127	50	617	625	59	573	586
Grp Sat Flow(s),veh/h/ln	1236	0	1846	1077	0	1699	1794	1721	1738	1767	1763	1801
Q Serve(g_s), s	6.8	0.0	9.1	2.3	0.0	4.0	1.8	18.9	19.0	2.1	16.0	16.1
Cycle Q Clear(g_c), s	10.8	0.0	9.1	11.4	0.0	4.0	1.8	18.9	19.0	2.1	16.0	16.1
Prop In Lane	1.00		0.23	1.00		0.46	1.00		0.21	1.00		0.13
Lane Grp Cap(c), veh/h	331	0	443	218	0	408	115	831	839	125	862	881
V/C Ratio(X)	0.42	0.00	0.65	0.18	0.00	0.31	0.44	0.74	0.75	0.47	0.66	0.67
Avail Cap(c_a), veh/h	442	0	608	315	0	560	201	1237	1250	219	1289	1317
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	22.3	27.4	0.0	20.4	29.4	13.6	13.6	29.2	12.6	12.6
Incr Delay (d2), s/veh	0.8	0.0	1.6	0.4	0.0	0.4	2.6	1.3	1.3	2.8	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	2.0	0.0	4.0	0.6	0.0	1.6	0.8	6.8	6.9	0.9	5.1	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	0.0	23.9	27.8	0.0	20.8	32.0	14.9	15.0	31.9	13.5	13.5
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		426			167			1292			1218	
Approach Delay, s/veh		24.5			22.5			15.6			14.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	36.0		20.1	8.7	36.4		20.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.1	46.9		21.5	7.3	47.7		21.5
Max Q Clear Time (g_c+I1), s	4.1	21.0		12.8	3.8	18.1		13.4
Green Ext Time (p_c), s	0.0	10.5		1.5	0.0	8.2		0.5

Intersection Summary		
HCM 6th Ctrl Delay		16.7
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	79	200	456	462	888	0	0	917	241
Future Volume (veh/h)	0	0	0	79	200	456	462	888	0	0	917	241
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1826	1826	1899	1856	1856	0	0	1841	1841
Adj Flow Rate, veh/h				86	217	496	502	965	0	0	997	262
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				5	5	5	3	3	0	0	4	4
Cap, veh/h				105	265	326	489	2448	0	0	1006	263
Arrive On Green				0.21	0.21	0.21	0.28	0.69	0.00	0.00	0.37	0.37
Sat Flow, veh/h				511	1289	1588	1767	3618	0	0	2827	716
Grp Volume(v), veh/h				303	0	496	502	965	0	0	636	623
Grp Sat Flow(s),veh/h/ln				1800	0	1588	1767	1763	0	0	1749	1701
Q Serve(g_s), s				14.5	0.0	18.5	24.9	10.4	0.0	0.0	32.5	32.9
Cycle Q Clear(g_c), s				14.5	0.0	18.5	24.9	10.4	0.0	0.0	32.5	32.9
Prop In Lane				0.28		1.00	1.00		0.00	0.00		0.42
Lane Grp Cap(c), veh/h				370	0	326	489	2448	0	0	643	626
V/C Ratio(X)				0.82	0.00	1.52	1.03	0.39	0.00	0.00	0.99	1.00
Avail Cap(c_a), veh/h				370	0	326	489	2448	0	0	643	626
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.1	0.0	35.8	32.6	5.8	0.0	0.0	28.3	28.4
Incr Delay (d2), s/veh				13.5	0.0	248.8	47.7	0.1	0.0	0.0	32.6	34.8
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				7.6	0.0	29.5	16.7	3.2	0.0	0.0	18.7	18.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				47.6	0.0	284.6	80.2	5.9	0.0	0.0	60.9	63.2
LnGrp LOS				D	A	F	F	A	A	A	E	E
Approach Vol, veh/h					799			1467			1259	
Approach Delay, s/veh					194.7			31.3			62.0	
Approach LOS					F			C			E	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	67.0		29.4	37.6		23.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	62.5		24.9	33.1		18.5
Max Q Clear Time (g_c+I1), s	12.4		26.9	34.9		20.5
Green Ext Time (p_c), s	8.9		0.0	0.0		0.0

Intersection Summary		
HCM 6th Ctrl Delay	79.3	
HCM 6th LOS	E	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	11	218	0	0	0	0	1185	206	394	601	0
Future Volume (veh/h)	168	11	218	0	0	0	0	1185	206	394	601	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
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	1900	1781	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	183	12	237				0	1288	224	428	653	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	8	0				0	2	2	2	2	0
Cap, veh/h	294	19	278				0	1415	630	463	2526	0
Arrive On Green	0.18	0.18	0.18				0.00	0.40	0.40	0.26	0.71	0.00
Sat Flow, veh/h	1597	105	1510				0	3647	1583	1781	3647	0
Grp Volume(v), veh/h	195	0	237				0	1288	224	428	653	0
Grp Sat Flow(s),veh/h/ln	1702	0	1510				0	1777	1583	1781	1777	0
Q Serve(g_s), s	9.1	0.0	13.0				0.0	29.3	8.5	20.1	5.6	0.0
Cycle Q Clear(g_c), s	9.1	0.0	13.0				0.0	29.3	8.5	20.1	5.6	0.0
Prop In Lane	0.94		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	314	0	278				0	1415	630	463	2526	0
V/C Ratio(X)	0.62	0.00	0.85				0.00	0.91	0.36	0.92	0.26	0.00
Avail Cap(c_a), veh/h	357	0	317				0	1450	646	488	2611	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.2	0.0	33.8				0.0	24.4	18.1	30.9	4.4	0.0
Incr Delay (d2), s/veh	2.7	0.0	17.8				0.0	8.7	0.3	22.8	0.1	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	3.9	0.0	6.0				0.0	13.3	3.1	11.2	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	0.0	51.6				0.0	33.1	18.4	53.7	4.4	0.0
LnGrp LOS	C	A	D				A	C	B	D	A	A
Approach Vol, veh/h		432						1512			1081	
Approach Delay, s/veh		44.1						30.9			23.9	
Approach LOS		D						C			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	6.8	38.6		20.3		65.5						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	23.5	35.0		18.0		63.0						
Max Q Clear Time (g_c+I1), s	22.1	31.3		15.0		7.6						
Green Ext Time (p_c), s	0.2	2.8		0.8		5.3						

Intersection Summary		
HCM 6th Ctrl Delay		30.3
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	187	29	58	43	233	4	693	40	193	492	25
Future Volume (veh/h)	124	187	29	58	43	233	4	693	40	193	492	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	203	32	63	47	253	4	753	43	210	535	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	316	505	80	388	81	438	401	1014	58	428	1431	72
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.01	0.30	0.30	0.13	0.42	0.42
Sat Flow, veh/h	1077	1573	248	1142	253	1364	1781	3415	195	1781	3441	173
Grp Volume(v), veh/h	135	0	235	63	0	300	4	392	404	210	276	286
Grp Sat Flow(s),veh/h/ln	1077	0	1821	1142	0	1617	1781	1777	1833	1781	1777	1838
Q Serve(g_s), s	6.3	0.0	5.3	2.4	0.0	8.2	0.1	10.5	10.5	3.8	5.7	5.7
Cycle Q Clear(g_c), s	14.5	0.0	5.3	7.7	0.0	8.2	0.1	10.5	10.5	3.8	5.7	5.7
Prop In Lane	1.00		0.14	1.00		0.84	1.00		0.11	1.00		0.09
Lane Grp Cap(c), veh/h	316	0	585	388	0	519	401	527	544	428	739	764
V/C Ratio(X)	0.43	0.00	0.40	0.16	0.00	0.58	0.01	0.74	0.74	0.49	0.37	0.37
Avail Cap(c_a), veh/h	347	0	638	421	0	567	623	690	712	456	739	764
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	14.0	17.0	0.0	14.9	12.8	16.7	16.8	10.8	10.7	10.7
Incr Delay (d2), s/veh	0.9	0.0	0.4	0.2	0.0	1.2	0.0	3.1	3.0	0.9	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	1.5	0.0	2.0	0.6	0.0	2.9	0.0	4.1	4.2	1.2	1.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	14.4	17.2	0.0	16.2	12.8	19.8	19.8	11.7	11.0	11.0
LnGrp LOS	C	A	B	B	A	B	B	B	B	B	B	B
Approach Vol, veh/h		370			363			800			772	
Approach Delay, s/veh		17.1			16.4			19.8			11.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.2	20.2		21.5	4.9	26.5		21.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	20.5		18.5	7.0	21.0		18.5
Max Q Clear Time (g_c+I1), s	15.8	12.5		16.5	2.1	7.7		10.2
Green Ext Time (p_c), s	0.1	3.0		0.4	0.0	2.7		1.4

Intersection Summary		
HCM 6th Ctrl Delay	15.9	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	85	527	314	107	299	0	0	364	124
Future Volume (veh/h)	0	0	0	85	527	314	107	299	0	0	364	124
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.98
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				1900	1841	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				92	573	341	116	325	0	0	396	135
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	4	0	2	2	0	0	2	2
Cap, veh/h				120	761	489	176	843	0	0	519	433
Arrive On Green				0.40	0.40	0.40	0.10	0.45	0.00	0.00	0.28	0.28
Sat Flow, veh/h				299	1898	1219	1781	1870	0	0	1870	1561
Grp Volume(v), veh/h				561	0	445	116	325	0	0	396	135
Grp Sat Flow(s),veh/h/ln				1826	0	1591	1781	1870	0	0	1870	1561
Q Serve(g_s), s				16.1	0.0	14.1	3.8	7.0	0.0	0.0	11.8	4.1
Cycle Q Clear(g_c), s				16.1	0.0	14.1	3.8	7.0	0.0	0.0	11.8	4.1
Prop In Lane				0.16		0.77	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				732	0	638	176	843	0	0	519	433
V/C Ratio(X)				0.77	0.00	0.70	0.66	0.39	0.00	0.00	0.76	0.31
Avail Cap(c_a), veh/h				1008	0	878	338	1465	0	0	971	811
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.7	0.0	15.1	26.3	11.1	0.0	0.0	20.1	17.3
Incr Delay (d2), s/veh				2.4	0.0	1.5	4.1	0.3	0.0	0.0	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
%ile BackOfQ(50%),veh/ln				6.3	0.0	4.7	1.7	2.6	0.0	0.0	5.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				18.1	0.0	16.6	30.5	11.4	0.0	0.0	22.5	17.7
LnGrp LOS				B	A	B	C	B	A	A	C	B
Approach Vol, veh/h					1006			441			531	
Approach Delay, s/veh					17.4			16.4			21.3	
Approach LOS					B			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	31.8		10.5	21.3		28.8
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	47.5		11.5	31.5		33.5
Max Q Clear Time (g_c+I1), s	9.0		5.8	13.8		18.1
Green Ext Time (p_c), s	2.1		0.1	2.7		6.2

Intersection Summary		
HCM 6th Ctrl Delay		18.2
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	142	81	81	55	2	72	345	139	6	256	19
Future Volume (veh/h)	135	142	81	81	55	2	72	345	139	6	256	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	0.99		0.98	0.99		0.98
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	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	147	154	88	88	60	2	78	375	151	7	278	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	239	117	387	233	6	169	523	196	100	788	58
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	503	744	365	748	726	20	143	1170	438	12	1763	131
Grp Volume(v), veh/h	389	0	0	150	0	0	604	0	0	306	0	0
Grp Sat Flow(s),veh/h/ln	1612	0	0	1493	0	0	1751	0	0	1906	0	0
Q Serve(g_s), s	5.7	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.2	0.0	0.0	2.5	0.0	0.0	11.0	0.0	0.0	4.1	0.0	0.0
Prop In Lane	0.38		0.23	0.59		0.01	0.13		0.25	0.02		0.07
Lane Grp Cap(c), veh/h	645	0	0	627	0	0	887	0	0	947	0	0
V/C Ratio(X)	0.60	0.00	0.00	0.24	0.00	0.00	0.68	0.00	0.00	0.32	0.00	0.00
Avail Cap(c_a), veh/h	1011	0	0	955	0	0	1420	0	0	1534	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)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.6	0.0	0.0	9.7	0.0	0.0	8.9	0.0	0.0	7.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.2	0.0	0.0	0.9	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	0.8	0.0	0.0	3.2	0.0	0.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.5	0.0	0.0	9.9	0.0	0.0	9.8	0.0	0.0	7.3	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		389			150			604			306	
Approach Delay, s/veh		12.5			9.9			9.8			7.3	
Approach LOS		B			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	21.8	16.9	21.8	16.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	29.5	21.5	29.5	21.5
Max Q Clear Time (g_c+I1), s	13.0	10.2	6.1	4.5
Green Ext Time (p_c), s	4.2	2.0	1.8	0.8

Intersection Summary	
HCM 6th Ctrl Delay	10.0
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	704	26	167	692	88	44	206	184	59	99	32
Future Volume (veh/h)	83	704	26	167	692	88	44	206	184	59	99	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	1.00		0.99
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	1781	1781	1781	1826	1826	1826	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	90	765	28	182	752	96	48	224	200	64	108	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	8	8	8	5	5	5	2	2	2	2	2	2
Cap, veh/h	154	1025	38	230	1077	137	101	289	238	181	283	78
Arrive On Green	0.09	0.31	0.31	0.13	0.35	0.35	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1697	3328	122	1739	3082	393	105	862	711	306	844	234
Grp Volume(v), veh/h	90	389	404	182	423	425	472	0	0	207	0	0
Grp Sat Flow(s),veh/h/ln	1697	1692	1758	1739	1735	1740	1679	0	0	1384	0	0
Q Serve(g_s), s	3.1	12.4	12.4	6.1	12.6	12.6	8.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	12.4	12.4	6.1	12.6	12.6	15.5	0.0	0.0	5.6	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.23	0.10		0.42	0.31		0.17
Lane Grp Cap(c), veh/h	154	521	541	230	606	608	628	0	0	542	0	0
V/C Ratio(X)	0.59	0.75	0.75	0.79	0.70	0.70	0.75	0.00	0.00	0.38	0.00	0.00
Avail Cap(c_a), veh/h	243	860	893	420	1052	1056	942	0	0	810	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.2	18.7	18.7	25.2	16.8	16.8	18.3	0.0	0.0	15.0	0.0	0.0
Incr Delay (d2), s/veh	3.5	2.2	2.1	6.1	1.5	1.5	1.9	0.0	0.0	0.4	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	1.2	4.3	4.5	2.6	4.3	4.3	5.5	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	20.8	20.7	31.3	18.3	18.3	20.2	0.0	0.0	15.4	0.0	0.0
LnGrp LOS	C	C	C	C	B	B	C	A	A	B	A	A
Approach Vol, veh/h		883			1030			472			207	
Approach Delay, s/veh		21.7			20.6			20.2			15.4	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	23.0		24.6	9.9	25.5		24.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	14.5	30.5		31.5	8.6	36.4		31.5
Max Q Clear Time (g_c+I1), s	8.1	14.4		7.6	5.1	14.6		17.5
Green Ext Time (p_c), s	0.2	4.1		1.3	0.1	5.0		2.6

Intersection Summary		
HCM 6th Ctrl Delay		20.5
HCM 6th LOS		C

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	9	4	175	105	6
Future Vol, veh/h	11	9	4	175	105	6
Conflicting Peds, #/hr	0	0	2	0	0	2
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, %	10	10	1	1	2	2
Mvmt Flow	12	10	4	190	114	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	318	120	123	0	-	0
Stage 1	120	-	-	-	-	-
Stage 2	198	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.11	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.209	-	-	-
Pot Cap-1 Maneuver	659	910	1470	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	817	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	654	908	1467	-	-	-
Mov Cap-2 Maneuver	654	-	-	-	-	-
Stage 1	882	-	-	-	-	-
Stage 2	815	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1467	-	748	-	-
HCM Lane V/C Ratio	0.003	-	0.029	-	-
HCM Control Delay (s)	7.5	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	11.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	343	17	91	169	4	12	4	229	23	5	1
Future Vol, veh/h	2	343	17	91	169	4	12	4	229	23	5	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	10	10	10	4	4	4	33	33	33
Mvmt Flow	2	373	18	99	184	4	13	4	249	25	5	1
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay	11.8	10.4	12.6	11
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	5%	100%	0%	0%	100%	0%	0%	79%
Vol Thru, %	2%	0%	100%	87%	0%	100%	93%	17%
Vol Right, %	93%	0%	0%	13%	0%	0%	7%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	245	2	229	131	91	113	60	29
LT Vol	12	2	0	0	91	0	0	23
Through Vol	4	0	229	114	0	113	56	5
RT Vol	229	0	0	17	0	0	4	1
Lane Flow Rate	266	2	249	143	99	122	66	32
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.422	0.004	0.408	0.231	0.183	0.209	0.111	0.067
Departure Headway (Hd)	5.71	6.422	5.914	5.822	6.662	6.153	6.106	7.652
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	631	557	609	617	538	583	587	467
Service Time	3.45	4.159	3.651	3.559	4.403	3.894	3.847	5.407
HCM Lane V/C Ratio	0.422	0.004	0.409	0.232	0.184	0.209	0.112	0.069
HCM Control Delay	12.6	9.2	12.7	10.3	10.9	10.5	9.6	11
HCM Lane LOS	B	A	B	B	B	B	A	B
HCM 95th-tile Q	2.1	0	2	0.9	0.7	0.8	0.4	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	5	26	291	0	0	12	1151	327	165	1125	2
Future Volume (veh/h)	3	5	26	291	0	0	12	1151	327	165	1125	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1900	1900	1900	1811	1811	1811	1826	1826	1826
Adj Flow Rate, veh/h	3	5	28	316	0	0	13	1251	355	179	1223	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	5	5	5
Cap, veh/h	35	58	80	444	0	198	38	1550	879	218	1967	3
Arrive On Green	0.05	0.05	0.05	0.12	0.00	0.00	0.02	0.45	0.45	0.13	0.55	0.55
Sat Flow, veh/h	699	1166	1610	3619	0	1610	1725	3441	1533	1739	3554	6
Grp Volume(v), veh/h	8	0	28	316	0	0	13	1251	355	179	597	628
Grp Sat Flow(s),veh/h/ln	1865	0	1610	1810	0	1610	1725	1721	1533	1739	1735	1825
Q Serve(g_s), s	0.3	0.0	1.2	6.0	0.0	0.0	0.5	22.5	9.2	7.2	16.8	16.8
Cycle Q Clear(g_c), s	0.3	0.0	1.2	6.0	0.0	0.0	0.5	22.5	9.2	7.2	16.8	16.8
Prop In Lane	0.37		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	93	0	80	444	0	198	38	1550	879	218	960	1010
V/C Ratio(X)	0.09	0.00	0.35	0.71	0.00	0.00	0.34	0.81	0.40	0.82	0.62	0.62
Avail Cap(c_a), veh/h	182	0	157	910	0	405	169	1754	970	255	969	1020
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	32.9	30.2	0.0	0.0	34.5	17.0	8.5	30.5	10.9	10.9
Incr Delay (d2), s/veh	0.4	0.0	2.6	2.1	0.0	0.0	5.1	2.6	0.3	16.6	1.2	1.2
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	0.0	0.5	2.7	0.0	0.0	0.3	8.5	3.8	3.9	5.8	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	0.0	35.4	32.3	0.0	0.0	39.6	19.6	8.8	47.1	12.1	12.0
LnGrp LOS	C	A	D	C	A	A	D	B	A	D	B	B
Approach Vol, veh/h		36			316			1619			1404	
Approach Delay, s/veh		34.9			32.3			17.4			16.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.5	36.7		8.1	6.1	44.1		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	36.5		7.0	7.0	40.0		18.0
Max Q Clear Time (g_c+I1), s	19.2	24.5		3.2	2.5	18.8		8.0
Green Ext Time (p_c), s	0.1	7.8		0.0	0.0	8.9		0.8

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.2

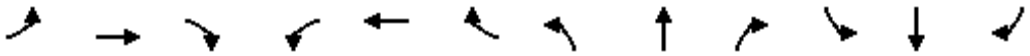
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	41	1034	69	29	1322
Future Vol, veh/h	17	41	1034	69	29	1322
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	45	1124	75	32	1437

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1945	600	0	0	1199	0
Stage 1	1162	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	57	444	-	-	578	-
Stage 1	260	-	-	-	-	-
Stage 2	411	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	54	444	-	-	578	-
Mov Cap-2 Maneuver	54	-	-	-	-	-
Stage 1	260	-	-	-	-	-
Stage 2	388	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	49.2	0	0.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	142	578	-
HCM Lane V/C Ratio	-	-	0.444	0.055	-
HCM Control Delay (s)	-	-	49.2	11.6	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q(veh)	-	-	2	0.2	-

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE WITHOUT ORANGE STREET EXTENSION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	251	169	480	248	17	100	3	132	24	20	5
Future Volume (veh/h)	0	251	169	480	248	17	100	3	132	24	20	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1722	1693	1760	1796	1868	1796	1856	1930	1856	1870	1945	1870
Adj Flow Rate, veh/h	0	273	184	522	270	18	109	3	143	26	22	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	12	14	14	7	7	7	3	3	3	2	2	2
Cap, veh/h	3	410	267	602	2184	145	213	24	180	229	175	32
Arrive On Green	0.00	0.22	0.22	0.35	0.65	0.65	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1640	1858	1211	1711	3378	224	573	115	879	631	851	154
Grp Volume(v), veh/h	0	235	222	522	141	147	255	0	0	53	0	0
Grp Sat Flow(s),veh/h/ln	1640	1608	1461	1711	1775	1827	1567	0	0	1636	0	0
Q Serve(g_s), s	0.0	7.2	7.5	15.4	1.6	1.7	6.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.2	7.5	15.4	1.6	1.7	8.3	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		0.83	1.00		0.12	0.43		0.56	0.49		0.09
Lane Grp Cap(c), veh/h	3	355	322	602	1148	1181	417	0	0	435	0	0
V/C Ratio(X)	0.00	0.66	0.69	0.87	0.12	0.12	0.61	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	213	655	595	1236	1758	1810	586	0	0	604	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	19.2	19.3	16.3	3.7	3.7	20.3	0.0	0.0	17.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	2.6	3.9	0.0	0.0	1.5	0.0	0.0	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	2.5	2.4	5.5	0.3	0.3	3.0	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.3	22.0	20.3	3.7	3.7	21.7	0.0	0.0	17.7	0.0	0.0
LnGrp LOS	A	C	C	C	A	A	C	A	A	B	A	A
Approach Vol, veh/h		457			810			255			53	
Approach Delay, s/veh		21.6			14.4			21.7			17.7	
Approach LOS		C			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.0	15.9		15.1	0.0	38.9		15.1				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	39.0	22.0		17.0	7.0	53.5		17.0				
Max Q Clear Time (g_c+I1), s	17.4	9.5		3.2	0.0	3.7		10.3				
Green Ext Time (p_c), s	1.6	2.1		0.2	0.0	1.6		0.8				

Intersection Summary												
HCM 6th Ctrl Delay			17.8									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	184.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	534	91	71	143	6	47	99	32	157	413	0
Future Vol, veh/h	2	534	91	71	143	6	47	99	32	157	413	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	8	15	8	2	2	2	3	3	4	2	2	2
Mvmt Flow	2	580	99	77	155	7	51	108	35	171	449	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	263.9	26.2	19.9	210.3
HCM LOS	F	D	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	32%	0%	0%	33%	0%	28%
Vol Thru, %	68%	0%	85%	67%	0%	72%
Vol Right, %	0%	100%	15%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	146	32	627	214	6	570
LT Vol	47	0	2	71	0	157
Through Vol	99	0	534	143	0	413
RT Vol	0	32	91	0	6	0
Lane Flow Rate	159	35	682	233	7	620
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.396	0.078	1.506	0.562	0.014	1.376
Departure Headway (Hd)	11.272	10.359	8.992	10.87	9.954	9.244
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	322	348	409	335	362	397
Service Time	8.972	8.059	6.992	8.57	7.654	7.244
HCM Lane V/C Ratio	0.494	0.101	1.667	0.696	0.019	1.562
HCM Control Delay	21.2	13.9	263.9	26.6	12.8	210.3
HCM Lane LOS	C	B	F	D	B	F
HCM 95th-tile Q	1.8	0.3	32.3	3.3	0	26

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	306	65	40	0	0	0	50	65	2	106	0
Future Vol, veh/h	43	306	65	40	0	0	0	50	65	2	106	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	11	20	11	12	12	12	3	3	3	2	2	2
Mvmt Flow	47	333	71	43	0	0	0	54	71	2	115	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	14.2	9	9.1	9.5
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	10%	100%	2%
Vol Thru, %	43%	74%	0%	98%
Vol Right, %	57%	16%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	414	40	108
LT Vol	0	43	40	2
Through Vol	50	306	0	106
RT Vol	65	65	0	0
Lane Flow Rate	125	450	43	117
Geometry Grp	1	1	1	1
Degree of Util (X)	0.173	0.586	0.066	0.173
Departure Headway (Hd)	4.981	4.684	5.472	5.31
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	714	765	648	670
Service Time	3.059	2.739	3.56	3.389
HCM Lane V/C Ratio	0.175	0.588	0.066	0.175
HCM Control Delay	9.1	14.2	9	9.5
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.6	3.9	0.2	0.6

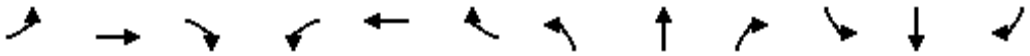
Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	391	17	23	654	6	131	2	240	5	0	30
Future Vol, veh/h	0	391	17	23	654	6	131	2	240	5	0	30
Conflicting Peds, #/hr	5	0	1	1	0	5	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	-	-	-	115	-	-	-
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, %	4	10	4	6	6	6	42	11	11	4	4	4
Mvmt Flow	0	425	18	25	711	7	142	2	261	5	0	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	723	0	-	426	0	0	832	1199	215	985	1196	364
Stage 1	-	-	-	-	-	-	426	426	-	770	770	-
Stage 2	-	-	-	-	-	-	406	773	-	215	426	-
Critical Hdwy	4.18	-	-	4.22	-	-	8.34	6.72	7.12	7.58	6.58	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.72	-	6.58	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.34	5.72	-	6.58	5.58	-
Follow-up Hdwy	2.24	-	-	2.26	-	-	3.92	4.11	3.41	3.54	4.04	3.34
Pot Cap-1 Maneuver	862	-	0	1102	-	-	203	172	763	200	182	627
Stage 1	-	-	0	-	-	-	482	562	-	355	403	-
Stage 2	-	-	0	-	-	-	497	386	-	762	579	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	858	-	-	1101	-	-	189	167	762	127	177	624
Mov Cap-2 Maneuver	-	-	-	-	-	-	189	167	-	127	177	-
Stage 1	-	-	-	-	-	-	482	561	-	353	392	-
Stage 2	-	-	-	-	-	-	460	375	-	499	578	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	32.1	14.9
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	189	762	858	-	1101	-	-	400
HCM Lane V/C Ratio	0.765	0.342	-	-	0.023	-	-	0.095
HCM Control Delay (s)	67.9	12.2	0	-	8.3	-	-	14.9
HCM Lane LOS	F	B	A	-	A	-	-	B
HCM 95th %tile Q(veh)	5.1	1.5	0	-	0.1	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	746	0	0	531	543	0	0	0	418	0	158
Future Volume (veh/h)	214	746	0	0	531	543	0	0	0	418	0	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1767	1767	1767	1678	1737	1737	1900	1900	1900	1826	1826	1826
Adj Flow Rate, veh/h	233	811	0	0	577	0	0	0	0	313	197	172
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	9	15	11	11	0	0	0	5	5	5
Cap, veh/h	291	1791	0	3	894		0	564	0	660	265	232
Arrive On Green	0.17	0.53	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.30	0.30	0.30
Sat Flow, veh/h	1682	3445	0	1598	3387	0	0	1900	0	1739	893	780
Grp Volume(v), veh/h	233	811	0	0	577	0	0	0	0	313	0	369
Grp Sat Flow(s),veh/h/ln	1682	1678	0	1598	1650	0	0	1900	0	1739	0	1674
Q Serve(g_s), s	6.7	7.5	0.0	0.0	7.8	0.0	0.0	0.0	0.0	7.7	0.0	10.0
Cycle Q Clear(g_c), s	6.7	7.5	0.0	0.0	7.8	0.0	0.0	0.0	0.0	7.7	0.0	10.0
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.47
Lane Grp Cap(c), veh/h	291	1791	0	3	894		0	564	0	660	0	497
V/C Ratio(X)	0.80	0.45	0.00	0.00	0.65		0.00	0.00	0.00	0.47	0.00	0.74
Avail Cap(c_a), veh/h	520	2909	0	223	2301		0	1003	0	1062	0	884
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.9	7.2	0.0	0.0	16.2	0.0	0.0	0.0	0.0	15.1	0.0	15.9
Incr Delay (d2), s/veh	5.1	0.2	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.5	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	2.6	1.7	0.0	0.0	2.4	0.0	0.0	0.0	0.0	2.7	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	7.4	0.0	0.0	16.9	0.0	0.0	0.0	0.0	15.7	0.0	18.1
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		1044			577	A		0			682	
Approach Delay, s/veh		11.3			16.9			0.0			17.0	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	30.8		19.4	13.2	17.6		19.4				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	43.5		26.5	15.5	35.0		26.5				
Max Q Clear Time (g_c+I1), s	0.0	9.5		12.0	8.7	9.8		0.0				
Green Ext Time (p_c), s	0.0	6.1		2.9	0.4	3.7		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	14.4	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	71.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	134	612	8	17	384	3	8	3	20	374	47	226
Future Vol, veh/h	134	612	8	17	384	3	8	3	20	374	47	226
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	20	18	20	5	4	5	2	2	2	2	2	2
Mvmt Flow	146	665	9	18	417	3	9	3	22	407	51	246
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	74.8	78.8	13.1	65
HCM LOS	F	F	B	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	73%	0%	30%	0%	4%	0%	89%	0%
Vol Thru, %	27%	0%	70%	97%	96%	0%	11%	0%
Vol Right, %	0%	100%	0%	3%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	20	440	314	401	3	421	226
LT Vol	8	0	134	0	17	0	374	0
Through Vol	3	0	306	306	384	0	47	0
RT Vol	0	20	0	8	0	3	0	226
Lane Flow Rate	12	22	478	341	436	3	458	246
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.034	0.055	1.103	0.768	1.019	0.007	1.061	0.491
Departure Headway (Hd)	10.648	9.524	8.63	8.419	8.777	8.013	8.623	7.439
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	338	378	426	433	418	449	426	489
Service Time	8.348	7.224	6.33	6.119	6.477	5.713	6.323	5.139
HCM Lane V/C Ratio	0.036	0.058	1.122	0.788	1.043	0.007	1.075	0.503
HCM Control Delay	13.7	12.8	103.9	34	79.3	10.8	90.7	17.1
HCM Lane LOS	B	B	F	D	F	B	F	C
HCM 95th-tile Q	0.1	0.2	16.1	6.5	13	0	14.6	2.7

Intersection	
Int Delay, s/veh	296.7

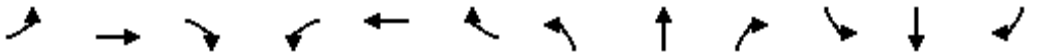
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	233	805	548	125	195	26
Future Vol, veh/h	233	805	548	125	195	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	13	12	4	5	12	12
Mvmt Flow	253	875	596	136	212	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1540	-	212	0	-	0
Stage 1	212	-	-	-	-	-
Stage 2	1328	-	-	-	-	-
Critical Hdwy	6.53	-	4.14	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	-	2.236	-	-	-
Pot Cap-1 Maneuver	~ 120	0	1347	-	-	0
Stage 1	798	0	-	-	-	0
Stage 2	~ 234	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 67	-	1347	-	-	-
Mov Cap-2 Maneuver	~ 67	-	-	-	-	-
Stage 1	445	-	-	-	-	-
Stage 2	~ 234	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 1379	8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1347	-	67	-	-
HCM Lane V/C Ratio	0.442	-	3.78	-	-
HCM Control Delay (s)	9.8	-	$ 1379	0	-
HCM Lane LOS	A	-	F	A	-
HCM 95th %tile Q(veh)	2.3	-	26.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	955	33	30	670	433	33	64	64	596	33	370
Future Volume (veh/h)	176	955	33	30	670	433	33	64	64	596	33	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	191	1038	36	33	728	471	36	70	70	648	36	402
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	227	1271	556	75	922	401	273	94	94	586	586	687
Arrive On Green	0.13	0.36	0.36	0.05	0.28	0.28	0.05	0.11	0.11	0.29	0.35	0.35
Sat Flow, veh/h	1753	3497	1530	1654	3300	1435	1781	885	885	1598	1678	1434
Grp Volume(v), veh/h	191	1038	36	33	728	471	36	0	140	648	36	402
Grp Sat Flow(s),veh/h/ln	1753	1749	1530	1654	1650	1435	1781	0	1771	1598	1678	1434
Q Serve(g_s), s	8.8	22.1	1.3	1.6	16.8	23.0	1.4	0.0	6.3	24.0	1.2	16.7
Cycle Q Clear(g_c), s	8.8	22.1	1.3	1.6	16.8	23.0	1.4	0.0	6.3	24.0	1.2	16.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	227	1271	556	75	922	401	273	0	187	586	586	687
V/C Ratio(X)	0.84	0.82	0.06	0.44	0.79	1.18	0.13	0.00	0.75	1.11	0.06	0.59
Avail Cap(c_a), veh/h	234	1271	556	141	922	401	339	0	344	586	672	760
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	1.00	1.00
Uniform Delay (d), s/veh	35.0	23.7	17.1	38.3	27.4	29.7	30.1	0.0	35.8	23.1	17.8	15.5
Incr Delay (d2), s/veh	22.9	4.3	0.0	4.1	4.7	102.1	0.2	0.0	5.9	69.9	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	8.9	0.4	0.7	6.6	18.9	0.6	0.0	3.0	20.9	0.4	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	28.0	17.1	42.4	32.1	131.7	30.3	0.0	41.6	93.0	17.9	16.5
LnGrp LOS	E	C	B	D	C	F	C	A	D	F	B	B
Approach Vol, veh/h		1265			1232			176			1086	
Approach Delay, s/veh		32.2			70.5			39.3			62.2	
Approach LOS		C			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	33.9	7.9	32.8	14.6	27.0	28.0	12.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	27.0	7.0	33.0	11.0	23.0	24.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	24.1	3.4	18.7	10.8	25.0	26.0	8.3
Green Ext Time (p_c), s	0.0	1.8	0.0	1.5	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	53.7
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	264.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	185	1	315	2	620	177	254	840	6
Future Vol, veh/h	0	0	0	185	1	315	2	620	177	254	840	6
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	100	-	-	100	-	-
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	16	16	39	14	7	14	50	7	13
Mvmt Flow	0	0	0	201	1	342	2	674	192	276	913	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1813	2341	462	1783	2248	433	922	0	0	866	0	0
Stage 1	1471	1471	-	774	774	-	-	-	-	-	-	-
Stage 2	342	870	-	1009	1474	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.82	6.82	7.68	4.38	-	-	5.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.66	4.16	3.69	2.34	-	-	2.7	-	-
Pot Cap-1 Maneuver	50	37	552	~ 44	34	480	666	-	-	532	-	-
Stage 1	136	193	-	328	375	-	-	-	-	-	-	-
Stage 2	652	372	-	233	166	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	8	18	551	~ 26	16	480	665	-	-	532	-	-
Mov Cap-2 Maneuver	8	18	-	~ 26	16	-	-	-	-	-	-	-
Stage 1	135	93	-	327	374	-	-	-	-	-	-	-
Stage 2	186	371	-	~ 112	80	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 1259.7	0	4.3
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	665	-	-	-	26	480	532	-	-
HCM Lane V/C Ratio	0.003	-	-	-	7.776	0.713	0.519	-	-
HCM Control Delay (s)	10.4	-	-	0	$ 3344	29	18.8	-	-
HCM Lane LOS	B	-	-	A	F	D	C	-	-
HCM 95th %tile Q(veh)	0	-	-	-	25	5.6	3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	16.9

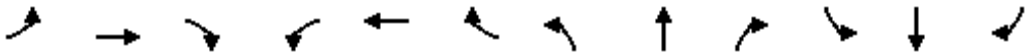
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	2	28	45	0	42	82	948	76	49	897	38
Future Vol, veh/h	6	2	28	45	0	42	82	948	76	49	897	38
Conflicting Peds, #/hr	7	0	0	0	0	7	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	0	140	-	-	170	-	-
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, %	15	15	15	25	25	25	8	5	8	14	8	14
Mvmt Flow	7	2	30	49	0	46	89	1030	83	53	975	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1802	2393	508	1845	-	564	1016	0	0	1113	0	0
Stage 1	1102	1102	-	1250	-	-	-	-	-	-	-	-
Stage 2	700	1291	-	595	-	-	-	-	-	-	-	-
Critical Hdwy	7.8	6.8	7.2	8	-	7.4	4.26	-	-	4.38	-	-
Critical Hdwy Stg 1	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4.15	3.45	3.75	-	3.55	2.28	-	-	2.34	-	-
Pot Cap-1 Maneuver	43	28	477	~ 36	0	415	643	-	-	558	-	-
Stage 1	204	260	-	151	0	-	-	-	-	-	-	-
Stage 2	367	208	-	405	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	32	22	477	~ 26	-	412	643	-	-	558	-	-
Mov Cap-2 Maneuver	32	22	-	~ 26	-	-	-	-	-	-	-	-
Stage 1	176	235	-	130	-	-	-	-	-	-	-	-
Stage 2	279	179	-	340	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	56.9	$ 388.6	0.9	0.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	643	-	-	107	26	412	558	-	-
HCM Lane V/C Ratio	0.139	-	-	0.366	1.881	0.111	0.095	-	-
HCM Control Delay (s)	11.5	-	-	56.9	$ 737.4	14.8	12.1	-	-
HCM Lane LOS	B	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0.5	-	-	1.5	5.9	0.4	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	243	86	137	80	213	17	862	168	317	809	22
Future Volume (veh/h)	27	243	86	137	80	213	17	862	168	317	809	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1870	1870	1870	1781	1707	1853	1856	1856	1856	1781	1781	1781
Adj Flow Rate, veh/h	29	264	93	149	87	232	18	937	183	345	879	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	8	13	8	3	3	3	8	8	8
Cap, veh/h	74	295	104	182	494	454	51	1121	498	428	1410	39
Arrive On Green	0.04	0.22	0.22	0.11	0.29	0.29	0.03	0.32	0.32	0.13	0.42	0.42
Sat Flow, veh/h	1781	1321	465	1697	1707	1570	1767	3526	1567	3291	3365	92
Grp Volume(v), veh/h	29	0	357	149	87	232	18	937	183	345	442	461
Grp Sat Flow(s),veh/h/ln	1781	0	1787	1697	1707	1570	1767	1763	1567	1646	1692	1764
Q Serve(g_s), s	1.3	0.0	15.8	7.0	3.1	10.0	0.8	20.1	7.3	8.3	16.7	16.7
Cycle Q Clear(g_c), s	1.3	0.0	15.8	7.0	3.1	10.0	0.8	20.1	7.3	8.3	16.7	16.7
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	74	0	399	182	494	454	51	1121	498	428	709	740
V/C Ratio(X)	0.39	0.00	0.90	0.82	0.18	0.51	0.35	0.84	0.37	0.81	0.62	0.62
Avail Cap(c_a), veh/h	154	0	429	219	494	454	152	1280	569	506	729	760
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	0.0	30.6	35.5	21.6	24.1	38.7	25.7	21.4	34.3	18.5	18.5
Incr Delay (d2), s/veh	3.4	0.0	20.0	18.1	0.2	1.0	4.1	4.5	0.5	8.1	1.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	8.7	3.6	1.2	3.5	0.4	8.2	2.5	3.5	5.9	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.3	0.0	50.6	53.6	21.8	25.0	42.8	30.2	21.8	42.4	20.1	20.1
LnGrp LOS	D	A	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		386			468			1138			1248	
Approach Delay, s/veh		49.9			33.5			29.0			26.3	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	30.3	13.2	22.6	6.8	38.5	7.9	28.0
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	29.5	10.5	19.5	7.0	35.0	7.0	23.0
Max Q Clear Time (g_c+I1), s	10.3	22.1	9.0	17.8	2.8	18.7	3.3	12.0
Green Ext Time (p_c), s	0.3	3.8	0.1	0.4	0.0	4.6	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	88	65	15	57	22	22	813	110	58	933	109
Future Volume (veh/h)	91	88	65	15	57	22	22	813	110	58	933	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		0.98
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	1870	1945	1870	1870	1870	1870	1930	1856	1856	1796	1796	1796
Adj Flow Rate, veh/h	99	96	71	16	62	24	24	884	120	63	1014	118
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	7	7	7
Cap, veh/h	345	195	144	281	242	94	74	1377	187	142	1489	173
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.04	0.44	0.44	0.08	0.48	0.48
Sat Flow, veh/h	1302	1028	760	1211	1275	493	1838	3117	423	1711	3071	357
Grp Volume(v), veh/h	99	0	167	16	0	86	24	500	504	63	563	569
Grp Sat Flow(s),veh/h/ln	1302	0	1788	1211	0	1768	1838	1763	1778	1711	1706	1722
Q Serve(g_s), s	3.3	0.0	4.0	0.6	0.0	2.0	0.6	10.5	10.5	1.7	12.0	12.0
Cycle Q Clear(g_c), s	5.3	0.0	4.0	4.5	0.0	2.0	0.6	10.5	10.5	1.7	12.0	12.0
Prop In Lane	1.00		0.43	1.00		0.28	1.00		0.24	1.00		0.21
Lane Grp Cap(c), veh/h	345	0	339	281	0	336	74	779	785	142	827	835
V/C Ratio(X)	0.29	0.00	0.49	0.06	0.00	0.26	0.33	0.64	0.64	0.44	0.68	0.68
Avail Cap(c_a), veh/h	634	0	736	550	0	728	291	1694	1709	416	1785	1800
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	0.0	17.1	19.2	0.0	16.3	22.1	10.3	10.3	20.6	9.4	9.4
Incr Delay (d2), s/veh	0.5	0.0	1.1	0.1	0.0	0.4	2.5	0.9	0.9	2.1	1.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	1.6	0.2	0.0	0.8	0.3	3.5	3.5	0.6	2.9	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	0.0	18.2	19.2	0.0	16.7	24.6	11.2	11.2	22.8	10.4	10.4
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		266			102			1028			1195	
Approach Delay, s/veh		18.5			17.1			11.5			11.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	25.4		13.5	6.4	27.5		13.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	11.5	45.5		19.5	7.5	49.5		19.5
Max Q Clear Time (g_c+I1), s	3.7	12.5		7.3	2.6	14.0		6.5
Green Ext Time (p_c), s	0.1	8.4		1.0	0.0	8.3		0.3

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	60	141	550	243	489	0	0	954	193
Future Volume (veh/h)	0	0	0	60	141	550	243	489	0	0	954	193
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1841	1841	0	0	1811	1811
Adj Flow Rate, veh/h				65	153	598	264	532	0	0	1037	210
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	4	4	0	0	6	6
Cap, veh/h				139	327	417	301	2243	0	0	1187	240
Arrive On Green				0.25	0.25	0.25	0.17	0.64	0.00	0.00	0.42	0.42
Sat Flow, veh/h				549	1293	1648	1753	3589	0	0	2941	576
Grp Volume(v), veh/h				218	0	598	264	532	0	0	625	622
Grp Sat Flow(s),veh/h/ln				1843	0	1648	1753	1749	0	0	1721	1705
Q Serve(g_s), s				8.5	0.0	21.5	12.5	5.5	0.0	0.0	28.3	28.5
Cycle Q Clear(g_c), s				8.5	0.0	21.5	12.5	5.5	0.0	0.0	28.3	28.5
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.34
Lane Grp Cap(c), veh/h				466	0	417	301	2243	0	0	716	710
V/C Ratio(X)				0.47	0.00	1.43	0.88	0.24	0.00	0.00	0.87	0.88
Avail Cap(c_a), veh/h				466	0	417	340	2448	0	0	779	772
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.9	0.0	31.8	34.3	6.5	0.0	0.0	22.7	22.8
Incr Delay (d2), s/veh				0.7	0.0	208.9	20.1	0.1	0.0	0.0	10.1	10.5
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				3.7	0.0	32.4	6.9	1.8	0.0	0.0	12.7	12.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				27.6	0.0	240.6	54.4	6.5	0.0	0.0	32.8	33.3
LnGrp LOS				C	A	F	D	A	A	A	C	C
Approach Vol, veh/h					816			796			1247	
Approach Delay, s/veh					183.7			22.4			33.1	
Approach LOS					F			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	59.0		19.1	39.9		26.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	59.5		16.5	38.5		21.5
Max Q Clear Time (g_c+I1), s	7.5		14.5	30.5		23.5
Green Ext Time (p_c), s	4.1		0.2	4.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	73.1
HCM 6th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	255	0	198	0	0	0	0	487	222	518	502	0
Future Volume (veh/h)	255	0	198	0	0	0	0	487	222	518	502	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				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	1900	1856	1900				0	1856	1856	1841	1841	0
Adj Flow Rate, veh/h	277	0	215				0	529	241	563	546	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	0				0	3	3	4	4	0
Cap, veh/h	365	0	319				0	774	345	634	2281	0
Arrive On Green	0.21	0.00	0.21				0.00	0.22	0.22	0.36	0.65	0.00
Sat Flow, veh/h	1767	0	1545				0	3618	1572	1753	3589	0
Grp Volume(v), veh/h	277	0	215				0	529	241	563	546	0
Grp Sat Flow(s),veh/h/ln	1767	0	1545				0	1763	1572	1753	1749	0
Q Serve(g_s), s	9.4	0.0	8.2				0.0	8.8	9.0	19.2	4.1	0.0
Cycle Q Clear(g_c), s	9.4	0.0	8.2				0.0	8.8	9.0	19.2	4.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	365	0	319				0	774	345	634	2281	0
V/C Ratio(X)	0.76	0.00	0.67				0.00	0.68	0.70	0.89	0.24	0.00
Avail Cap(c_a), veh/h	500	0	437				0	1109	495	1061	3465	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.8	0.0	23.3				0.0	22.8	22.9	19.1	4.6	0.0
Incr Delay (d2), s/veh	4.5	0.0	2.5				0.0	1.1	2.6	5.4	0.1	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	3.0				0.0	3.5	3.4	7.9	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.3	0.0	25.8				0.0	23.9	25.4	24.4	4.6	0.0
LnGrp LOS	C	A	C				A	C	C	C	A	A
Approach Vol, veh/h		492						770			1109	
Approach Delay, s/veh		27.2						24.3			14.7	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	37.5	18.5		17.6		46.0
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	33.5	20.0		18.0		63.0
Max Q Clear Time (g_c+I1), s	21.2	11.0		11.4		6.1
Green Ext Time (p_c), s	1.8	3.0		1.7		4.3

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	83	25	90	60	170	5	398	13	178	512	12
Future Volume (veh/h)	24	83	25	90	60	170	5	398	13	178	512	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	26	90	27	98	65	185	5	433	14	193	557	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	274	328	98	394	101	287	344	562	18	501	802	19
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.01	0.31	0.31	0.14	0.45	0.45
Sat Flow, veh/h	1117	1373	412	1253	421	1200	1767	1787	58	1753	1791	42
Grp Volume(v), veh/h	26	0	117	98	0	250	5	0	447	193	0	570
Grp Sat Flow(s),veh/h/ln	1117	0	1785	1253	0	1621	1767	0	1844	1753	0	1833
Q Serve(g_s), s	1.0	0.0	2.4	3.1	0.0	6.2	0.1	0.0	9.8	2.7	0.0	11.1
Cycle Q Clear(g_c), s	7.1	0.0	2.4	5.4	0.0	6.2	0.1	0.0	9.8	2.7	0.0	11.1
Prop In Lane	1.00		0.23	1.00		0.74	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	274	0	426	394	0	387	344	0	580	501	0	821
V/C Ratio(X)	0.09	0.00	0.27	0.25	0.00	0.65	0.01	0.00	0.77	0.39	0.00	0.69
Avail Cap(c_a), veh/h	459	0	722	602	0	656	605	0	888	530	0	886
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	13.8	16.0	0.0	15.2	10.5	0.0	13.8	8.1	0.0	9.8
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.3	0.0	1.8	0.0	0.0	2.3	0.5	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	0.2	0.0	0.9	0.8	0.0	2.2	0.0	0.0	3.5	0.7	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	14.1	16.3	0.0	17.0	10.5	0.0	16.0	8.6	0.0	12.0
LnGrp LOS	B	A	B	B	A	B	B	A	B	A	A	B
Approach Vol, veh/h		143			348			452			763	
Approach Delay, s/veh		14.9			16.8			16.0			11.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.9	18.5		15.1	4.9	24.4		15.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.4		18.0	7.0	21.5		18.0
Max Q Clear Time (g_c+I1), s	14.7	11.8		9.1	2.1	13.1		8.2
Green Ext Time (p_c), s	0.1	1.9		0.4	0.0	2.3		1.4

Intersection Summary		
HCM 6th Ctrl Delay	13.9	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	113	546	81	44	223	0	0	364	184
Future Volume (veh/h)	0	0	0	113	546	81	44	223	0	0	364	184
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.95
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				1900	1841	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				123	593	88	48	242	0	0	396	200
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	4	0	2	2	0	0	2	2
Cap, veh/h				180	908	141	121	896	0	0	603	486
Arrive On Green				0.34	0.34	0.34	0.07	0.48	0.00	0.00	0.32	0.32
Sat Flow, veh/h				522	2638	410	1781	1870	0	0	1870	1507
Grp Volume(v), veh/h				427	0	377	48	242	0	0	396	200
Grp Sat Flow(s),veh/h/ln				1815	0	1756	1781	1870	0	0	1870	1507
Q Serve(g_s), s				10.3	0.0	9.1	1.3	3.9	0.0	0.0	9.3	5.3
Cycle Q Clear(g_c), s				10.3	0.0	9.1	1.3	3.9	0.0	0.0	9.3	5.3
Prop In Lane				0.29		0.23	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				624	0	604	121	896	0	0	603	486
V/C Ratio(X)				0.68	0.00	0.62	0.40	0.27	0.00	0.00	0.66	0.41
Avail Cap(c_a), veh/h				1160	0	1122	263	1784	0	0	1343	1082
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				14.3	0.0	13.9	22.7	7.9	0.0	0.0	14.8	13.5
Incr Delay (d2), s/veh				1.3	0.0	1.1	2.1	0.2	0.0	0.0	1.2	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				3.8	0.0	3.2	0.6	1.3	0.0	0.0	3.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.6	0.0	15.0	24.8	8.1	0.0	0.0	16.0	14.0
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					804			290			596	
Approach Delay, s/veh					15.3			10.9			15.3	
Approach LOS					B			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	28.8		7.9	20.9		22.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	48.5		7.5	36.5		32.5
Max Q Clear Time (g_c+I1), s	5.9		3.3	11.3		12.3
Green Ext Time (p_c), s	1.5		0.0	3.3		5.2

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	54	96	75	40	7	36	131	41	7	315	38
Future Volume (veh/h)	109	54	96	75	40	7	36	131	41	7	315	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	0.98		0.96	0.97		0.96
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	1841	1841	1841	1870	1945	1870	1841	1914	1841	1870	1945	1870
Adj Flow Rate, veh/h	118	59	104	82	43	8	39	142	45	8	342	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	2	2	2	4	4	4	2	2	2
Cap, veh/h	331	141	170	465	214	30	205	463	129	136	636	75
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	494	469	566	857	711	100	144	1224	340	13	1681	198
Grp Volume(v), veh/h	281	0	0	133	0	0	226	0	0	391	0	0
Grp Sat Flow(s),veh/h/ln	1529	0	0	1668	0	0	1707	0	0	1893	0	0
Q Serve(g_s), s	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.3	0.0	0.0	1.5	0.0	0.0	2.5	0.0	0.0	4.5	0.0	0.0
Prop In Lane	0.42		0.37	0.62		0.06	0.17		0.20	0.02		0.10
Lane Grp Cap(c), veh/h	642	0	0	709	0	0	797	0	0	847	0	0
V/C Ratio(X)	0.44	0.00	0.00	0.19	0.00	0.00	0.28	0.00	0.00	0.46	0.00	0.00
Avail Cap(c_a), veh/h	1490	0	0	1535	0	0	1699	0	0	1910	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)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.3	0.0	0.0	7.4	0.0	0.0	6.2	0.0	0.0	6.8	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.4	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	1.0	0.0	0.0	0.4	0.0	0.0	0.6	0.0	0.0	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.8	0.0	0.0	7.5	0.0	0.0	6.4	0.0	0.0	7.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		281			133			226			391	
Approach Delay, s/veh		8.8			7.5			6.4			7.2	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.1	12.9	15.1	12.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.5	24.5	26.5	24.5
Max Q Clear Time (g_c+I1), s	4.5	6.3	6.5	3.5
Green Ext Time (p_c), s	1.4	1.7	2.3	0.7

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	783	24	96	404	50	32	96	185	266	126	51
Future Volume (veh/h)	37	783	24	96	404	50	32	96	185	266	126	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.99	1.00		0.98
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	1811	1811	1811	1811	1811	1811	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	40	851	26	104	439	54	35	104	201	289	137	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	6	6	3	3	3	3	3	3
Cap, veh/h	90	1001	31	139	989	121	97	266	451	386	154	60
Arrive On Green	0.05	0.29	0.29	0.08	0.32	0.32	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1725	3405	104	1725	3068	375	101	589	998	689	341	133
Grp Volume(v), veh/h	40	430	447	104	245	248	340	0	0	481	0	0
Grp Sat Flow(s),veh/h/ln	1725	1721	1789	1725	1721	1722	1688	0	0	1164	0	0
Q Serve(g_s), s	1.7	18.3	18.3	4.6	8.7	8.9	0.0	0.0	0.0	19.7	0.0	0.0
Cycle Q Clear(g_c), s	1.7	18.3	18.3	4.6	8.7	8.9	10.9	0.0	0.0	30.6	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.22	0.10		0.59	0.60		0.11
Lane Grp Cap(c), veh/h	90	506	526	139	555	555	814	0	0	600	0	0
V/C Ratio(X)	0.45	0.85	0.85	0.75	0.44	0.45	0.42	0.00	0.00	0.80	0.00	0.00
Avail Cap(c_a), veh/h	158	583	606	171	596	596	965	0	0	720	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.7	25.8	25.8	34.9	20.8	20.8	14.7	0.0	0.0	20.9	0.0	0.0
Incr Delay (d2), s/veh	3.4	10.3	10.0	13.3	0.6	0.6	0.3	0.0	0.0	5.5	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	0.8	8.1	8.4	2.3	3.2	3.3	3.8	0.0	0.0	8.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.1	36.1	35.8	48.2	21.3	21.4	15.0	0.0	0.0	26.4	0.0	0.0
LnGrp LOS	D	D	D	D	C	C	B	A	A	C	A	A
Approach Vol, veh/h		917			597			340			481	
Approach Delay, s/veh		36.1			26.0			15.0			26.4	
Approach LOS		D			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	27.3		39.6	8.5	29.5		39.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.3	26.3		42.5	7.1	26.9		42.5				
Max Q Clear Time (g_c+I1), s	10.6	20.3		32.6	3.7	10.9		12.9				
Green Ext Time (p_c), s	0.0	2.6		2.4	0.0	2.4		2.3				

Intersection Summary		
HCM 6th Ctrl Delay	28.5	
HCM 6th LOS	C	

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	24	0	230	207	1
Future Vol, veh/h	0	24	0	230	207	1
Conflicting Peds, #/hr	1	0	5	0	0	5
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, %	2	2	4	4	3	3
Mvmt Flow	0	26	0	250	225	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	482	231	231	0	-	0
Stage 1	231	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.14	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.236	-	-	-
Pot Cap-1 Maneuver	543	808	1325	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	538	804	1319	-	-	-
Mov Cap-2 Maneuver	538	-	-	-	-	-
Stage 1	803	-	-	-	-	-
Stage 2	787	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1319	-	804	-	-
HCM Lane V/C Ratio	-	-	0.032	-	-
HCM Control Delay (s)	0	-	9.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	245	2	100	262	20	6	4	273	8	4	4
Future Vol, veh/h	7	245	2	100	262	20	6	4	273	8	4	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	18	41	18	10	29	10	10	10	10	23	23	23
Mvmt Flow	8	266	2	109	285	22	7	4	297	9	4	4
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay	12.2	11.5	14.3	10.5
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	2%	100%	0%	0%	100%	0%	0%	50%
Vol Thru, %	1%	0%	100%	98%	0%	100%	81%	25%
Vol Right, %	96%	0%	0%	2%	0%	0%	19%	25%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	283	7	163	84	100	175	107	16
LT Vol	6	7	0	0	100	0	0	8
Through Vol	4	0	163	82	0	175	87	4
RT Vol	273	0	0	2	0	0	20	4
Lane Flow Rate	308	8	178	91	109	190	117	17
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.5	0.015	0.339	0.163	0.201	0.342	0.195	0.036
Departure Headway (Hd)	5.851	6.983	6.872	6.456	6.669	6.489	6.027	7.406
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	615	512	524	555	538	554	595	482
Service Time	3.597	4.731	4.619	4.204	4.413	4.232	3.771	5.174
HCM Lane V/C Ratio	0.501	0.016	0.34	0.164	0.203	0.343	0.197	0.035
HCM Control Delay	14.3	9.8	13.1	10.5	11.1	12.6	10.2	10.5
HCM Lane LOS	B	A	B	B	B	B	B	B
HCM 95th-tile Q	2.8	0	1.5	0.6	0.7	1.5	0.7	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	7	339	1	0	12	699	391	84	1111	7
Future Volume (veh/h)	3	0	7	339	1	0	12	699	391	84	1111	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1648	1648	1648	1885	1885	1885	1781	1781	1781	1752	1752	1752
Adj Flow Rate, veh/h	3	0	8	369	0	0	13	760	425	91	1208	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	17	17	17	1	1	1	8	8	8	10	10	10
Cap, veh/h	31	0	27	541	0	241	39	1391	848	159	1637	11
Arrive On Green	0.02	0.00	0.02	0.15	0.00	0.00	0.02	0.41	0.41	0.10	0.48	0.48
Sat Flow, veh/h	1570	0	1397	3591	0	1598	1697	3385	1510	1668	3390	22
Grp Volume(v), veh/h	3	0	8	369	0	0	13	760	425	91	593	623
Grp Sat Flow(s),veh/h/ln	1570	0	1397	1795	0	1598	1697	1692	1510	1668	1664	1748
Q Serve(g_s), s	0.1	0.0	0.3	5.4	0.0	0.0	0.4	9.5	9.6	2.9	15.9	15.9
Cycle Q Clear(g_c), s	0.1	0.0	0.3	5.4	0.0	0.0	0.4	9.5	9.6	2.9	15.9	15.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	31	0	27	541	0	241	39	1391	848	159	804	844
V/C Ratio(X)	0.10	0.00	0.29	0.68	0.00	0.00	0.33	0.55	0.50	0.57	0.74	0.74
Avail Cap(c_a), veh/h	198	0	176	1182	0	526	214	2179	1199	327	1188	1248
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	0.0	26.9	22.4	0.0	0.0	26.8	12.4	7.4	24.1	11.5	11.5
Incr Delay (d2), s/veh	1.4	0.0	5.7	1.5	0.0	0.0	5.0	0.3	0.5	3.3	1.3	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	0.0	0.0	0.1	2.2	0.0	0.0	0.2	3.1	3.8	1.2	5.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	0.0	32.6	23.9	0.0	0.0	31.7	12.8	7.9	27.3	12.9	12.8
LnGrp LOS	C	A	C	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		11			369			1198			1307	
Approach Delay, s/veh		31.4			23.9			11.3			13.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	27.4		5.6	5.8	31.4		12.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.3	35.8		7.0	7.0	39.7		18.3
Max Q Clear Time (g_c+I1), s	4.9	11.6		2.3	2.4	17.9		7.4
Green Ext Time (p_c), s	0.1	7.6		0.0	0.0	8.9		1.0

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	85.5

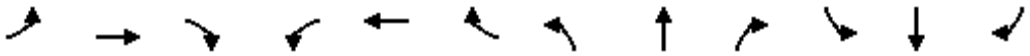
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	195	188	737	198	221	905
Future Vol, veh/h	195	188	737	198	221	905
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	9	9	14	9	9	13
Mvmt Flow	212	204	801	215	240	984

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1881	508	0	0	1016	0
Stage 1	909	-	-	-	-	-
Stage 2	972	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.28	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	~ 58	492	-	-	638	-
Stage 1	337	-	-	-	-	-
Stage 2	312	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 36	492	-	-	638	-
Mov Cap-2 Maneuver	~ 128	-	-	-	-	-
Stage 1	337	-	-	-	-	-
Stage 2	~ 195	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 537.4	0	2.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	201	638	-
HCM Lane V/C Ratio	-	-	2.071	0.377	-
HCM Control Delay (s)	-	-	$ 537.4	14	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	31.8	1.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	403	267	340	212	12	124	6	124	10	6	3
Future Volume (veh/h)	1	403	267	340	212	12	124	6	124	10	6	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.98
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	1841	1796	1868	1826	1899	1826	1796	1868	1796	1870	1945	1870
Adj Flow Rate, veh/h	1	438	290	370	230	13	135	7	135	11	7	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	7	7	5	5	5	7	7	7	2	2	2
Cap, veh/h	3	601	395	441	1908	107	244	27	168	250	149	50
Arrive On Green	0.00	0.31	0.31	0.25	0.55	0.55	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1753	1962	1289	1739	3471	195	656	119	737	673	654	221
Grp Volume(v), veh/h	1	381	347	370	119	124	277	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1753	1706	1544	1739	1804	1862	1511	0	0	1548	0	0
Q Serve(g_s), s	0.0	11.3	11.4	11.5	1.8	1.8	8.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.3	11.4	11.5	1.8	1.8	9.8	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.83	1.00		0.10	0.49		0.49	0.52		0.14
Lane Grp Cap(c), veh/h	3	523	473	441	992	1024	439	0	0	450	0	0
V/C Ratio(X)	0.30	0.73	0.73	0.84	0.12	0.12	0.63	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	219	871	789	857	1569	1620	650	0	0	663	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.3	17.6	17.6	20.1	6.2	6.2	20.6	0.0	0.0	17.1	0.0	0.0
Incr Delay (d2), s/veh	42.6	2.0	2.2	4.3	0.1	0.1	1.5	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	0.1	4.0	3.7	4.5	0.5	0.5	3.4	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.9	19.5	19.8	24.4	6.2	6.2	22.1	0.0	0.0	17.1	0.0	0.0
LnGrp LOS	E	B	B	C	A	A	C	A	A	B	A	A
Approach Vol, veh/h		729			613			277			21	
Approach Delay, s/veh		19.7			17.2			22.1			17.1	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.4	21.4		17.0	4.6	35.2		17.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	28.0	29.0		21.0	7.1	49.4		21.0				
Max Q Clear Time (g_c+I1), s	13.5	13.4		2.5	2.0	3.8		11.8				
Green Ext Time (p_c), s	1.0	4.0		0.0	0.0	1.4		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			19.2									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	253.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	398	117	64	136	10	60	329	10	158	518	0
Future Vol, veh/h	1	398	117	64	136	10	60	329	10	158	518	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	6	18	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	1	433	127	70	148	11	65	358	11	172	563	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	233.2	33.4	100	428.7
HCM LOS	F	D	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	15%	0%	0%	32%	0%	23%
Vol Thru, %	85%	0%	77%	68%	0%	77%
Vol Right, %	0%	100%	23%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	389	10	516	200	10	676
LT Vol	60	0	1	64	0	158
Through Vol	329	0	398	136	0	518
RT Vol	0	10	117	0	10	0
Lane Flow Rate	423	11	561	217	11	735
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	1.049	0.025	1.413	0.599	0.027	1.874
Departure Headway (Hd)	12.099	11.269	11.358	13.412	12.492	10.691
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	304	320	325	272	288	345
Service Time	9.799	8.969	9.358	11.112	10.192	8.691
HCM Lane V/C Ratio	1.391	0.034	1.726	0.798	0.038	2.13
HCM Control Delay	102.2	14.3	233.2	34.3	15.5	428.7
HCM Lane LOS	F	B	F	D	C	F
HCM 95th-tile Q	11.8	0.1	23.5	3.5	0.1	42.4

Intersection	
Intersection Delay, s/veh	16
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	382	18	44	0	9	0	133	117	0	112	0
Future Vol, veh/h	54	382	18	44	0	9	0	133	117	0	112	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	18	5	8	8	8	3	3	3	3	3	3
Mvmt Flow	59	415	20	48	0	10	0	145	127	0	122	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	20.1	9.7	12.2	10.5
HCM LOS	C	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	12%	83%	0%
Vol Thru, %	53%	84%	0%	100%
Vol Right, %	47%	4%	17%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	250	454	53	112
LT Vol	0	54	44	0
Through Vol	133	382	0	112
RT Vol	117	18	9	0
Lane Flow Rate	272	493	58	122
Geometry Grp	1	1	1	1
Degree of Util (X)	0.408	0.713	0.096	0.201
Departure Headway (Hd)	5.41	5.201	6.022	5.946
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	663	696	593	601
Service Time	3.456	3.236	4.08	4.001
HCM Lane V/C Ratio	0.41	0.708	0.098	0.203
HCM Control Delay	12.2	20.1	9.7	10.5
HCM Lane LOS	B	C	A	B
HCM 95th-tile Q	2	6	0.3	0.7

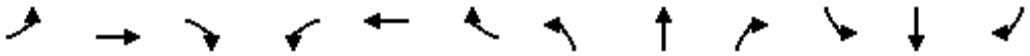
Intersection	
Int Delay, s/veh	11

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	496	38	15	462	4	134	0	365	9	0	47
Future Vol, veh/h	3	496	38	15	462	4	134	0	365	9	0	47
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	5	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	-	-	-	115	-	-	-
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, %	4	6	4	3	8	3	45	5	5	9	9	9
Mvmt Flow	3	539	41	16	502	4	146	0	397	10	0	51

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	518	0	-	539	0	0	828	1095	275	829	1093	265
Stage 1	-	-	-	-	-	-	545	545	-	548	548	-
Stage 2	-	-	-	-	-	-	283	550	-	281	545	-
Critical Hdwy	4.18	-	-	4.16	-	-	8.4	6.6	7	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	7.4	5.6	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.4	5.6	-	6.68	5.68	-
Follow-up Hdwy	2.24	-	-	2.23	-	-	3.95	4.05	3.35	3.59	4.09	3.39
Pot Cap-1 Maneuver	1030	-	0	1019	-	-	201	208	714	251	202	713
Stage 1	-	-	0	-	-	-	395	509	-	471	498	-
Stage 2	-	-	0	-	-	-	593	507	-	683	500	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1018	-	-	1019	-	-	184	202	711	108	196	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	184	202	-	108	196	-
Stage 1	-	-	-	-	-	-	394	507	-	464	485	-
Stage 2	-	-	-	-	-	-	541	493	-	300	499	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	31.6	16.5
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	184	711	1018	-	1019	-	-	373
HCM Lane V/C Ratio	0.792	0.558	0.003	-	0.016	-	-	0.163
HCM Control Delay (s)	73.4	16.3	8.5	-	8.6	-	-	16.5
HCM Lane LOS	F	C	A	-	A	-	-	C
HCM 95th %tile Q(veh)	5.4	3.5	0	-	0	-	-	0.6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	983	0	0	715	834	0	0	0	390	0	227
Future Volume (veh/h)	220	983	0	0	715	834	0	0	0	390	0	227
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1841	1841	1841	1811	1841	1841	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	239	1068	0	0	777	0	0	0	0	336	124	247
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	6	4	4	0	0	0	3	3	3
Cap, veh/h	292	1979	0	3	1122		0	543	0	631	158	315
Arrive On Green	0.17	0.57	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.29	0.29	0.29
Sat Flow, veh/h	1753	3589	0	1725	3589	0	0	1900	0	1767	554	1103
Grp Volume(v), veh/h	239	1068	0	0	777	0	0	0	0	336	0	371
Grp Sat Flow(s),veh/h/ln	1753	1749	0	1725	1749	0	0	1900	0	1767	0	1657
Q Serve(g_s), s	7.5	10.9	0.0	0.0	11.1	0.0	0.0	0.0	0.0	9.6	0.0	11.8
Cycle Q Clear(g_c), s	7.5	10.9	0.0	0.0	11.1	0.0	0.0	0.0	0.0	9.6	0.0	11.8
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.67
Lane Grp Cap(c), veh/h	292	1979	0	3	1122		0	543	0	631	0	473
V/C Ratio(X)	0.82	0.54	0.00	0.00	0.69		0.00	0.00	0.00	0.53	0.00	0.78
Avail Cap(c_a), veh/h	401	2813	0	211	2441		0	792	0	863	0	691
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.0	7.8	0.0	0.0	17.0	0.0	0.0	0.0	0.0	18.1	0.0	18.8
Incr Delay (d2), s/veh	9.2	0.2	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.7	0.0	3.6
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	3.5	2.8	0.0	0.0	3.7	0.0	0.0	0.0	0.0	3.6	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	8.0	0.0	0.0	17.8	0.0	0.0	0.0	0.0	18.8	0.0	22.5
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	C
Approach Vol, veh/h		1307			777	A		0			707	
Approach Delay, s/veh		12.4			17.8			0.0			20.7	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	36.4		20.9	14.0	22.4		20.9				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	46.1		23.9	13.1	40.0		23.9				
Max Q Clear Time (g_c+I1), s	0.0	12.9		13.8	9.5	13.1		0.0				
Green Ext Time (p_c), s	0.0	8.7		2.6	0.2	5.3		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		16.0
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	163.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	168	876	10	29	268	9	3	239	13	365	89	254
Future Vol, veh/h	168	876	10	29	268	9	3	239	13	365	89	254
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	7	6	7	3	3	3	6	6	6	2	2	2
Mvmt Flow	183	952	11	32	291	10	3	260	14	397	97	276
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	258.2	50.7	34	118.3
HCM LOS	F	F	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	1%	0%	28%	0%	10%	0%	80%	0%
Vol Thru, %	99%	0%	72%	98%	90%	0%	20%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	242	13	606	448	297	9	454	254
LT Vol	3	0	168	0	29	0	365	0
Through Vol	239	0	438	438	268	0	89	0
RT Vol	0	13	0	10	0	9	0	254
Lane Flow Rate	263	14	659	487	323	10	493	276
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.713	0.036	1.678	1.217	0.858	0.024	1.277	0.63
Departure Headway (Hd)	10.375	9.633	9.652	9.473	10.348	9.564	9.459	8.212
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	350	374	382	390	352	377	390	436
Service Time	8.075	7.333	7.352	7.173	8.048	7.264	7.159	6.011
HCM Lane V/C Ratio	0.751	0.037	1.725	1.249	0.918	0.027	1.264	0.633
HCM Control Delay	35.1	12.7	339.7	148	51.9	12.5	171	24.1
HCM Lane LOS	E	B	F	F	F	B	F	C
HCM 95th-tile Q	5.2	0.1	37.8	19.3	7.9	0.1	21.6	4.2

Intersection	
Int Delay, s/veh	466.1

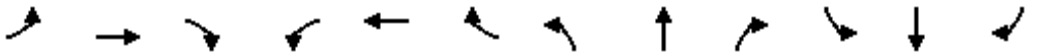
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	86	341	865	174	340	77
Future Vol, veh/h	86	341	865	174	340	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	22	20	2	2	2	2
Mvmt Flow	93	371	940	189	370	84

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2439	-	370	0	-	0
Stage 1	370	-	-	-	-	-
Stage 2	2069	-	-	-	-	-
Critical Hdwy	6.62	-	4.12	-	-	-
Critical Hdwy Stg 1	5.62	-	-	-	-	-
Critical Hdwy Stg 2	5.62	-	-	-	-	-
Follow-up Hdwy	3.698	-	2.218	-	-	-
Pot Cap-1 Maneuver	~ 30	0	1189	-	-	0
Stage 1	657	0	-	-	-	0
Stage 2	~ 93	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 6	-	1189	-	-	-
Mov Cap-2 Maneuver	~ 6	-	-	-	-	-
Stage 1	137	-	-	-	-	-
Stage 2	~ 93	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	7754.3	15.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1189	-	6	-	-
HCM Lane V/C Ratio	0.791	-	15.58	-	-
HCM Control Delay (s)	18.3	-	$ 7754.3	0	-
HCM Lane LOS	C	-	F	A	-
HCM 95th %tile Q(veh)	8.8	-	13.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	1037	60	51	1177	637	39	126	32	256	93	333
Future Volume (veh/h)	277	1037	60	51	1177	637	39	126	32	256	93	333
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	0.99		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	301	1127	65	55	1279	692	42	137	35	278	101	362
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	321	1778	785	104	1370	590	307	230	59	312	340	567
Arrive On Green	0.18	0.51	0.51	0.06	0.39	0.39	0.05	0.15	0.15	0.09	0.19	0.19
Sat Flow, veh/h	1753	3469	1531	1767	3526	1518	1781	1491	381	1668	1752	1496
Grp Volume(v), veh/h	301	1127	65	55	1279	692	42	0	172	278	101	362
Grp Sat Flow(s),veh/h/ln	1753	1735	1531	1767	1763	1518	1781	0	1871	1668	1752	1496
Q Serve(g_s), s	14.8	20.5	1.9	2.6	30.4	34.0	1.7	0.0	7.5	8.0	4.3	17.0
Cycle Q Clear(g_c), s	14.8	20.5	1.9	2.6	30.4	34.0	1.7	0.0	7.5	8.0	4.3	17.0
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	321	1778	785	104	1370	590	307	0	288	312	340	567
V/C Ratio(X)	0.94	0.63	0.08	0.53	0.93	1.17	0.14	0.00	0.60	0.89	0.30	0.64
Avail Cap(c_a), veh/h	321	1778	785	141	1370	590	359	0	342	312	340	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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	15.4	10.9	40.0	25.7	26.7	28.3	0.0	34.5	32.5	30.1	22.4
Incr Delay (d2), s/veh	34.5	0.7	0.0	4.1	11.8	94.9	0.2	0.0	2.0	25.6	0.5	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	9.0	7.1	0.6	1.2	13.6	27.1	0.7	0.0	3.5	4.5	1.8	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.8	16.1	10.9	44.1	37.5	121.6	28.5	0.0	36.5	58.0	30.6	24.8
LnGrp LOS	E	B	B	D	D	F	C	A	D	E	C	C
Approach Vol, veh/h		1493			2026			214			741	
Approach Delay, s/veh		26.7			66.4			34.9			38.1	
Approach LOS		C			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	48.8	8.5	21.0	20.0	38.0	12.0	17.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	17.0	16.0	34.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	4.6	22.5	3.7	19.0	16.8	36.0	10.0	9.5
Green Ext Time (p_c), s	0.0	7.9	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	47.0
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	13.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	1	184	1	323	2	900	252	370	1066	0
Future Vol, veh/h	0	1	1	184	1	323	2	900	252	370	1066	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	-	-	-	-	-	0	100	-	-	100	-	-
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, %	2	2	2	10	10	44	10	5	10	45	3	6
Mvmt Flow	0	1	1	200	1	351	2	978	274	402	1159	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2457	3219	580	2503	3082	626	1159	0	0	1252	0	0
Stage 1	1963	1963	-	1119	1119	-	-	-	-	-	-	-
Stage 2	494	1256	-	1384	1963	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.7	6.7	7.78	4.3	-	-	5	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.6	4.1	3.74	2.3	-	-	2.65	-	-
Pot Cap-1 Maneuver	16	10	458	~ 13	10	~ 338	555	-	-	~ 365	-	-
Stage 1	65	108	-	207	264	-	-	-	-	-	-	-
Stage 2	526	241	-	~ 141	98	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	458	-	0	~ 338	555	-	-	~ 365	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	65	0	-	206	263	-	-	-	-	-	-	-
Stage 2	-	240	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0	28.7
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	555	-	-	-	-	338	~ 365	-	-
HCM Lane V/C Ratio	0.004	-	-	-	-	1.039	1.102	-	-
HCM Control Delay (s)	11.5	-	-	-	-	95.5	111.4	-	-
HCM Lane LOS	B	-	-	-	-	F	F	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	12.3	14.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

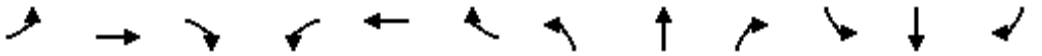
Intersection	
Int Delay, s/veh	12.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	79	19	0	8	6	982	32	34	1114	8
Future Vol, veh/h	37	0	79	19	0	8	6	982	32	34	1114	8
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	-	0	140	-	-	170	-	-
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, %	3	3	3	27	27	27	9	5	9	6	3	6
Mvmt Flow	40	0	86	21	0	9	7	1067	35	37	1211	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1838	2406	610	1779	-	551	1220	0	0	1102	0	0
Stage 1	1290	1290	-	1099	-	-	-	-	-	-	-	-
Stage 2	548	1116	-	680	-	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	8.04	-	7.44	4.28	-	-	4.22	-	-
Critical Hdwy Stg 1	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.77	-	3.57	2.29	-	-	2.26	-	-
Pot Cap-1 Maneuver	46	32	435	40	0	419	530	-	-	606	-	-
Stage 1	171	230	-	187	0	-	-	-	-	-	-	-
Stage 2	486	279	-	353	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	43	30	435	30	-	419	530	-	-	606	-	-
Mov Cap-2 Maneuver	43	30	-	30	-	-	-	-	-	-	-	-
Stage 1	169	216	-	185	-	-	-	-	-	-	-	-
Stage 2	470	275	-	266	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	200.4	187.1	0.1	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	530	-	-	111	30	419	606	-	-
HCM Lane V/C Ratio	0.012	-	-	1.136	0.688	0.021	0.061	-	-
HCM Control Delay (s)	11.9	-	-	200.4	260	13.8	11.3	-	-
HCM Lane LOS	B	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	7.9	2.3	0.1	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	161	45	182	160	190	55	812	161	480	949	34
Future Volume (veh/h)	40	161	45	182	160	190	55	812	161	480	949	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1870	1870	1870	1826	1781	1899	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	43	175	49	198	174	207	60	883	175	522	1032	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	8	5	4	4	4	3	3	3
Cap, veh/h	160	216	61	236	356	321	114	1053	467	615	1441	52
Arrive On Green	0.09	0.15	0.15	0.14	0.20	0.20	0.07	0.30	0.30	0.18	0.42	0.42
Sat Flow, veh/h	1781	1406	394	1739	1781	1609	1753	3497	1552	3428	3471	124
Grp Volume(v), veh/h	43	0	224	198	174	207	60	883	175	522	524	545
Grp Sat Flow(s),veh/h/ln	1781	0	1800	1739	1781	1609	1753	1749	1552	1714	1763	1832
Q Serve(g_s), s	1.8	0.0	9.4	8.7	6.8	9.2	2.6	18.4	6.9	11.5	19.3	19.3
Cycle Q Clear(g_c), s	1.8	0.0	9.4	8.7	6.8	9.2	2.6	18.4	6.9	11.5	19.3	19.3
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	160	0	277	236	356	321	114	1053	467	615	732	761
V/C Ratio(X)	0.27	0.00	0.81	0.84	0.49	0.64	0.52	0.84	0.37	0.85	0.72	0.72
Avail Cap(c_a), veh/h	160	0	415	261	518	468	159	1187	527	694	795	826
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	0.0	31.9	32.9	27.7	28.7	35.3	25.5	21.5	31.0	19.0	19.0
Incr Delay (d2), s/veh	0.9	0.0	7.1	19.7	1.0	2.2	3.7	5.0	0.5	8.9	2.8	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	0.8	0.0	4.4	4.7	2.8	3.5	1.2	7.6	2.3	5.1	7.2	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	0.0	39.1	52.6	28.8	30.9	39.0	30.5	22.0	40.0	21.8	21.7
LnGrp LOS	C	A	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		267			579			1118			1591	
Approach Delay, s/veh		38.3			37.7			29.6			27.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	28.0	15.1	16.5	9.6	36.9	11.5	20.1
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	15.8	26.5	11.7	18.0	7.1	35.2	7.0	22.7
Max Q Clear Time (g_c+I1), s	13.5	20.4	10.7	11.4	4.6	21.3	3.8	11.2
Green Ext Time (p_c), s	0.5	3.1	0.1	0.6	0.0	5.2	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	225	59	34	59	58	41	1052	127	64	964	77
Future Volume (veh/h)	119	225	59	34	59	58	41	1052	127	64	964	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.97	1.00		0.98	1.00		0.96
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	1870	1945	1870	1870	1870	1870	1914	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	129	245	64	37	64	63	45	1143	138	70	1048	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	4	4	4	2	2	2
Cap, veh/h	325	351	92	198	203	200	108	1521	183	135	1666	133
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.06	0.49	0.49	0.08	0.50	0.50
Sat Flow, veh/h	1236	1470	384	1056	851	838	1823	3135	378	1781	3320	266
Grp Volume(v), veh/h	129	0	309	37	0	127	45	636	645	70	561	571
Grp Sat Flow(s),veh/h/ln	1236	0	1854	1056	0	1689	1823	1749	1764	1781	1777	1809
Q Serve(g_s), s	6.5	0.0	10.3	2.2	0.0	4.2	1.6	19.8	20.0	2.5	15.5	15.5
Cycle Q Clear(g_c), s	10.6	0.0	10.3	12.5	0.0	4.2	1.6	19.8	20.0	2.5	15.5	15.5
Prop In Lane	1.00		0.21	1.00		0.50	1.00		0.21	1.00		0.15
Lane Grp Cap(c), veh/h	325	0	442	198	0	403	108	848	856	135	892	908
V/C Ratio(X)	0.40	0.00	0.70	0.19	0.00	0.32	0.42	0.75	0.75	0.52	0.63	0.63
Avail Cap(c_a), veh/h	425	0	592	283	0	539	203	1208	1218	225	1254	1277
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	0.0	23.4	29.1	0.0	21.1	30.5	14.0	14.1	29.9	12.2	12.2
Incr Delay (d2), s/veh	0.8	0.0	2.3	0.5	0.0	0.4	2.6	1.6	1.7	3.0	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	1.9	0.0	4.6	0.6	0.0	1.6	0.8	7.3	7.5	1.1	4.9	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	0.0	25.8	29.6	0.0	21.6	33.1	15.7	15.7	33.0	12.9	12.9
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		438			164			1326			1202	
Approach Delay, s/veh		25.9			23.4			16.3			14.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.6	37.2		20.6	8.5	38.3		20.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.5	46.5		21.5	7.5	47.5		21.5
Max Q Clear Time (g_c+I1), s	4.5	22.0		12.6	3.6	17.5		14.5
Green Ext Time (p_c), s	0.0	10.7		1.6	0.0	7.9		0.4

Intersection Summary	
HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	76	178	435	443	978	0	0	913	244
Future Volume (veh/h)	0	0	0	76	178	435	443	978	0	0	913	244
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1841	1826	1914	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				83	193	473	482	1063	0	0	992	265
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	5	4	3	3	0	0	3	3
Cap, veh/h				114	264	336	493	2433	0	0	991	264
Arrive On Green				0.21	0.21	0.21	0.28	0.69	0.00	0.00	0.36	0.36
Sat Flow, veh/h				541	1258	1601	1767	3618	0	0	2838	730
Grp Volume(v), veh/h				276	0	473	482	1063	0	0	635	622
Grp Sat Flow(s),veh/h/ln				1799	0	1601	1767	1763	0	0	1763	1713
Q Serve(g_s), s				12.9	0.0	18.9	24.3	12.0	0.0	0.0	32.4	32.5
Cycle Q Clear(g_c), s				12.9	0.0	18.9	24.3	12.0	0.0	0.0	32.4	32.5
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.43
Lane Grp Cap(c), veh/h				378	0	336	493	2433	0	0	637	619
V/C Ratio(X)				0.73	0.00	1.41	0.98	0.44	0.00	0.00	1.00	1.00
Avail Cap(c_a), veh/h				378	0	336	493	2433	0	0	637	619
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				33.2	0.0	35.6	32.2	6.2	0.0	0.0	28.7	28.8
Incr Delay (d2), s/veh				7.1	0.0	200.0	34.8	0.1	0.0	0.0	35.2	37.4
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				6.2	0.0	25.9	14.8	3.7	0.0	0.0	19.2	19.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				40.2	0.0	235.5	66.9	6.3	0.0	0.0	63.9	66.1
LnGrp LOS				D	A	F	E	A	A	A	E	F
Approach Vol, veh/h					749			1545			1257	
Approach Delay, s/veh					163.6			25.2			65.0	
Approach LOS					F			C			E	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	66.6		29.6	37.0		23.4
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	62.1		25.1	32.5		18.9
Max Q Clear Time (g_c+I1), s	14.0		26.3	34.5		20.9
Green Ext Time (p_c), s	10.3		0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	68.5
HCM 6th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	11	207	0	0	0	0	1245	186	383	598	0
Future Volume (veh/h)	180	11	207	0	0	0	0	1245	186	383	598	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
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	1900	1781	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	196	12	225				0	1353	202	416	650	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	8	0				0	2	2	2	2	0
Cap, veh/h	285	17	269				0	1464	652	450	2549	0
Arrive On Green	0.18	0.18	0.18				0.00	0.41	0.41	0.25	0.72	0.00
Sat Flow, veh/h	1603	98	1510				0	3647	1583	1781	3647	0
Grp Volume(v), veh/h	208	0	225				0	1353	202	416	650	0
Grp Sat Flow(s),veh/h/ln	1701	0	1510				0	1777	1583	1781	1777	0
Q Serve(g_s), s	9.8	0.0	12.4				0.0	31.0	7.4	19.6	5.4	0.0
Cycle Q Clear(g_c), s	9.8	0.0	12.4				0.0	31.0	7.4	19.6	5.4	0.0
Prop In Lane	0.94		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	303	0	269				0	1464	652	450	2549	0
V/C Ratio(X)	0.69	0.00	0.84				0.00	0.92	0.31	0.92	0.26	0.00
Avail Cap(c_a), veh/h	357	0	316				0	1489	663	467	2606	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.1	0.0	34.1				0.0	24.0	17.0	31.3	4.2	0.0
Incr Delay (d2), s/veh	4.4	0.0	15.6				0.0	9.9	0.3	23.8	0.1	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	4.3	0.0	5.6				0.0	14.2	2.6	11.1	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.5	0.0	49.7				0.0	33.9	17.3	55.1	4.3	0.0
LnGrp LOS	D	A	D				A	C	B	E	A	A
Approach Vol, veh/h		433						1555			1066	
Approach Delay, s/veh		43.8						31.7			24.1	
Approach LOS		D						C			C	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	86.2	39.9	19.8	66.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	22.5	36.0	18.0	63.0
Max Q Clear Time (g_c+I1), s	21.6	33.0	14.4	7.4
Green Ext Time (p_c), s	0.2	2.4	0.9	5.3

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	181	28	57	35	215	4	767	40	174	490	13
Future Volume (veh/h)	72	181	28	57	35	215	4	767	40	174	490	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	197	30	62	38	234	4	834	43	189	533	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	358	54	223	51	313	473	918	47	298	1086	29
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.01	0.52	0.52	0.09	0.60	0.60
Sat Flow, veh/h	1102	1577	240	1147	224	1380	1781	1763	91	1781	1814	48
Grp Volume(v), veh/h	78	0	227	62	0	272	4	0	877	189	0	547
Grp Sat Flow(s),veh/h/ln	1102	0	1818	1147	0	1604	1781	0	1853	1781	0	1862
Q Serve(g_s), s	5.6	0.0	8.9	4.1	0.0	12.7	0.1	0.0	34.8	3.5	0.0	13.5
Cycle Q Clear(g_c), s	18.3	0.0	8.9	13.0	0.0	12.7	0.1	0.0	34.8	3.5	0.0	13.5
Prop In Lane	1.00		0.13	1.00		0.86	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	165	0	412	223	0	364	473	0	965	298	0	1114
V/C Ratio(X)	0.47	0.00	0.55	0.28	0.00	0.75	0.01	0.00	0.91	0.63	0.00	0.49
Avail Cap(c_a), veh/h	165	0	412	223	0	364	617	0	1141	334	0	1179
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.7	0.0	27.6	33.3	0.0	29.1	9.3	0.0	17.6	17.1	0.0	9.2
Incr Delay (d2), s/veh	2.1	0.0	1.6	0.7	0.0	8.3	0.0	0.0	9.6	3.3	0.0	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	1.6	0.0	3.9	1.2	0.0	5.6	0.0	0.0	15.3	2.0	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.8	0.0	29.1	34.0	0.0	37.3	9.3	0.0	27.2	20.3	0.0	9.5
LnGrp LOS	D	A	C	C	A	D	A	A	C	C	A	A
Approach Vol, veh/h		305			334			881			736	
Approach Delay, s/veh		31.9			36.7			27.1			12.3	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.4	46.5		22.8	5.1	52.8		22.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.5	49.7		18.3	7.1	51.1		18.3
Max Q Clear Time (g_c+I1), s	15.5	36.8		20.3	2.1	15.5		15.0
Green Ext Time (p_c), s	0.1	5.3		0.0	0.0	3.8		0.6

Intersection Summary	
HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	80	510	363	105	354	0	0	364	124
Future Volume (veh/h)	0	0	0	80	510	363	105	354	0	0	364	124
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.98
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				1900	1841	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				87	554	395	114	385	0	0	396	135
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	4	0	2	2	0	0	2	2
Cap, veh/h				111	715	554	174	835	0	0	516	431
Arrive On Green				0.41	0.41	0.41	0.10	0.45	0.00	0.00	0.28	0.28
Sat Flow, veh/h				273	1755	1360	1781	1870	0	0	1870	1561
Grp Volume(v), veh/h				583	0	453	114	385	0	0	396	135
Grp Sat Flow(s),veh/h/ln				1827	0	1562	1781	1870	0	0	1870	1561
Q Serve(g_s), s				17.1	0.0	14.9	3.8	8.8	0.0	0.0	12.0	4.2
Cycle Q Clear(g_c), s				17.1	0.0	14.9	3.8	8.8	0.0	0.0	12.0	4.2
Prop In Lane				0.15		0.87	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				744	0	636	174	835	0	0	516	431
V/C Ratio(X)				0.78	0.00	0.71	0.66	0.46	0.00	0.00	0.77	0.31
Avail Cap(c_a), veh/h				965	0	825	362	1475	0	0	958	799
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.9	0.0	15.2	26.8	11.9	0.0	0.0	20.5	17.7
Incr Delay (d2), s/veh				3.2	0.0	2.0	4.2	0.4	0.0	0.0	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
%ile BackOfQ(50%),veh/ln				6.9	0.0	5.0	1.7	3.3	0.0	0.0	5.1	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				19.1	0.0	17.3	30.9	12.3	0.0	0.0	22.9	18.1
LnGrp LOS				B	A	B	C	B	A	A	C	B
Approach Vol, veh/h					1036			499			531	
Approach Delay, s/veh					18.3			16.5			21.7	
Approach LOS					B			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	32.0		10.5	21.5		29.5
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	48.5		12.5	31.5		32.5
Max Q Clear Time (g_c+I1), s	10.8		5.8	14.0		19.1
Green Ext Time (p_c), s	2.6		0.1	2.7		6.0

Intersection Summary	
HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	152	81	81	54	3	72	408	158	7	256	19
Future Volume (veh/h)	170	152	81	81	54	3	72	408	158	7	256	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	0.99		0.98	1.00		0.98
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	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	185	165	88	88	59	3	78	443	172	8	278	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	311	224	107	357	214	9	148	567	207	86	834	62
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	604	678	322	704	647	28	129	1195	437	13	1758	130
Grp Volume(v), veh/h	438	0	0	150	0	0	693	0	0	307	0	0
Grp Sat Flow(s),veh/h/ln	1605	0	0	1379	0	0	1762	0	0	1902	0	0
Q Serve(g_s), s	8.1	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.4	0.0	0.0	3.3	0.0	0.0	15.5	0.0	0.0	4.6	0.0	0.0
Prop In Lane	0.42		0.20	0.59		0.02	0.11		0.25	0.03		0.07
Lane Grp Cap(c), veh/h	642	0	0	580	0	0	922	0	0	982	0	0
V/C Ratio(X)	0.68	0.00	0.00	0.26	0.00	0.00	0.75	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	817	0	0	738	0	0	1243	0	0	1328	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)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.0	0.0	0.0	11.3	0.0	0.0	10.3	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.2	0.0	0.0	1.8	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.0	1.0	0.0	0.0	5.0	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	0.0	0.0	11.5	0.0	0.0	12.1	0.0	0.0	7.8	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		438			150			693			307	
Approach Delay, s/veh		15.6			11.5			12.1			7.8	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.4	19.8	26.4	19.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	30.5	20.5	30.5	20.5
Max Q Clear Time (g_c+I1), s	17.5	13.4	6.6	5.3
Green Ext Time (p_c), s	4.4	1.7	1.8	0.8

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	666	26	167	629	240	44	258	178	106	99	29
Future Volume (veh/h)	118	666	26	167	629	240	44	258	178	106	99	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.99
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	1826	1826	1826	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	724	28	182	684	261	48	280	193	115	108	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	2	2	2
Cap, veh/h	166	1084	42	228	869	332	95	346	224	210	182	45
Arrive On Green	0.10	0.32	0.32	0.13	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1739	3404	132	1767	2471	943	101	990	642	376	521	129
Grp Volume(v), veh/h	128	369	383	182	488	457	521	0	0	255	0	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1800	1767	1763	1651	1733	0	0	1025	0	0
Q Serve(g_s), s	4.8	12.2	12.2	6.6	16.5	16.5	3.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.8	12.2	12.2	6.6	16.5	16.5	18.3	0.0	0.0	14.9	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.57	0.09		0.37	0.45		0.13
Lane Grp Cap(c), veh/h	166	552	573	228	620	581	664	0	0	437	0	0
V/C Ratio(X)	0.77	0.67	0.67	0.80	0.79	0.79	0.78	0.00	0.00	0.58	0.00	0.00
Avail Cap(c_a), veh/h	275	745	774	386	864	809	925	0	0	633	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.3	19.6	19.6	28.1	19.3	19.3	20.0	0.0	0.0	18.0	0.0	0.0
Incr Delay (d2), s/veh	7.3	1.4	1.4	6.4	3.3	3.5	3.0	0.0	0.0	1.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.4	4.6	2.9	6.2	5.8	7.1	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	21.0	20.9	34.4	22.6	22.8	23.0	0.0	0.0	19.2	0.0	0.0
LnGrp LOS	D	C	C	C	C	C	C	A	A	B	A	A
Approach Vol, veh/h		880			1127			521			255	
Approach Delay, s/veh		23.2			24.6			23.0			19.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	25.6		27.6	10.8	27.8		27.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	14.5	28.5		33.5	10.5	32.5		33.5
Max Q Clear Time (g_c+I1), s	8.6	14.2		16.9	6.8	18.5		20.3
Green Ext Time (p_c), s	0.2	3.6		1.5	0.1	4.9		2.8

Intersection Summary	
HCM 6th Ctrl Delay	23.4
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	21	46	378	237	28
Future Vol, veh/h	10	21	46	378	237	28
Conflicting Peds, #/hr	0	0	2	0	0	2
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, %	10	10	2	2	2	2
Mvmt Flow	11	23	50	411	258	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	786	275	290	0	-	0
Stage 1	275	-	-	-	-	-
Stage 2	511	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.12	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.218	-	-	-
Pot Cap-1 Maneuver	350	745	1272	-	-	-
Stage 1	753	-	-	-	-	-
Stage 2	586	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	331	744	1270	-	-	-
Mov Cap-2 Maneuver	331	-	-	-	-	-
Stage 1	713	-	-	-	-	-
Stage 2	585	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1270	-	530	-	-
HCM Lane V/C Ratio	0.039	-	0.064	-	-
HCM Control Delay (s)	8	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Intersection Delay, s/veh	17.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	451	17	229	254	4	12	4	266	23	5	1
Future Vol, veh/h	2	451	17	229	254	4	12	4	266	23	5	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	34	3	5	38	10	4	4	4	33	33	33
Mvmt Flow	2	490	18	249	276	4	13	4	289	25	5	1
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay	19.4	15.1	17.9	12.6
HCM LOS	C	C	C	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	4%	100%	0%	0%	100%	0%	0%	79%
Vol Thru, %	1%	0%	100%	90%	0%	100%	95%	17%
Vol Right, %	94%	0%	0%	10%	0%	0%	5%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	282	2	301	167	229	169	89	29
LT Vol	12	2	0	0	229	0	0	23
Through Vol	4	0	301	150	0	169	85	5
RT Vol	266	0	0	17	0	0	4	1
Lane Flow Rate	307	2	327	182	249	184	96	32
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.566	0.004	0.662	0.338	0.503	0.375	0.183	0.08
Departure Headway (Hd)	6.77	7.27	7.297	6.684	7.281	7.344	6.823	9.08
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	536	494	497	540	498	491	528	396
Service Time	4.47	4.982	5.009	4.396	4.993	5.056	4.535	6.812
HCM Lane V/C Ratio	0.573	0.004	0.658	0.337	0.5	0.375	0.182	0.081
HCM Control Delay	17.9	10	23.2	12.8	17.1	14.4	11.1	12.6
HCM Lane LOS	C	A	C	B	C	B	B	B
HCM 95th-tile Q	3.5	0	4.8	1.5	2.8	1.7	0.7	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	6	26	291	0	0	12	1190	327	231	1121	2
Future Volume (veh/h)	3	6	26	291	0	0	12	1190	327	231	1121	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1900	1900	1900	1811	1811	1811	1826	1826	1826
Adj Flow Rate, veh/h	3	7	28	316	0	0	13	1293	355	251	1218	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	5	5	5
Cap, veh/h	29	67	82	436	0	194	38	1462	836	290	2024	3
Arrive On Green	0.05	0.05	0.05	0.12	0.00	0.00	0.02	0.42	0.42	0.17	0.57	0.57
Sat Flow, veh/h	562	1310	1610	3619	0	1610	1725	3441	1533	1739	3554	6
Grp Volume(v), veh/h	10	0	28	316	0	0	13	1293	355	251	595	625
Grp Sat Flow(s),veh/h/ln	1872	0	1610	1810	0	1610	1725	1721	1533	1739	1735	1825
Q Serve(g_s), s	0.4	0.0	1.3	6.4	0.0	0.0	0.6	26.3	10.4	10.7	17.1	17.1
Cycle Q Clear(g_c), s	0.4	0.0	1.3	6.4	0.0	0.0	0.6	26.3	10.4	10.7	17.1	17.1
Prop In Lane	0.30		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	95	0	82	436	0	194	38	1462	836	290	988	1040
V/C Ratio(X)	0.11	0.00	0.34	0.72	0.00	0.00	0.34	0.88	0.42	0.86	0.60	0.60
Avail Cap(c_a), veh/h	172	0	148	857	0	381	159	1517	861	309	988	1040
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	0.0	34.8	32.2	0.0	0.0	36.6	20.1	10.2	30.8	10.7	10.7
Incr Delay (d2), s/veh	0.5	0.0	2.5	2.3	0.0	0.0	5.2	6.4	0.3	20.9	1.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.5	2.9	0.0	0.0	0.3	10.9	4.4	6.0	5.9	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	0.0	37.3	34.5	0.0	0.0	41.8	26.6	10.6	51.7	11.7	11.7
LnGrp LOS	C	A	D	C	A	A	D	C	B	D	B	B
Approach Vol, veh/h		38			316			1661			1471	
Approach Delay, s/veh		36.7			34.5			23.3			18.5	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.2	36.8		8.4	6.2	47.8		13.7
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		7.0	7.0	40.0		18.0
Max Q Clear Time (g_c+I1), s	12.7	28.3		3.3	2.6	19.1		8.4
Green Ext Time (p_c), s	0.1	4.0		0.0	0.0	8.7		0.8

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	181.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	199	208	993	230	255	1261
Future Vol, veh/h	199	208	993	230	255	1261
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	9	9	10	9	9	10
Mvmt Flow	216	226	1079	250	277	1371

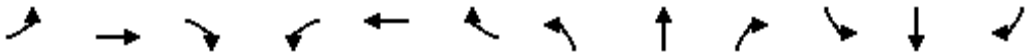
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2444	665	0	0	1329	0
Stage 1	1204	-	-	-	-	-
Stage 2	1240	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.28	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	~ 23	386	-	-	480	-
Stage 1	233	-	-	-	-	-
Stage 2	223	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 10	386	-	-	480	-
Mov Cap-2 Maneuver	~ 65	-	-	-	-	-
Stage 1	233	-	-	-	-	-
Stage 2	~ 94	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 1390.1	0	3.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	113	480	-
HCM Lane V/C Ratio	-	-	3.915	0.577	-
HCM Control Delay (s)	-	-	$ 1390.1	22.2	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	44.9	3.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE WITH ORANGE STREET EXTENSION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	272	301	506	313	18	106	3	139	26	21	5
Future Volume (veh/h)	0	272	301	506	313	18	106	3	139	26	21	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1722	1693	1760	1796	1868	1796	1856	1930	1856	1870	1945	1870
Adj Flow Rate, veh/h	0	296	327	550	340	20	115	3	151	28	23	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	12	14	14	7	7	7	3	3	3	2	2	2
Cap, veh/h	2	434	384	611	2330	137	194	18	177	200	150	27
Arrive On Green	0.00	0.27	0.27	0.36	0.68	0.68	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1640	1608	1424	1711	3407	200	596	91	880	608	746	133
Grp Volume(v), veh/h	0	296	327	550	176	184	269	0	0	56	0	0
Grp Sat Flow(s),veh/h/ln	1640	1608	1424	1711	1775	1831	1567	0	0	1487	0	0
Q Serve(g_s), s	0.0	11.5	15.2	21.2	2.4	2.5	9.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.5	15.2	21.2	2.4	2.5	11.5	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.11	0.43		0.56	0.50		0.09
Lane Grp Cap(c), veh/h	2	434	384	611	1214	1253	389	0	0	377	0	0
V/C Ratio(X)	0.00	0.68	0.85	0.90	0.15	0.15	0.69	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	165	507	449	957	1362	1405	455	0	0	442	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	22.8	24.1	21.3	3.9	3.9	26.7	0.0	0.0	22.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.0	12.9	7.6	0.1	0.1	3.6	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.3	6.0	8.7	0.6	0.6	4.5	0.0	0.0	0.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.8	37.0	28.9	3.9	3.9	30.4	0.0	0.0	23.1	0.0	0.0
LnGrp LOS	A	C	D	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		623			910			269			56	
Approach Delay, s/veh		31.7			19.0			30.4			23.1	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	28.9	22.8		18.0	0.0	51.7		18.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	39.0	22.0		17.0	7.0	53.5		17.0				
Max Q Clear Time (g_c+I1), s	23.2	17.2		3.7	0.0	4.5		13.5				
Green Ext Time (p_c), s	1.6	1.6		0.2	0.0	2.1		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			25.0									
HCM 6th LOS			C									

Intersection	
Intersection Delay, s/veh	282
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	685	96	75	150	6	50	104	34	165	435	0
Future Vol, veh/h	2	685	96	75	150	6	50	104	34	165	435	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	8	15	8	2	2	2	3	3	4	2	2	2
Mvmt Flow	2	745	104	82	163	7	54	113	37	179	473	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	441	30.6	22.7	252.4
HCM LOS	F	D	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	32%	0%	0%	33%	0%	28%
Vol Thru, %	68%	0%	87%	67%	0%	72%
Vol Right, %	0%	100%	12%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	154	34	783	225	6	600
LT Vol	50	0	2	75	0	165
Through Vol	104	0	685	150	0	435
RT Vol	0	34	96	0	6	0
Lane Flow Rate	167	37	851	245	7	652
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.421	0.084	1.911	0.595	0.014	1.469
Departure Headway (Hd)	12.689	11.766	9.34	12.058	11.132	10.203
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	286	306	400	303	323	365
Service Time	10.389	9.466	7.34	9.758	8.832	8.203
HCM Lane V/C Ratio	0.584	0.121	2.127	0.809	0.022	1.786
HCM Control Delay	24.3	15.5	441	31	14	252.4
HCM Lane LOS	C	C	F	D	B	F
HCM 95th-tile Q	2	0.3	49.5	3.6	0	27.7

Intersection	
Intersection Delay, s/veh	15
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	371	69	42	0	0	0	53	69	2	112	0
Future Vol, veh/h	45	371	69	42	0	0	0	53	69	2	112	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	11	20	11	12	12	12	3	3	3	2	2	2
Mvmt Flow	49	403	75	46	0	0	0	58	75	2	122	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	18.1	9.2	9.6	10
HCM LOS	C	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	9%	100%	2%
Vol Thru, %	43%	76%	0%	98%
Vol Right, %	57%	14%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	122	485	42	114
LT Vol	0	45	42	2
Through Vol	53	371	0	112
RT Vol	69	69	0	0
Lane Flow Rate	133	527	46	124
Geometry Grp	1	1	1	1
Degree of Util (X)	0.196	0.695	0.073	0.194
Departure Headway (Hd)	5.313	4.749	5.754	5.639
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	679	754	625	639
Service Time	3.313	2.835	3.77	3.647
HCM Lane V/C Ratio	0.196	0.699	0.074	0.194
HCM Control Delay	9.6	18.1	9.2	10
HCM Lane LOS	A	C	A	A
HCM 95th-tile Q	0.7	5.7	0.2	0.7

Intersection	
Int Delay, s/veh	24.4

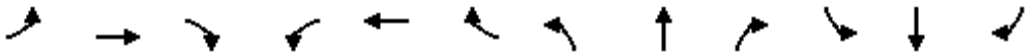
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	419	18	24	687	6	187	2	253	5	0	32
Future Vol, veh/h	0	419	18	24	687	6	187	2	253	5	0	32
Conflicting Peds, #/hr	5	0	1	1	0	5	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	-	-	-	115	-	-	-
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, %	4	10	4	6	6	6	42	11	11	4	4	4
Mvmt Flow	0	455	20	26	747	7	203	2	275	5	0	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	759	0	-	456	0	0	882	1267	230	1038	1264	382
Stage 1	-	-	-	-	-	-	456	456	-	808	808	-
Stage 2	-	-	-	-	-	-	426	811	-	230	456	-
Critical Hdwy	4.18	-	-	4.22	-	-	8.34	6.72	7.12	7.58	6.58	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.72	-	6.58	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.34	5.72	-	6.58	5.58	-
Follow-up Hdwy	2.24	-	-	2.26	-	-	3.92	4.11	3.41	3.54	4.04	3.34
Pot Cap-1 Maneuver	835	-	0	1073	-	-	~ 185	156	745	182	165	610
Stage 1	-	-	0	-	-	-	460	544	-	337	387	-
Stage 2	-	-	0	-	-	-	482	370	-	746	562	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	831	-	-	1072	-	-	~ 171	151	744	111	160	607
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 171	151	-	111	160	-
Stage 1	-	-	-	-	-	-	460	543	-	335	376	-
Stage 2	-	-	-	-	-	-	443	359	-	468	561	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	87.3	15.7
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	171	744	831	-	1072	-	-	378
HCM Lane V/C Ratio	1.201	0.37	-	-	0.024	-	-	0.106
HCM Control Delay (s)	187.3	12.6	0	-	8.4	-	-	15.7
HCM Lane LOS	F	B	A	-	A	-	-	C
HCM 95th %tile Q(veh)	11.2	1.7	0	-	0.1	-	-	0.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	786	0	0	560	571	0	0	0	440	0	166
Future Volume (veh/h)	226	786	0	0	560	571	0	0	0	440	0	166
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1767	1767	1767	1678	1737	1737	1900	1900	1900	1826	1826	1826
Adj Flow Rate, veh/h	246	854	0	0	609	0	0	0	0	329	209	180
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	9	15	11	11	0	0	0	5	5	5
Cap, veh/h	302	1807	0	3	908		0	577	0	662	273	235
Arrive On Green	0.18	0.54	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.30	0.30	0.30
Sat Flow, veh/h	1682	3445	0	1598	3387	0	0	1900	0	1739	900	775
Grp Volume(v), veh/h	246	854	0	0	609	0	0	0	0	329	0	389
Grp Sat Flow(s),veh/h/ln	1682	1678	0	1598	1650	0	0	1900	0	1739	0	1675
Q Serve(g_s), s	7.6	8.5	0.0	0.0	8.8	0.0	0.0	0.0	0.0	8.7	0.0	11.3
Cycle Q Clear(g_c), s	7.6	8.5	0.0	0.0	8.8	0.0	0.0	0.0	0.0	8.7	0.0	11.3
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.46
Lane Grp Cap(c), veh/h	302	1807	0	3	908		0	577	0	662	0	508
V/C Ratio(X)	0.81	0.47	0.00	0.00	0.67		0.00	0.00	0.00	0.50	0.00	0.77
Avail Cap(c_a), veh/h	485	2716	0	208	2149		0	937	0	991	0	825
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.2	7.7	0.0	0.0	17.3	0.0	0.0	0.0	0.0	16.1	0.0	17.0
Incr Delay (d2), s/veh	5.6	0.2	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.6	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	3.0	2.1	0.0	0.0	2.8	0.0	0.0	0.0	0.0	3.2	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.8	7.9	0.0	0.0	18.2	0.0	0.0	0.0	0.0	16.7	0.0	19.4
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		1100			609	A		0			718	
Approach Delay, s/veh		12.1			18.2			0.0			18.2	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	32.9		20.8	14.2	18.8		20.8				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	43.5		26.5	15.5	35.0		26.5				
Max Q Clear Time (g_c+I1), s	0.0	10.5		13.3	9.6	10.8		0.0				
Green Ext Time (p_c), s	0.0	6.5		3.0	0.4	3.9		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	15.4	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	92.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	141	645	8	18	404	3	8	35	21	394	50	238
Future Vol, veh/h	141	645	8	18	404	3	8	35	21	394	50	238
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	20	18	20	5	4	5	2	2	2	2	2	2
Mvmt Flow	153	701	9	20	439	3	9	38	23	428	54	259
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	98	105.5	14.3	85.3
HCM LOS	F	F	B	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	19%	0%	30%	0%	4%	0%	89%	0%
Vol Thru, %	81%	0%	70%	98%	96%	0%	11%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	43	21	464	331	422	3	444	238
LT Vol	8	0	141	0	18	0	394	0
Through Vol	35	0	323	323	404	0	50	0
RT Vol	0	21	0	8	0	3	0	238
Lane Flow Rate	47	23	504	359	459	3	483	259
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.129	0.058	1.194	0.831	1.102	0.007	1.149	0.534
Departure Headway (Hd)	10.638	9.797	9.043	8.832	9.197	8.43	8.931	7.743
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	339	368	408	413	399	427	410	468
Service Time	8.338	7.497	6.743	6.532	6.897	6.13	6.631	5.443
HCM Lane V/C Ratio	0.139	0.063	1.235	0.869	1.15	0.007	1.178	0.553
HCM Control Delay	14.9	13.1	137.6	42.4	106.2	11.2	120.9	19
HCM Lane LOS	B	B	F	E	F	B	F	C
HCM 95th-tile Q	0.4	0.2	19	7.8	15.5	0	17.5	3.1

Intersection	
Int Delay, s/veh	385

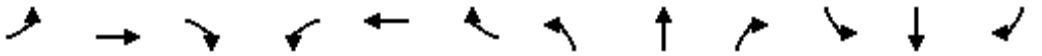
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	245	848	578	131	205	27
Future Vol, veh/h	245	848	578	131	205	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	13	12	4	5	12	12
Mvmt Flow	266	922	628	142	223	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1621	-	223	0	-	0
Stage 1	223	-	-	-	-	-
Stage 2	1398	-	-	-	-	-
Critical Hdwy	6.53	-	4.14	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	-	2.236	-	-	-
Pot Cap-1 Maneuver	~ 107	0	1334	-	-	0
Stage 1	789	0	-	-	-	0
Stage 2	~ 216	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 57	-	1334	-	-	-
Mov Cap-2 Maneuver	~ 57	-	-	-	-	-
Stage 1	417	-	-	-	-	-
Stage 2	~ 216	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	1797.4	8.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1334	-	57	-	-
HCM Lane V/C Ratio	0.471	-	4.672	-	-
HCM Control Delay (s)	10.1	-	$ 1797.4	0	-
HCM Lane LOS	B	-	F	A	-
HCM 95th %tile Q(veh)	2.6	-	29.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	1005	35	32	706	456	35	67	67	627	35	391
Future Volume (veh/h)	186	1005	35	32	706	456	35	67	67	627	35	391
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	202	1092	38	35	767	496	38	73	73	682	38	425
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	232	1269	555	77	914	397	276	96	96	581	585	690
Arrive On Green	0.13	0.36	0.36	0.05	0.28	0.28	0.05	0.11	0.11	0.29	0.35	0.35
Sat Flow, veh/h	1753	3497	1530	1654	3300	1435	1781	885	885	1598	1678	1434
Grp Volume(v), veh/h	202	1092	38	35	767	496	38	0	146	682	38	425
Grp Sat Flow(s),veh/h/ln	1753	1749	1530	1654	1650	1435	1781	0	1771	1598	1678	1434
Q Serve(g_s), s	9.4	24.0	1.3	1.7	18.2	23.0	1.5	0.0	6.6	24.0	1.3	18.1
Cycle Q Clear(g_c), s	9.4	24.0	1.3	1.7	18.2	23.0	1.5	0.0	6.6	24.0	1.3	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	232	1269	555	77	914	397	276	0	193	581	585	690
V/C Ratio(X)	0.87	0.86	0.07	0.45	0.84	1.25	0.14	0.00	0.76	1.17	0.06	0.62
Avail Cap(c_a), veh/h	232	1269	555	139	914	397	338	0	341	581	667	760
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	1.00	1.00
Uniform Delay (d), s/veh	35.3	24.5	17.3	38.6	28.3	30.0	30.1	0.0	35.9	23.1	18.0	15.9
Incr Delay (d2), s/veh	27.9	6.2	0.1	4.1	7.0	131.1	0.2	0.0	6.0	95.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	9.9	0.5	0.7	7.4	22.0	0.7	0.0	3.1	25.0	0.5	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	30.8	17.3	42.7	35.3	161.1	30.3	0.0	41.9	118.8	18.1	17.2
LnGrp LOS	E	C	B	D	D	F	C	A	D	F	B	B
Approach Vol, veh/h		1332			1298			184			1145	
Approach Delay, s/veh		35.3			83.6			39.5			77.8	
Approach LOS		D			F			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	34.1	8.1	33.0	15.0	27.0	28.0	13.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	27.0	7.0	33.0	11.0	23.0	24.0	16.0
Max Q Clear Time (g_c+I1), s	3.7	26.0	3.5	20.1	11.4	25.0	26.0	8.6
Green Ext Time (p_c), s	0.0	0.7	0.0	1.5	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	63.6
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	303.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	242	1	291	2	566	194	215	825	7
Future Vol, veh/h	0	0	0	242	1	291	2	566	194	215	825	7
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	100	-	-	100	-	-
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	16	16	39	14	7	14	50	7	13
Mvmt Flow	0	0	0	263	1	316	2	615	211	234	897	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1683	2201	455	1642	2100	413	907	0	0	826	0	0
Stage 1	1371	1371	-	725	725	-	-	-	-	-	-	-
Stage 2	312	830	-	917	1375	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.82	6.82	7.68	4.38	-	-	5.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.66	4.16	3.69	2.34	-	-	2.7	-	-
Pot Cap-1 Maneuver	63	45	558	~ 57	43	496	675	-	-	555	-	-
Stage 1	157	216	-	352	396	-	-	-	-	-	-	-
Stage 2	679	388	-	266	187	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	15	26	557	~ 38	25	496	674	-	-	555	-	-
Mov Cap-2 Maneuver	15	26	-	~ 38	25	-	-	-	-	-	-	-
Stage 1	156	125	-	351	395	-	-	-	-	-	-	-
Stage 2	245	387	-	~ 154	108	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 1325.6	0	3.3
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	674	-	-	-	38	496	555	-	-
HCM Lane V/C Ratio	0.003	-	-	-	6.951	0.638	0.421	-	-
HCM Control Delay (s)	10.4	-	-	0	$ 2884	24.2	16.1	-	-
HCM Lane LOS	B	-	-	A	F	C	C	-	-
HCM 95th %tile Q(veh)	0	-	-	-	31.4	4.4	2.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	17.6

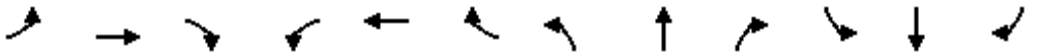
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	2	28	46	0	41	82	948	77	48	905	38
Future Vol, veh/h	6	2	28	46	0	41	82	948	77	48	905	38
Conflicting Peds, #/hr	7	0	0	0	0	7	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	0	140	-	-	170	-	-
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, %	15	15	15	25	25	25	8	5	8	14	8	14
Mvmt Flow	7	2	30	50	0	45	89	1030	84	52	984	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1809	2401	513	1847	-	564	1025	0	0	1114	0	0
Stage 1	1109	1109	-	1250	-	-	-	-	-	-	-	-
Stage 2	700	1292	-	597	-	-	-	-	-	-	-	-
Critical Hdwy	7.8	6.8	7.2	8	-	7.4	4.26	-	-	4.38	-	-
Critical Hdwy Stg 1	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4.15	3.45	3.75	-	3.55	2.28	-	-	2.34	-	-
Pot Cap-1 Maneuver	43	27	473	~ 36	0	415	638	-	-	558	-	-
Stage 1	202	257	-	151	0	-	-	-	-	-	-	-
Stage 2	367	208	-	404	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	32	21	473	~ 26	-	412	638	-	-	558	-	-
Mov Cap-2 Maneuver	32	21	-	~ 26	-	-	-	-	-	-	-	-
Stage 1	174	233	-	130	-	-	-	-	-	-	-	-
Stage 2	280	179	-	340	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	58.4	$ 406.1	0.9	0.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	638	-	-	105	26	412	558	-	-
HCM Lane V/C Ratio	0.14	-	-	0.373	1.923	0.108	0.094	-	-
HCM Control Delay (s)	11.6	-	-	58.4	$ 754.8	14.8	12.1	-	-
HCM Lane LOS	B	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0.5	-	-	1.5	6.1	0.4	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	242	85	135	80	214	17	862	166	320	812	22
Future Volume (veh/h)	27	242	85	135	80	214	17	862	166	320	812	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1870	1870	1870	1781	1707	1853	1856	1856	1856	1781	1781	1781
Adj Flow Rate, veh/h	29	263	92	147	87	233	18	937	180	348	883	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	8	13	8	3	3	3	8	8	8
Cap, veh/h	74	291	102	180	486	447	51	1133	504	430	1425	39
Arrive On Green	0.04	0.22	0.22	0.11	0.28	0.28	0.03	0.32	0.32	0.13	0.42	0.42
Sat Flow, veh/h	1781	1324	463	1697	1707	1570	1767	3526	1567	3291	3365	91
Grp Volume(v), veh/h	29	0	355	147	87	233	18	937	180	348	444	463
Grp Sat Flow(s),veh/h/ln	1781	0	1787	1697	1707	1570	1767	1763	1567	1646	1692	1764
Q Serve(g_s), s	1.3	0.0	15.7	6.9	3.1	10.1	0.8	20.0	7.2	8.3	16.7	16.7
Cycle Q Clear(g_c), s	1.3	0.0	15.7	6.9	3.1	10.1	0.8	20.0	7.2	8.3	16.7	16.7
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	74	0	393	180	486	447	51	1133	504	430	717	747
V/C Ratio(X)	0.39	0.00	0.90	0.82	0.18	0.52	0.35	0.83	0.36	0.81	0.62	0.62
Avail Cap(c_a), veh/h	153	0	407	219	486	447	152	1324	588	506	750	782
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	0.0	30.8	35.5	21.9	24.4	38.7	25.5	21.1	34.3	18.3	18.3
Incr Delay (d2), s/veh	3.4	0.0	22.4	17.7	0.2	1.1	4.1	3.9	0.4	8.2	1.5	1.4
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	0.6	0.0	8.9	3.6	1.2	3.6	0.4	8.1	2.4	3.6	5.8	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.3	0.0	53.3	53.3	22.1	25.5	42.8	29.4	21.6	42.5	19.8	19.7
LnGrp LOS	D	A	D	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		384			467			1135			1255	
Approach Delay, s/veh		52.4			33.6			28.4			26.1	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	30.6	13.1	22.4	6.8	38.9	7.9	27.6
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	12.5	30.5	10.5	18.5	7.0	36.0	7.0	22.0
Max Q Clear Time (g_c+I1), s	10.3	22.0	8.9	17.7	2.8	18.7	3.3	12.1
Green Ext Time (p_c), s	0.3	4.2	0.1	0.2	0.0	4.8	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	91	65	15	56	22	24	810	109	55	939	101
Future Volume (veh/h)	91	91	65	15	56	22	24	810	109	55	939	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		0.98
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	1870	1945	1870	1870	1870	1870	1930	1856	1856	1796	1796	1796
Adj Flow Rate, veh/h	99	99	71	16	61	24	26	880	118	60	1021	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	7	7	7
Cap, veh/h	348	198	142	281	241	95	79	1377	185	138	1484	160
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.04	0.44	0.44	0.08	0.48	0.48
Sat Flow, veh/h	1303	1043	748	1208	1268	499	1838	3123	419	1711	3099	334
Grp Volume(v), veh/h	99	0	170	16	0	85	26	497	501	60	562	569
Grp Sat Flow(s),veh/h/ln	1303	0	1790	1208	0	1767	1838	1763	1778	1711	1706	1727
Q Serve(g_s), s	3.3	0.0	4.0	0.6	0.0	1.9	0.6	10.3	10.3	1.6	12.0	12.0
Cycle Q Clear(g_c), s	5.2	0.0	4.0	4.5	0.0	1.9	0.6	10.3	10.3	1.6	12.0	12.0
Prop In Lane	1.00		0.42	1.00		0.28	1.00		0.24	1.00		0.19
Lane Grp Cap(c), veh/h	348	0	341	281	0	336	79	777	784	138	817	827
V/C Ratio(X)	0.28	0.00	0.50	0.06	0.00	0.25	0.33	0.64	0.64	0.43	0.69	0.69
Avail Cap(c_a), veh/h	642	0	745	553	0	735	294	1711	1726	420	1801	1823
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	17.0	19.0	0.0	16.1	21.8	10.2	10.2	20.5	9.5	9.5
Incr Delay (d2), s/veh	0.4	0.0	1.1	0.1	0.0	0.4	2.4	0.9	0.9	2.1	1.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.6	0.2	0.0	0.7	0.3	3.4	3.4	0.6	3.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	0.0	18.1	19.1	0.0	16.5	24.2	11.1	11.1	22.7	10.5	10.5
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		269			101			1024			1191	
Approach Delay, s/veh		18.4			16.9			11.4			11.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	25.2		13.4	6.5	27.0		13.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	11.5	45.5		19.5	7.5	49.5		19.5
Max Q Clear Time (g_c+I1), s	3.6	12.3		7.2	2.6	14.0		6.5
Green Ext Time (p_c), s	0.1	8.4		1.0	0.0	8.3		0.3

Intersection Summary		
HCM 6th Ctrl Delay		12.2
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	64	145	550	248	483	0	0	957	191
Future Volume (veh/h)	0	0	0	64	145	550	248	483	0	0	957	191
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1841	1841	0	0	1811	1811
Adj Flow Rate, veh/h				70	158	598	270	525	0	0	1040	208
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	4	4	0	0	6	6
Cap, veh/h				138	312	402	309	2269	0	0	1196	239
Arrive On Green				0.24	0.24	0.24	0.18	0.65	0.00	0.00	0.42	0.42
Sat Flow, veh/h				566	1277	1648	1753	3589	0	0	2947	570
Grp Volume(v), veh/h				228	0	598	270	525	0	0	625	623
Grp Sat Flow(s),veh/h/ln				1842	0	1648	1753	1749	0	0	1721	1706
Q Serve(g_s), s				9.0	0.0	20.5	12.6	5.2	0.0	0.0	27.9	28.1
Cycle Q Clear(g_c), s				9.0	0.0	20.5	12.6	5.2	0.0	0.0	27.9	28.1
Prop In Lane				0.31		1.00	1.00		0.00	0.00		0.33
Lane Grp Cap(c), veh/h				450	0	402	309	2269	0	0	721	715
V/C Ratio(X)				0.51	0.00	1.49	0.87	0.23	0.00	0.00	0.87	0.87
Avail Cap(c_a), veh/h				450	0	402	365	2520	0	0	789	782
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				27.4	0.0	31.7	33.7	6.1	0.0	0.0	22.3	22.3
Incr Delay (d2), s/veh				0.9	0.0	231.5	18.1	0.1	0.0	0.0	9.5	9.9
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				4.0	0.0	33.7	6.8	1.7	0.0	0.0	12.4	12.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				28.3	0.0	263.3	51.7	6.1	0.0	0.0	31.8	32.3
LnGrp LOS				C	A	F	D	A	A	A	C	C
Approach Vol, veh/h					826			795			1248	
Approach Delay, s/veh					198.4			21.6			32.0	
Approach LOS					F			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	59.0		19.3	39.7		25.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	60.5		17.5	38.5		20.5
Max Q Clear Time (g_c+I1), s	7.2		14.6	30.1		22.5
Green Ext Time (p_c), s	4.1		0.2	5.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	77.1
HCM 6th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	0	198	0	0	0	0	492	221	509	512	0
Future Volume (veh/h)	250	0	198	0	0	0	0	492	221	509	512	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				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	1900	1856	1900				0	1856	1856	1841	1841	0
Adj Flow Rate, veh/h	272	0	215				0	535	240	553	557	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	0				0	3	3	4	4	0
Cap, veh/h	363	0	317				0	781	348	626	2275	0
Arrive On Green	0.21	0.00	0.21				0.00	0.22	0.22	0.36	0.65	0.00
Sat Flow, veh/h	1767	0	1545				0	3618	1572	1753	3589	0
Grp Volume(v), veh/h	272	0	215				0	535	240	553	557	0
Grp Sat Flow(s),veh/h/ln	1767	0	1545				0	1763	1572	1753	1749	0
Q Serve(g_s), s	9.0	0.0	8.0				0.0	8.7	8.7	18.5	4.1	0.0
Cycle Q Clear(g_c), s	9.0	0.0	8.0				0.0	8.7	8.7	18.5	4.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	363	0	317				0	781	348	626	2275	0
V/C Ratio(X)	0.75	0.00	0.68				0.00	0.69	0.69	0.88	0.24	0.00
Avail Cap(c_a), veh/h	510	0	446				0	1130	504	1082	3533	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.3	0.0	22.9				0.0	22.3	22.3	18.8	4.5	0.0
Incr Delay (d2), s/veh	3.9	0.0	2.5				0.0	1.1	2.4	4.7	0.1	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	3.9	0.0	2.9				0.0	3.5	3.2	7.5	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.1	0.0	25.4				0.0	23.4	24.7	23.5	4.6	0.0
LnGrp LOS	C	A	C				A	C	C	C	A	A
Approach Vol, veh/h		487						775			1110	
Approach Delay, s/veh		26.4						23.8			14.0	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	26.8	18.3		17.3		45.1						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	38.5	20.0		18.0		63.0						
Max Q Clear Time (g_c+I1), s	20.5	10.7		11.0		6.1						
Green Ext Time (p_c), s	1.8	3.1		1.7		4.4						

Intersection Summary		
HCM 6th Ctrl Delay		19.8
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	85	25	100	60	172	5	398	19	184	522	21
Future Volume (veh/h)	22	85	25	100	60	172	5	398	19	184	522	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	24	92	27	109	65	187	5	433	21	200	567	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	271	331	97	392	100	288	331	557	27	497	792	32
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.01	0.32	0.32	0.14	0.45	0.45
Sat Flow, veh/h	1115	1381	405	1251	418	1203	1767	1754	85	1753	1756	71
Grp Volume(v), veh/h	24	0	119	109	0	252	5	0	454	200	0	590
Grp Sat Flow(s),veh/h/ln	1115	0	1786	1251	0	1621	1767	0	1839	1753	0	1827
Q Serve(g_s), s	0.9	0.0	2.4	3.5	0.0	6.3	0.1	0.0	10.1	2.9	0.0	11.8
Cycle Q Clear(g_c), s	7.2	0.0	2.4	5.9	0.0	6.3	0.1	0.0	10.1	2.9	0.0	11.8
Prop In Lane	1.00		0.23	1.00		0.74	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	271	0	428	392	0	388	331	0	584	497	0	824
V/C Ratio(X)	0.09	0.00	0.28	0.28	0.00	0.65	0.02	0.00	0.78	0.40	0.00	0.72
Avail Cap(c_a), veh/h	450	0	715	593	0	648	589	0	875	523	0	873
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.6	0.0	13.9	16.4	0.0	15.4	10.6	0.0	13.9	8.3	0.0	10.0
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.4	0.0	1.8	0.0	0.0	2.6	0.5	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	0.2	0.0	0.9	0.9	0.0	2.2	0.0	0.0	3.7	0.8	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	0.0	14.3	16.7	0.0	17.2	10.6	0.0	16.5	8.8	0.0	12.7
LnGrp LOS	B	A	B	B	A	B	B	A	B	A	A	B
Approach Vol, veh/h		143			361			459			790	
Approach Delay, s/veh		15.0			17.1			16.4			11.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.9	18.8		15.3	4.9	24.8		15.3
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.4		18.0	7.0	21.5		18.0
Max Q Clear Time (g_c+I1), s	4.9	12.1		9.2	2.1	13.8		8.3
Green Ext Time (p_c), s	0.1	1.9		0.4	0.0	2.3		1.4

Intersection Summary		
HCM 6th Ctrl Delay	14.3	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	113	545	81	40	205	0	0	393	195
Future Volume (veh/h)	0	0	0	113	545	81	40	205	0	0	393	195
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.95
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				1900	1841	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				123	592	88	43	223	0	0	427	212
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	4	0	2	2	0	0	2	2
Cap, veh/h				179	904	141	111	900	0	0	619	499
Arrive On Green				0.34	0.34	0.34	0.06	0.48	0.00	0.00	0.33	0.33
Sat Flow, veh/h				523	2637	411	1781	1870	0	0	1870	1509
Grp Volume(v), veh/h				427	0	376	43	223	0	0	427	212
Grp Sat Flow(s),veh/h/ln				1815	0	1756	1781	1870	0	0	1870	1509
Q Serve(g_s), s				10.3	0.0	9.2	1.2	3.6	0.0	0.0	10.1	5.6
Cycle Q Clear(g_c), s				10.3	0.0	9.2	1.2	3.6	0.0	0.0	10.1	5.6
Prop In Lane				0.29		0.23	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				622	0	602	111	900	0	0	619	499
V/C Ratio(X)				0.69	0.00	0.62	0.39	0.25	0.00	0.00	0.69	0.42
Avail Cap(c_a), veh/h				1152	0	1114	261	1772	0	0	1333	1076
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				14.5	0.0	14.1	23.1	7.8	0.0	0.0	14.9	13.3
Incr Delay (d2), s/veh				1.4	0.0	1.1	2.2	0.1	0.0	0.0	1.4	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				3.8	0.0	3.3	0.5	1.2	0.0	0.0	3.9	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.8	0.0	15.1	25.2	8.0	0.0	0.0	16.2	13.9
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					803			266			639	
Approach Delay, s/veh					15.5			10.8			15.5	
Approach LOS					B			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	29.1		7.7	21.4		22.1
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	48.5		7.5	36.5		32.5
Max Q Clear Time (g_c+I1), s	5.6		3.2	12.1		12.3
Green Ext Time (p_c), s	1.4		0.0	3.6		5.2

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	52	94	70	38	7	36	124	38	8	352	41
Future Volume (veh/h)	113	52	94	70	38	7	36	124	38	8	352	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	0.98		0.96	0.97		0.96
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	1841	1841	1841	1870	1945	1870	1841	1914	1841	1870	1945	1870
Adj Flow Rate, veh/h	123	57	102	76	41	8	39	135	41	9	383	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	2	2	2	4	4	4	2	2	2
Cap, veh/h	331	135	164	451	214	32	203	485	128	131	666	77
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	519	453	551	850	720	107	146	1228	324	13	1686	195
Grp Volume(v), veh/h	282	0	0	125	0	0	215	0	0	437	0	0
Grp Sat Flow(s),veh/h/ln	1523	0	0	1677	0	0	1698	0	0	1894	0	0
Q Serve(g_s), s	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.5	0.0	0.0	1.4	0.0	0.0	2.4	0.0	0.0	5.3	0.0	0.0
Prop In Lane	0.44		0.36	0.61		0.06	0.18		0.19	0.02		0.10
Lane Grp Cap(c), veh/h	630	0	0	697	0	0	816	0	0	873	0	0
V/C Ratio(X)	0.45	0.00	0.00	0.18	0.00	0.00	0.26	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1427	0	0	1480	0	0	1617	0	0	1833	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)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.7	0.0	0.0	7.7	0.0	0.0	6.1	0.0	0.0	7.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.4	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	1.1	0.0	0.0	0.4	0.0	0.0	0.6	0.0	0.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.2	0.0	0.0	7.8	0.0	0.0	6.2	0.0	0.0	7.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		282			125			215			437	
Approach Delay, s/veh		9.2			7.8			6.2			7.4	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.1	13.2	16.1	13.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.5	24.5	26.5	24.5
Max Q Clear Time (g_c+I1), s	4.4	6.5	7.3	3.4
Green Ext Time (p_c), s	1.4	1.7	2.6	0.7

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	765	24	96	395	61	32	97	174	286	146	59
Future Volume (veh/h)	41	765	24	96	395	61	32	97	174	286	146	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.99	1.00		0.98
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	1811	1811	1811	1811	1811	1811	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	45	832	26	104	429	66	35	105	189	311	159	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	6	6	3	3	3	3	3	3
Cap, veh/h	94	950	30	133	896	137	102	290	464	402	171	69
Arrive On Green	0.05	0.28	0.28	0.08	0.30	0.30	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1725	3402	106	1725	2970	453	112	607	970	694	357	143
Grp Volume(v), veh/h	45	421	437	104	247	248	329	0	0	534	0	0
Grp Sat Flow(s),veh/h/ln	1725	1721	1788	1725	1721	1702	1689	0	0	1194	0	0
Q Serve(g_s), s	2.1	19.1	19.1	4.9	9.6	9.8	0.0	0.0	0.0	24.6	0.0	0.0
Cycle Q Clear(g_c), s	2.1	19.1	19.1	4.9	9.6	9.8	10.5	0.0	0.0	35.1	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.27	0.11		0.57	0.58		0.12
Lane Grp Cap(c), veh/h	94	480	499	133	519	514	857	0	0	641	0	0
V/C Ratio(X)	0.48	0.88	0.88	0.78	0.48	0.48	0.38	0.00	0.00	0.83	0.00	0.00
Avail Cap(c_a), veh/h	149	525	545	158	533	527	948	0	0	715	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	37.6	28.2	28.2	37.1	23.3	23.4	13.9	0.0	0.0	21.2	0.0	0.0
Incr Delay (d2), s/veh	3.7	14.5	14.0	18.7	0.7	0.7	0.3	0.0	0.0	7.6	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	0.9	9.1	9.4	2.6	3.7	3.7	3.7	0.0	0.0	10.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.3	42.7	42.2	55.8	24.0	24.1	14.2	0.0	0.0	28.9	0.0	0.0
LnGrp LOS	D	D	D	E	C	C	B	A	A	C	A	A
Approach Vol, veh/h		903			599			329			534	
Approach Delay, s/veh		42.4			29.6			14.2			28.9	
Approach LOS		D			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	27.4		43.8	9.0	29.3		43.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	25.0		44.0	7.1	25.4		44.0
Max Q Clear Time (g_c+I1), s	6.9	21.1		37.1	4.1	11.8		12.5
Green Ext Time (p_c), s	0.0	1.8		2.1	0.0	2.2		2.2

Intersection Summary		
HCM 6th Ctrl Delay		32.2
HCM 6th LOS		C

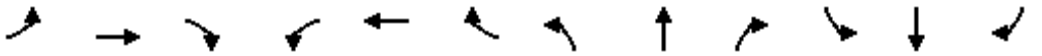
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	15	0	290	256	1
Future Vol, veh/h	0	15	0	290	256	1
Conflicting Peds, #/hr	1	0	5	0	0	5
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, %	2	2	4	4	3	3
Mvmt Flow	0	16	0	315	278	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	600	284	284	0	-	0
Stage 1	284	-	-	-	-	-
Stage 2	316	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.14	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.236	-	-	-
Pot Cap-1 Maneuver	464	755	1267	-	-	-
Stage 1	764	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	459	751	1261	-	-	-
Mov Cap-2 Maneuver	459	-	-	-	-	-
Stage 1	760	-	-	-	-	-
Stage 2	735	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1261	-	751	-	-
HCM Lane V/C Ratio	-	-	0.022	-	-
HCM Control Delay (s)	0	-	9.9	-	-
HCM Lane LOS	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)	39	188	2	103	235	99	7	0	245	174	0	93
Future Volume (veh/h)	39	188	2	103	235	99	7	0	245	174	0	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1292	1292	1752	1470	1470	1752	1752	1752	1559	1559	1559
Adj Flow Rate, veh/h	42	204	2	112	255	108	8	0	266	189	0	101
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	18	41	41	10	29	29	10	10	10	23	23	23
Cap, veh/h	443	777	8	537	601	247	634	0	535	541	0	476
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.36	0.00	0.36	0.36	0.00	0.36
Sat Flow, veh/h	888	2491	24	1099	1928	793	1031	0	1485	928	0	1321
Grp Volume(v), veh/h	42	100	106	112	183	180	8	0	266	189	0	101
Grp Sat Flow(s),veh/h/ln	888	1228	1288	1099	1397	1324	1031	0	1485	928	0	1321
Q Serve(g_s), s	1.1	1.7	1.7	2.3	2.8	3.0	0.1	0.0	3.8	4.9	0.0	1.5
Cycle Q Clear(g_c), s	4.1	1.7	1.7	4.0	2.8	3.0	1.6	0.0	3.8	6.6	0.0	1.5
Prop In Lane	1.00		0.02	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	443	383	402	537	436	413	634	0	535	541	0	476
V/C Ratio(X)	0.09	0.26	0.26	0.21	0.42	0.44	0.01	0.00	0.50	0.35	0.00	0.21
Avail Cap(c_a), veh/h	991	1141	1197	1216	1298	1230	1323	0	1379	1069	0	1228
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	9.1	7.1	7.1	8.6	7.5	7.5	6.6	0.0	6.8	8.4	0.0	6.1
Incr Delay (d2), s/veh	0.1	0.4	0.3	0.2	0.6	0.7	0.0	0.0	0.7	0.4	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	0.2	0.3	0.3	0.5	0.5	0.0	0.0	0.7	0.6	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.2	7.4	7.4	8.8	8.1	8.3	6.7	0.0	7.6	8.8	0.0	6.3
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		248			475			274			290	
Approach Delay, s/veh		7.7			8.3			7.5			7.9	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.1		14.4		13.1		14.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		25.5		25.5		25.5		25.5				
Max Q Clear Time (g_c+I1), s		6.1		8.6		6.0		5.8				
Green Ext Time (p_c), s		1.2		1.5		2.4		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			8.0									
HCM 6th LOS			A									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	7	339	1	0	12	699	391	84	1111	7
Future Volume (veh/h)	3	0	7	339	1	0	12	699	391	84	1111	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1648	1648	1648	1885	1885	1885	1781	1781	1781	1752	1752	1752
Adj Flow Rate, veh/h	3	0	8	369	0	0	13	760	425	91	1208	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	17	17	17	1	1	1	8	8	8	10	10	10
Cap, veh/h	31	0	27	541	0	241	39	1391	848	159	1637	11
Arrive On Green	0.02	0.00	0.02	0.15	0.00	0.00	0.02	0.41	0.41	0.10	0.48	0.48
Sat Flow, veh/h	1570	0	1397	3591	0	1598	1697	3385	1510	1668	3390	22
Grp Volume(v), veh/h	3	0	8	369	0	0	13	760	425	91	593	623
Grp Sat Flow(s),veh/h/ln	1570	0	1397	1795	0	1598	1697	1692	1510	1668	1664	1748
Q Serve(g_s), s	0.1	0.0	0.3	5.4	0.0	0.0	0.4	9.5	9.6	2.9	15.9	15.9
Cycle Q Clear(g_c), s	0.1	0.0	0.3	5.4	0.0	0.0	0.4	9.5	9.6	2.9	15.9	15.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	31	0	27	541	0	241	39	1391	848	159	804	844
V/C Ratio(X)	0.10	0.00	0.29	0.68	0.00	0.00	0.33	0.55	0.50	0.57	0.74	0.74
Avail Cap(c_a), veh/h	198	0	176	1182	0	526	214	2179	1199	327	1188	1248
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	0.0	26.9	22.4	0.0	0.0	26.8	12.4	7.4	24.1	11.5	11.5
Incr Delay (d2), s/veh	1.4	0.0	5.7	1.5	0.0	0.0	5.0	0.3	0.5	3.3	1.3	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	0.0	0.0	0.1	2.2	0.0	0.0	0.2	3.1	3.8	1.2	5.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	0.0	32.6	23.9	0.0	0.0	31.7	12.8	7.9	27.3	12.9	12.8
LnGrp LOS	C	A	C	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		11			369			1198			1307	
Approach Delay, s/veh		31.4			23.9			11.3			13.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	27.4		5.6	5.8	31.4		12.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.3	35.8		7.0	7.0	39.7		18.3
Max Q Clear Time (g_c+I1), s	4.9	11.6		2.3	2.4	17.9		7.4
Green Ext Time (p_c), s	0.1	7.6		0.0	0.0	8.9		1.0

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	40.2

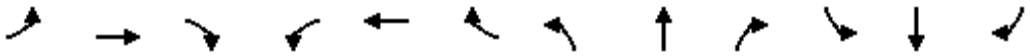
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	138	188	681	176	221	909
Future Vol, veh/h	138	188	681	176	221	909
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	9	9	14	9	9	13
Mvmt Flow	150	204	740	191	240	988

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1810	466	0	0	931	0
Stage 1	836	-	-	-	-	-
Stage 2	974	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.28	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	~ 65	525	-	-	689	-
Stage 1	369	-	-	-	-	-
Stage 2	311	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 42	525	-	-	689	-
Mov Cap-2 Maneuver	~ 137	-	-	-	-	-
Stage 1	369	-	-	-	-	-
Stage 2	203	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	276.4	0	2.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	239	689	-
HCM Lane V/C Ratio	-	-	1.483	0.349	-
HCM Control Delay (s)	-	-	276.4	13	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	20.8	1.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	429	418	361	332	12	132	6	132	11	6	3
Future Volume (veh/h)	2	429	418	361	332	12	132	6	132	11	6	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.98
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	1841	1796	1868	1826	1899	1826	1796	1868	1796	1870	1945	1870
Adj Flow Rate, veh/h	2	466	454	392	361	13	143	7	143	12	7	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	7	7	5	5	5	7	7	7	2	2	2
Cap, veh/h	7	600	529	446	2121	76	228	21	166	229	126	44
Arrive On Green	0.00	0.35	0.35	0.26	0.60	0.60	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1753	1706	1505	1739	3551	128	679	91	734	671	558	194
Grp Volume(v), veh/h	2	466	454	392	183	191	293	0	0	22	0	0
Grp Sat Flow(s),veh/h/ln	1753	1706	1505	1739	1804	1875	1504	0	0	1423	0	0
Q Serve(g_s), s	0.1	17.6	20.2	15.6	3.3	3.3	12.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	17.6	20.2	15.6	3.3	3.3	13.5	0.0	0.0	0.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.07	0.49		0.49	0.55		0.14
Lane Grp Cap(c), veh/h	7	600	529	446	1077	1120	414	0	0	399	0	0
V/C Ratio(X)	0.30	0.78	0.86	0.88	0.17	0.17	0.71	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	172	685	604	674	1234	1282	511	0	0	495	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.9	20.9	21.8	25.8	6.5	6.5	26.8	0.0	0.0	21.9	0.0	0.0
Incr Delay (d2), s/veh	23.2	5.0	10.8	8.7	0.1	0.1	3.4	0.0	0.0	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	0.1	7.0	7.9	6.9	1.0	1.0	5.1	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	25.9	32.5	34.4	6.6	6.6	30.2	0.0	0.0	21.9	0.0	0.0
LnGrp LOS	E	C	C	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		922			766			293			22	
Approach Delay, s/veh		29.2			20.8			30.2			21.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.5	29.4		20.3	4.8	47.1		20.3				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	28.0	29.0		21.0	7.1	49.4		21.0				
Max Q Clear Time (g_c+I1), s	17.6	22.2		2.7	2.1	5.3		15.5				
Green Ext Time (p_c), s	0.9	3.1		0.1	0.0	2.2		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		26.1	
HCM 6th LOS		C	

Intersection	
Intersection Delay, s/veh	354.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	557	124	68	144	11	64	349	11	167	552	0
Future Vol, veh/h	2	557	124	68	144	11	64	349	11	167	552	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	6	18	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	2	605	135	74	157	12	70	379	12	182	600	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	444.4	40.6	131.2	497.6
HCM LOS	F	E	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	15%	0%	0%	32%	0%	23%
Vol Thru, %	85%	0%	82%	68%	0%	77%
Vol Right, %	0%	100%	18%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	413	11	683	212	11	719
LT Vol	64	0	2	68	0	167
Through Vol	349	0	557	144	0	552
RT Vol	0	11	124	0	11	0
Lane Flow Rate	449	12	742	230	12	782
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	1.126	0.027	1.901	0.635	0.03	2.02
Departure Headway (Hd)	14.104	13.263	12.018	15.508	14.58	12.337
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	260	272	312	235	247	305
Service Time	11.804	10.963	10.018	13.208	12.28	10.337
HCM Lane V/C Ratio	1.727	0.044	2.378	0.979	0.049	2.564
HCM Control Delay	134.3	16.3	444.4	41.8	17.7	497.6
HCM Lane LOS	F	C	F	E	C	F
HCM 95th-tile Q	12.6	0.1	39.2	3.8	0.1	42.4

Intersection	
Intersection Delay, s/veh	29.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	497	19	47	0	9	0	141	124	0	119	0
Future Vol, veh/h	57	497	19	47	0	9	0	141	124	0	119	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	18	5	8	8	8	3	3	3	3	3	3
Mvmt Flow	62	540	21	51	0	10	0	153	135	0	129	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	42.7	10.4	14.1	11.6
HCM LOS	E	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	10%	84%	0%
Vol Thru, %	53%	87%	0%	100%
Vol Right, %	47%	3%	16%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	265	573	56	119
LT Vol	0	57	47	0
Through Vol	141	497	0	119
RT Vol	124	19	9	0
Lane Flow Rate	288	623	61	129
Geometry Grp	1	1	1	1
Degree of Util (X)	0.47	0.929	0.111	0.236
Departure Headway (Hd)	5.87	5.367	6.568	6.571
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	608	673	548	550
Service Time	3.96	3.432	4.578	4.571
HCM Lane V/C Ratio	0.474	0.926	0.111	0.235
HCM Control Delay	14.1	42.7	10.4	11.6
HCM Lane LOS	B	E	B	B
HCM 95th-tile Q	2.5	12.5	0.4	0.9

Intersection	
Int Delay, s/veh	49.3

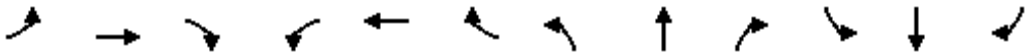
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	528	40	16	500	5	234	0	388	9	0	50
Future Vol, veh/h	3	528	40	16	500	5	234	0	388	9	0	50
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	5	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	-	-	-	115	-	-	-
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, %	4	6	4	3	8	3	45	5	5	9	9	9
Mvmt Flow	3	574	43	17	543	5	254	0	422	10	0	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	560	0	-	574	0	0	886	1174	292	890	1172	286
Stage 1	-	-	-	-	-	-	580	580	-	592	592	-
Stage 2	-	-	-	-	-	-	306	594	-	298	580	-
Critical Hdwy	4.18	-	-	4.16	-	-	8.4	6.6	7	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	7.4	5.6	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.4	5.6	-	6.68	5.68	-
Follow-up Hdwy	2.24	-	-	2.23	-	-	3.95	4.05	3.35	3.59	4.09	3.39
Pot Cap-1 Maneuver	993	-	0	988	-	-	~ 180	186	696	227	181	690
Stage 1	-	-	0	-	-	-	374	491	-	443	475	-
Stage 2	-	-	0	-	-	-	572	484	-	667	481	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	982	-	-	988	-	-	~ 163	180	693	86	175	682
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 163	180	-	86	175	-
Stage 1	-	-	-	-	-	-	373	490	-	437	462	-
Stage 2	-	-	-	-	-	-	517	470	-	259	480	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	135.5	18.4
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	163	693	982	-	988	-	-	332
HCM Lane V/C Ratio	1.56	0.609	0.003	-	0.018	-	-	0.193
HCM Control Delay (s)	$ 330.4	17.9	8.7	-	8.7	-	-	18.4
HCM Lane LOS	F	C	A	-	A	-	-	C
HCM 95th %tile Q(veh)	17	4.2	0	-	0.1	-	-	0.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	1044	0	0	760	885	0	0	0	414	0	241
Future Volume (veh/h)	235	1044	0	0	760	885	0	0	0	414	0	241
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1841	1841	1841	1811	1841	1841	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	255	1135	0	0	826	0	0	0	0	356	132	262
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	6	4	4	0	0	0	3	3	3
Cap, veh/h	303	2007	0	3	1152		0	552	0	628	161	320
Arrive On Green	0.17	0.57	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.29	0.29	0.29
Sat Flow, veh/h	1753	3589	0	1725	3589	0	0	1900	0	1767	555	1102
Grp Volume(v), veh/h	255	1135	0	0	826	0	0	0	0	356	0	394
Grp Sat Flow(s),veh/h/ln	1753	1749	0	1725	1749	0	0	1900	0	1767	0	1657
Q Serve(g_s), s	8.8	12.8	0.0	0.0	13.0	0.0	0.0	0.0	0.0	11.2	0.0	13.9
Cycle Q Clear(g_c), s	8.8	12.8	0.0	0.0	13.0	0.0	0.0	0.0	0.0	11.2	0.0	13.9
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.66
Lane Grp Cap(c), veh/h	303	2007	0	3	1152		0	552	0	628	0	481
V/C Ratio(X)	0.84	0.57	0.00	0.00	0.72		0.00	0.00	0.00	0.57	0.00	0.82
Avail Cap(c_a), veh/h	350	2596	0	193	2289		0	713	0	778	0	622
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.1	8.4	0.0	0.0	18.4	0.0	0.0	0.0	0.0	19.7	0.0	20.7
Incr Delay (d2), s/veh	15.0	0.3	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.8	0.0	6.7
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	4.6	3.5	0.0	0.0	4.5	0.0	0.0	0.0	0.0	4.4	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.1	8.7	0.0	0.0	19.3	0.0	0.0	0.0	0.0	20.6	0.0	27.3
LnGrp LOS	D	A	A	A	B		A	A	A	C	A	C
Approach Vol, veh/h		1390			826	A		0			750	
Approach Delay, s/veh		14.4			19.3			0.0			24.1	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	39.9		22.7	15.3	24.6		22.7				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	46.5		23.5	12.5	41.0		23.5				
Max Q Clear Time (g_c+I1), s	0.0	14.8		15.9	10.8	15.0		0.0				
Green Ext Time (p_c), s	0.0	9.4		2.3	0.1	5.6		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		18.2	
HCM 6th LOS		B	

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	199.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	178	931	11	31	284	9	3	254	14	388	95	270
Future Vol, veh/h	178	931	11	31	284	9	3	254	14	388	95	270
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	7	6	7	3	3	3	6	6	6	2	2	2
Mvmt Flow	193	1012	12	34	309	10	3	276	15	422	103	293
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	312.5	62.2	38.8	147.2
HCM LOS	F	F	E	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	1%	0%	28%	0%	10%	0%	80%	0%
Vol Thru, %	99%	0%	72%	98%	90%	0%	20%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	257	14	644	477	315	9	483	270
LT Vol	3	0	178	0	31	0	388	0
Through Vol	254	0	466	466	284	0	95	0
RT Vol	0	14	0	11	0	9	0	270
Lane Flow Rate	279	15	699	518	342	10	525	293
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.765	0.039	1.821	1.323	0.92	0.024	1.385	0.684
Departure Headway (Hd)	10.444	9.703	9.915	9.734	10.518	9.733	9.494	8.267
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	349	371	371	378	346	370	389	440
Service Time	8.144	7.403	7.615	7.434	8.218	7.433	7.115	5.967
HCM Lane V/C Ratio	0.799	0.04	1.884	1.37	0.988	0.027	1.35	0.666
HCM Control Delay	40.2	12.8	402.9	190.4	63.6	12.7	214.4	27
HCM Lane LOS	E	B	F	F	F	B	F	D
HCM 95th-tile Q	6.1	0.1	43	22.9	9.3	0.1	26	5

Intersection	
Int Delay, s/veh	993.7

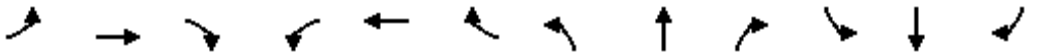
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	91	363	918	184	361	82
Future Vol, veh/h	91	363	918	184	361	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	22	20	2	2	2	2
Mvmt Flow	99	395	998	200	392	89

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2588	-	392	0	-	0
Stage 1	392	-	-	-	-	-
Stage 2	2196	-	-	-	-	-
Critical Hdwy	6.62	-	4.12	-	-	-
Critical Hdwy Stg 1	5.62	-	-	-	-	-
Critical Hdwy Stg 2	5.62	-	-	-	-	-
Follow-up Hdwy	3.698	-	2.218	-	-	-
Pot Cap-1 Maneuver	~ 24	0	1167	-	-	0
Stage 1	641	0	-	-	-	0
Stage 2	~ 80	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 3	-	1167	-	-	-
Mov Cap-2 Maneuver	~ 3	-	-	-	-	-
Stage 1	~ 93	-	-	-	-	-
Stage 2	~ 80	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 16738.2	19.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1167	-	3	-	-
HCM Lane V/C Ratio	0.855	-	32.971	-	-
HCM Control Delay (s)	22.9	-	$ 16738.2	0	-
HCM Lane LOS	C	-	F	A	-
HCM 95th %tile Q(veh)	11.5	-	14.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	293	1101	64	54	1249	676	42	133	34	271	99	354
Future Volume (veh/h)	293	1101	64	54	1249	676	42	133	34	271	99	354
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	0.99		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	318	1197	70	59	1358	735	46	145	37	295	108	385
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	320	1766	779	108	1367	588	304	233	59	308	340	565
Arrive On Green	0.18	0.51	0.51	0.06	0.39	0.39	0.05	0.16	0.16	0.09	0.19	0.19
Sat Flow, veh/h	1753	3469	1531	1767	3526	1518	1781	1491	380	1668	1752	1496
Grp Volume(v), veh/h	318	1197	70	59	1358	735	46	0	182	295	108	385
Grp Sat Flow(s),veh/h/ln	1753	1735	1531	1767	1763	1518	1781	0	1871	1668	1752	1496
Q Serve(g_s), s	15.9	22.7	2.1	2.8	33.7	34.0	1.8	0.0	8.0	8.0	4.6	17.0
Cycle Q Clear(g_c), s	15.9	22.7	2.1	2.8	33.7	34.0	1.8	0.0	8.0	8.0	4.6	17.0
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	320	1766	779	108	1367	588	304	0	293	308	340	565
V/C Ratio(X)	0.99	0.68	0.09	0.55	0.99	1.25	0.15	0.00	0.62	0.96	0.32	0.68
Avail Cap(c_a), veh/h	320	1766	779	141	1367	588	351	0	341	308	340	565
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	1.00	1.00
Uniform Delay (d), s/veh	35.8	16.1	11.1	40.0	26.8	26.9	28.1	0.0	34.6	33.3	30.4	23.0
Incr Delay (d2), s/veh	48.7	1.1	0.0	4.3	22.8	125.9	0.2	0.0	2.7	40.3	0.5	3.3
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	10.7	7.9	0.7	1.3	16.9	32.1	0.8	0.0	3.8	6.1	2.0	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.6	17.2	11.1	44.3	49.5	152.8	28.3	0.0	37.2	73.6	30.9	26.3
LnGrp LOS	F	B	B	D	D	F	C	A	D	E	C	C
Approach Vol, veh/h		1585			2152			228			788	
Approach Delay, s/veh		30.4			84.7			35.4			44.7	
Approach LOS		C			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	48.7	8.7	21.0	20.0	38.0	12.0	17.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	17.0	16.0	34.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	4.8	24.7	3.8	19.0	17.9	36.0	10.0	10.0
Green Ext Time (p_c), s	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	57.6
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	13

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	1	220	1	296	2	858	317	360	1059	0
Future Vol, veh/h	0	1	1	220	1	296	2	858	317	360	1059	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	-	-	-	-	-	0	100	-	-	100	-	-
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, %	2	2	2	10	10	44	10	5	10	45	3	6
Mvmt Flow	0	1	1	239	1	322	2	933	345	391	1151	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2404	3215	576	2468	3043	639	1151	0	0	1278	0	0
Stage 1	1933	1933	-	1110	1110	-	-	-	-	-	-	-
Stage 2	471	1282	-	1358	1933	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.7	6.7	7.78	4.3	-	-	5	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.6	4.1	3.74	2.3	-	-	2.65	-	-
Pot Cap-1 Maneuver	17	10	460	~ 14	11	331	559	-	-	~ 355	-	-
Stage 1	68	112	-	~ 210	267	-	-	-	-	-	-	-
Stage 2	542	234	-	~ 146	102	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	460	-	0	331	559	-	-	~ 355	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	68	0	-	~ 209	266	-	-	-	-	-	-	-
Stage 2	15	233	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0	28.6
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	559	-	-	-	-	331	~ 355	-	-
HCM Lane V/C Ratio	0.004	-	-	-	-	0.972	1.102	-	-
HCM Control Delay (s)	11.5	-	-	-	-	78.8	112.7	-	-
HCM Lane LOS	B	-	-	-	-	F	F	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	10.4	14.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

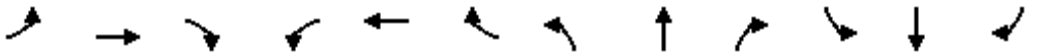
Intersection	
Int Delay, s/veh	13.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	80	20	0	8	6	998	33	33	1118	8
Future Vol, veh/h	37	0	80	20	0	8	6	998	33	33	1118	8
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	-	0	140	-	-	170	-	-
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, %	3	3	3	27	27	27	9	5	9	6	3	6
Mvmt Flow	40	0	87	22	0	9	7	1085	36	36	1215	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1849	2427	612	1797	-	561	1224	0	0	1121	0	0
Stage 1	1292	1292	-	1117	-	-	-	-	-	-	-	-
Stage 2	557	1135	-	680	-	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	8.04	-	7.44	4.28	-	-	4.22	-	-
Critical Hdwy Stg 1	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.77	-	3.57	2.29	-	-	2.26	-	-
Pot Cap-1 Maneuver	45	31	434	38	0	412	528	-	-	596	-	-
Stage 1	171	230	-	182	0	-	-	-	-	-	-	-
Stage 2	480	273	-	353	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	42	29	434	29	-	412	528	-	-	596	-	-
Mov Cap-2 Maneuver	42	29	-	29	-	-	-	-	-	-	-	-
Stage 1	169	216	-	180	-	-	-	-	-	-	-	-
Stage 2	464	269	-	265	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	208	207.6	0.1	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	528	-	-	110	29	412	596	-	-
HCM Lane V/C Ratio	0.012	-	-	1.156	0.75	0.021	0.06	-	-
HCM Control Delay (s)	11.9	-	-	208	285.1	13.9	11.4	-	-
HCM Lane LOS	B	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	8.1	2.4	0.1	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	162	45	184	160	187	56	815	167	483	949	34
Future Volume (veh/h)	39	162	45	184	160	187	56	815	167	483	949	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1870	1870	1870	1826	1781	1899	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	42	176	49	200	174	203	61	886	182	525	1032	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	8	5	4	4	4	3	3	3
Cap, veh/h	159	217	60	238	359	324	115	1050	466	617	1439	52
Arrive On Green	0.09	0.15	0.15	0.14	0.20	0.20	0.07	0.30	0.30	0.18	0.41	0.41
Sat Flow, veh/h	1781	1408	392	1739	1781	1609	1753	3497	1552	3428	3471	124
Grp Volume(v), veh/h	42	0	225	200	174	203	61	886	182	525	524	545
Grp Sat Flow(s),veh/h/ln	1781	0	1800	1739	1781	1609	1753	1749	1552	1714	1763	1832
Q Serve(g_s), s	1.7	0.0	9.5	8.8	6.8	9.1	2.6	18.6	7.3	11.6	19.5	19.5
Cycle Q Clear(g_c), s	1.7	0.0	9.5	8.8	6.8	9.1	2.6	18.6	7.3	11.6	19.5	19.5
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	159	0	277	238	359	324	115	1050	466	617	731	760
V/C Ratio(X)	0.26	0.00	0.81	0.84	0.48	0.63	0.53	0.84	0.39	0.85	0.72	0.72
Avail Cap(c_a), veh/h	159	0	413	261	517	467	159	1171	520	694	788	819
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	0.0	32.1	33.1	27.7	28.7	35.5	25.7	21.8	31.2	19.2	19.2
Incr Delay (d2), s/veh	0.9	0.0	7.4	19.9	1.0	2.0	3.8	5.3	0.5	9.1	2.9	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	0.8	0.0	4.5	4.8	2.8	3.4	1.2	7.7	2.5	5.1	7.3	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	0.0	39.5	53.0	28.8	30.6	39.3	31.1	22.3	40.3	22.1	21.9
LnGrp LOS	C	A	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		267			577			1129			1594	
Approach Delay, s/veh		38.7			37.8			30.1			28.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	28.1	15.2	16.6	9.6	37.1	11.5	20.3
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	15.9	26.3	11.8	18.0	7.1	35.1	7.0	22.8
Max Q Clear Time (g_c+I1), s	13.6	20.6	10.8	11.5	4.6	21.5	3.7	11.1
Green Ext Time (p_c), s	0.5	2.9	0.1	0.6	0.0	5.2	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	219	59	35	58	56	43	1060	135	62	964	77
Future Volume (veh/h)	120	219	59	35	58	56	43	1060	135	62	964	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.97	1.00		0.98	1.00		0.96
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	1870	1945	1870	1870	1870	1870	1914	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	130	238	64	38	63	61	47	1152	147	67	1048	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	4	4	4	2	2	2
Cap, veh/h	324	345	93	199	203	196	111	1526	194	132	1672	134
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.06	0.49	0.49	0.07	0.50	0.50
Sat Flow, veh/h	1239	1459	392	1063	859	831	1823	3113	396	1781	3320	266
Grp Volume(v), veh/h	130	0	302	38	0	124	47	646	653	67	561	571
Grp Sat Flow(s),veh/h/ln	1239	0	1852	1063	0	1690	1823	1749	1760	1781	1777	1809
Q Serve(g_s), s	6.5	0.0	10.1	2.3	0.0	4.1	1.7	20.2	20.4	2.4	15.5	15.5
Cycle Q Clear(g_c), s	10.6	0.0	10.1	12.4	0.0	4.1	1.7	20.2	20.4	2.4	15.5	15.5
Prop In Lane	1.00		0.21	1.00		0.49	1.00		0.23	1.00		0.15
Lane Grp Cap(c), veh/h	324	0	437	199	0	399	111	857	863	132	895	911
V/C Ratio(X)	0.40	0.00	0.69	0.19	0.00	0.31	0.42	0.75	0.76	0.51	0.63	0.63
Avail Cap(c_a), veh/h	425	0	588	286	0	537	202	1202	1210	224	1247	1270
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	0.0	23.6	29.2	0.0	21.3	30.6	13.9	14.0	30.1	12.2	12.2
Incr Delay (d2), s/veh	0.8	0.0	2.1	0.5	0.0	0.4	2.6	1.7	1.8	3.0	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	1.9	0.0	4.5	0.6	0.0	1.6	0.8	7.5	7.6	1.1	4.9	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	0.0	25.7	29.7	0.0	21.7	33.2	15.7	15.8	33.1	12.9	12.9
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		432			162			1346			1199	
Approach Delay, s/veh		26.0			23.6			16.3			14.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	37.7		20.5	8.6	38.6		20.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.5	46.5		21.5	7.5	47.5		21.5				
Max Q Clear Time (g_c+I1), s	14.4	22.4		12.6	3.7	17.5		14.4				
Green Ext Time (p_c), s	0.0	10.8		1.6	0.0	7.9		0.4				

Intersection Summary		
HCM 6th Ctrl Delay		17.2
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	76	175	435	441	1000	0	0	916	244
Future Volume (veh/h)	0	0	0	76	175	435	441	1000	0	0	916	244
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1841	1826	1914	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				83	190	473	479	1087	0	0	996	265
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	5	4	3	3	0	0	3	3
Cap, veh/h				117	268	343	489	2417	0	0	986	261
Arrive On Green				0.21	0.21	0.21	0.28	0.69	0.00	0.00	0.36	0.36
Sat Flow, veh/h				547	1252	1601	1767	3618	0	0	2841	728
Grp Volume(v), veh/h				273	0	473	479	1087	0	0	637	624
Grp Sat Flow(s),veh/h/ln				1799	0	1601	1767	1763	0	0	1763	1714
Q Serve(g_s), s				12.7	0.0	19.3	24.2	12.6	0.0	0.0	32.3	32.3
Cycle Q Clear(g_c), s				12.7	0.0	19.3	24.2	12.6	0.0	0.0	32.3	32.3
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.42
Lane Grp Cap(c), veh/h				386	0	343	489	2417	0	0	633	615
V/C Ratio(X)				0.71	0.00	1.38	0.98	0.45	0.00	0.00	1.01	1.01
Avail Cap(c_a), veh/h				386	0	343	489	2417	0	0	633	615
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				32.7	0.0	35.3	32.3	6.4	0.0	0.0	28.9	28.9
Incr Delay (d2), s/veh				5.9	0.0	187.2	35.3	0.1	0.0	0.0	37.6	39.9
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				6.0	0.0	25.2	14.8	4.0	0.0	0.0	19.6	19.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				38.6	0.0	222.6	67.6	6.6	0.0	0.0	66.5	68.7
LnGrp LOS				D	A	F	E	A	A	A	F	F
Approach Vol, veh/h					746			1566			1261	
Approach Delay, s/veh					155.3			25.2			67.6	
Approach LOS					F			C			E	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	66.2		29.4	36.8		23.8
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	61.7		24.9	32.3		19.3
Max Q Clear Time (g_c+I1), s	14.6		26.2	34.3		21.3
Green Ext Time (p_c), s	10.6		0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	67.3
HCM 6th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	11	200	0	0	0	0	1253	175	350	595	0
Future Volume (veh/h)	192	11	200	0	0	0	0	1253	175	350	595	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
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	1900	1781	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	209	12	217				0	1362	190	380	647	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	8	0				0	2	2	2	2	0
Cap, veh/h	282	16	265				0	1520	677	419	2547	0
Arrive On Green	0.18	0.18	0.18				0.00	0.43	0.43	0.23	0.72	0.00
Sat Flow, veh/h	1609	92	1510				0	3647	1583	1781	3647	0
Grp Volume(v), veh/h	221	0	217				0	1362	190	380	647	0
Grp Sat Flow(s),veh/h/ln	1701	0	1510				0	1777	1583	1781	1777	0
Q Serve(g_s), s	10.3	0.0	11.6				0.0	29.7	6.5	17.3	5.3	0.0
Cycle Q Clear(g_c), s	10.3	0.0	11.6				0.0	29.7	6.5	17.3	5.3	0.0
Prop In Lane	0.95		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	299	0	265				0	1520	677	419	2547	0
V/C Ratio(X)	0.74	0.00	0.82				0.00	0.90	0.28	0.91	0.25	0.00
Avail Cap(c_a), veh/h	367	0	326				0	1575	702	459	2682	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	0.0	33.1				0.0	22.2	15.5	31.0	4.1	0.0
Incr Delay (d2), s/veh	6.1	0.0	12.7				0.0	7.0	0.2	20.7	0.1	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	4.6	0.0	5.1				0.0	12.9	2.3	9.6	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	0.0	45.8				0.0	29.1	15.8	51.7	4.1	0.0
LnGrp LOS	D	A	D				A	C	B	D	A	A
Approach Vol, veh/h		438						1552			1027	
Approach Delay, s/veh		42.2						27.5			21.8	
Approach LOS		D						C			C	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	24.1	40.2	19.1	64.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	21.5	37.0	18.0	63.0
Max Q Clear Time (g_c+I1), s	19.3	31.7	13.6	7.3
Green Ext Time (p_c), s	0.3	4.0	1.1	5.3

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	168	28	63	43	199	4	781	42	172	490	15
Future Volume (veh/h)	63	168	28	63	43	199	4	781	42	172	490	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	183	30	68	47	216	4	849	46	187	533	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	348	57	227	64	296	477	927	50	291	1091	33
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.01	0.53	0.53	0.08	0.60	0.60
Sat Flow, veh/h	1111	1559	256	1161	288	1326	1781	1757	95	1781	1806	54
Grp Volume(v), veh/h	68	0	213	68	0	263	4	0	895	187	0	549
Grp Sat Flow(s),veh/h/ln	1111	0	1814	1161	0	1614	1781	0	1853	1781	0	1860
Q Serve(g_s), s	5.0	0.0	8.5	4.5	0.0	12.4	0.1	0.0	36.2	3.5	0.0	13.6
Cycle Q Clear(g_c), s	17.3	0.0	8.5	12.9	0.0	12.4	0.1	0.0	36.2	3.5	0.0	13.6
Prop In Lane	1.00		0.14	1.00		0.82	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	168	0	405	227	0	361	477	0	977	291	0	1124
V/C Ratio(X)	0.40	0.00	0.53	0.30	0.00	0.73	0.01	0.00	0.92	0.64	0.00	0.49
Avail Cap(c_a), veh/h	168	0	405	227	0	361	618	0	1124	326	0	1161
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	28.0	33.7	0.0	29.5	9.2	0.0	17.7	17.5	0.0	9.1
Incr Delay (d2), s/veh	1.6	0.0	1.3	0.7	0.0	7.3	0.0	0.0	10.6	3.6	0.0	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	1.4	0.0	3.7	1.3	0.0	5.5	0.0	0.0	16.1	2.1	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.1	0.0	29.2	34.4	0.0	36.8	9.2	0.0	28.3	21.1	0.0	9.4
LnGrp LOS	D	A	C	C	A	D	A	A	C	C	A	A
Approach Vol, veh/h		281			331			899			736	
Approach Delay, s/veh		31.6			36.3			28.2			12.4	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.4	47.7		22.8	5.1	54.0		22.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.5	49.7		18.3	7.1	51.1		18.3
Max Q Clear Time (g_c+I1), s	15.5	38.2		19.3	2.1	15.6		14.9
Green Ext Time (p_c), s	0.1	5.0		0.0	0.0	3.9		0.6

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	80	554	366	108	371	0	0	339	116
Future Volume (veh/h)	0	0	0	80	554	366	108	371	0	0	339	116
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.98
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				1900	1841	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				87	602	398	117	403	0	0	368	126
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	4	0	2	2	0	0	2	2
Cap, veh/h				110	769	550	175	811	0	0	491	409
Arrive On Green				0.42	0.42	0.42	0.10	0.43	0.00	0.00	0.26	0.26
Sat Flow, veh/h				261	1829	1310	1781	1870	0	0	1870	1560
Grp Volume(v), veh/h				609	0	478	117	403	0	0	368	126
Grp Sat Flow(s),veh/h/ln				1828	0	1572	1781	1870	0	0	1870	1560
Q Serve(g_s), s				17.9	0.0	15.6	3.9	9.6	0.0	0.0	11.1	4.0
Cycle Q Clear(g_c), s				17.9	0.0	15.6	3.9	9.6	0.0	0.0	11.1	4.0
Prop In Lane				0.14		0.83	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				768	0	661	175	811	0	0	491	409
V/C Ratio(X)				0.79	0.00	0.72	0.67	0.50	0.00	0.00	0.75	0.31
Avail Cap(c_a), veh/h				964	0	829	361	1472	0	0	956	797
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.5	0.0	14.9	26.8	12.6	0.0	0.0	20.9	18.2
Incr Delay (d2), s/veh				3.7	0.0	2.3	4.4	0.5	0.0	0.0	2.3	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
%ile BackOfQ(50%),veh/ln				7.2	0.0	5.3	1.8	3.6	0.0	0.0	4.8	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				19.2	0.0	17.2	31.2	13.1	0.0	0.0	23.2	18.7
LnGrp LOS				B	A	B	C	B	A	A	C	B
Approach Vol, veh/h					1087			520			494	
Approach Delay, s/veh					18.3			17.1			22.0	
Approach LOS					B			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	31.2		10.6	20.7		30.4
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	48.5		12.5	31.5		32.5
Max Q Clear Time (g_c+I1), s	11.6		5.9	13.1		19.9
Green Ext Time (p_c), s	2.7		0.1	2.5		6.0

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	159	80	79	57	4	72	419	171	8	256	19
Future Volume (veh/h)	169	159	80	79	57	4	72	419	171	8	256	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	0.99		0.98	1.00		0.98
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	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	184	173	87	86	62	4	78	455	186	9	278	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	230	104	338	219	12	144	570	220	85	847	63
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	596	697	315	671	666	36	125	1180	456	16	1754	130
Grp Volume(v), veh/h	444	0	0	152	0	0	719	0	0	308	0	0
Grp Sat Flow(s),veh/h/ln	1608	0	0	1373	0	0	1761	0	0	1900	0	0
Q Serve(g_s), s	8.6	0.0	0.0	0.0	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.1	0.0	0.0	3.4	0.0	0.0	16.9	0.0	0.0	4.7	0.0	0.0
Prop In Lane	0.41		0.20	0.57		0.03	0.11		0.26	0.03		0.07
Lane Grp Cap(c), veh/h	636	0	0	570	0	0	934	0	0	995	0	0
V/C Ratio(X)	0.70	0.00	0.00	0.27	0.00	0.00	0.77	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	787	0	0	706	0	0	1195	0	0	1276	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)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.7	0.0	0.0	11.8	0.0	0.0	10.6	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.2	0.0	0.0	2.4	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0	1.1	0.0	0.0	5.7	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.7	0.0	0.0	12.1	0.0	0.0	13.0	0.0	0.0	7.8	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		444			152			719			308	
Approach Delay, s/veh		16.7			12.1			13.0			7.8	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	27.7	20.3	27.7	20.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	30.5	20.5	30.5	20.5
Max Q Clear Time (g_c+I1), s	18.9	14.1	6.7	5.4
Green Ext Time (p_c), s	4.3	1.6	1.8	0.8

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	644	26	167	627	271	44	292	185	134	107	41
Future Volume (veh/h)	144	644	26	167	627	271	44	292	185	134	107	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.99
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	1826	1826	1826	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	700	28	182	682	295	48	317	201	146	116	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	2	2	2
Cap, veh/h	192	1075	43	221	784	339	86	398	240	205	153	50
Arrive On Green	0.11	0.32	0.32	0.12	0.33	0.33	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1739	3398	136	1767	2370	1025	95	1019	614	355	391	128
Grp Volume(v), veh/h	157	357	371	182	507	470	566	0	0	307	0	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1800	1767	1763	1632	1728	0	0	875	0	0
Q Serve(g_s), s	7.1	14.2	14.2	8.1	21.7	21.7	0.0	0.0	0.0	4.5	0.0	0.0
Cycle Q Clear(g_c), s	7.1	14.2	14.2	8.1	21.7	21.7	23.7	0.0	0.0	28.2	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.63	0.08		0.36	0.48		0.15
Lane Grp Cap(c), veh/h	192	549	569	221	583	540	723	0	0	408	0	0
V/C Ratio(X)	0.82	0.65	0.65	0.82	0.87	0.87	0.78	0.00	0.00	0.75	0.00	0.00
Avail Cap(c_a), veh/h	228	575	597	295	649	600	832	0	0	486	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.9	23.6	23.6	34.2	25.2	25.2	22.1	0.0	0.0	23.3	0.0	0.0
Incr Delay (d2), s/veh	17.7	2.4	2.4	13.1	11.4	12.2	4.3	0.0	0.0	5.4	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	3.8	5.6	5.8	4.0	9.9	9.3	9.6	0.0	0.0	5.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.6	26.0	26.0	47.3	36.6	37.4	26.3	0.0	0.0	28.8	0.0	0.0
LnGrp LOS	D	C	C	D	D	D	C	A	A	C	A	A
Approach Vol, veh/h		885			1159			566			307	
Approach Delay, s/veh		30.7			38.6			26.3			28.8	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.5	29.9		35.8	13.4	31.0		35.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	13.4	26.6		36.5	10.5	29.5		36.5
Max Q Clear Time (g_c+I1), s	10.1	16.2		30.2	9.1	23.7		25.7
Green Ext Time (p_c), s	0.1	3.0		1.1	0.1	2.8		2.8

Intersection Summary	
HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

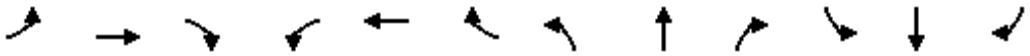
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	7	14	530	277	49
Future Vol, veh/h	23	7	14	530	277	49
Conflicting Peds, #/hr	0	0	2	0	0	2
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, %	10	10	2	2	2	2
Mvmt Flow	25	8	15	576	301	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	936	330	356	0	-	0
Stage 1	330	-	-	-	-	-
Stage 2	606	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.12	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.218	-	-	-
Pot Cap-1 Maneuver	285	693	1203	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	279	692	1201	-	-	-
Mov Cap-2 Maneuver	279	-	-	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	528	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.4	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1201	-	324	-	-
HCM Lane V/C Ratio	0.013	-	0.101	-	-
HCM Control Delay (s)	8	0	17.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	328	80	137	166	342	59	0	292	87	0	53
Future Volume (veh/h)	147	328	80	137	166	342	59	0	292	87	0	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1856	1396	1396	1826	1337	1337	1841	1841	1841	1411	1411	1411
Adj Flow Rate, veh/h	160	357	87	149	180	372	64	0	317	95	0	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	34	34	5	38	38	4	4	4	33	33	33
Cap, veh/h	413	1099	265	561	659	586	473	0	411	324	0	315
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.26	0.00	0.26	0.26	0.00	0.26
Sat Flow, veh/h	848	2119	510	922	1270	1129	1134	0	1558	801	0	1194
Grp Volume(v), veh/h	160	222	222	149	180	372	64	0	317	95	0	58
Grp Sat Flow(s),veh/h/ln	848	1326	1302	922	1270	1129	1134	0	1558	801	0	1194
Q Serve(g_s), s	6.9	4.0	4.1	4.6	3.3	9.8	1.6	0.0	7.8	4.5	0.0	1.6
Cycle Q Clear(g_c), s	16.7	4.0	4.1	8.7	3.3	9.8	3.2	0.0	7.8	7.7	0.0	1.6
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	688	676	561	659	586	473	0	411	324	0	315
V/C Ratio(X)	0.39	0.32	0.33	0.27	0.27	0.64	0.14	0.00	0.77	0.29	0.00	0.18
Avail Cap(c_a), veh/h	597	975	958	760	934	830	778	0	770	508	0	590
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	13.2	5.8	5.8	8.3	5.6	7.2	13.0	0.0	14.1	15.5	0.0	11.8
Incr Delay (d2), s/veh	0.6	0.3	0.3	0.3	0.2	1.1	0.1	0.0	3.1	0.5	0.0	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	1.0	0.6	0.6	0.6	0.5	1.4	0.4	0.0	2.5	0.7	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.8	6.0	6.1	8.6	5.8	8.3	13.2	0.0	17.2	16.0	0.0	12.1
LnGrp LOS	B	A	A	A	A	A	B	A	B	B	A	B
Approach Vol, veh/h		604			701			381			153	
Approach Delay, s/veh		8.1			7.7			16.5			14.5	
Approach LOS		A			A			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.0		15.4		26.0		15.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		30.5		20.5		30.5		20.5				
Max Q Clear Time (g_c+I1), s		18.7		9.7		11.8		9.8				
Green Ext Time (p_c), s		2.8		0.6		4.2		1.1				
Intersection Summary												
HCM 6th Ctrl Delay			10.2									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	7	26	291	0	0	12	1247	327	297	1002	4
Future Volume (veh/h)	5	7	26	291	0	0	12	1247	327	297	1002	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1900	1900	1900	1811	1811	1811	1826	1826	1826
Adj Flow Rate, veh/h	5	8	28	316	0	0	13	1355	355	323	1089	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	5	5	5
Cap, veh/h	35	56	78	408	0	182	37	1537	858	356	2234	8
Arrive On Green	0.05	0.05	0.05	0.11	0.00	0.00	0.02	0.45	0.45	0.20	0.63	0.63
Sat Flow, veh/h	717	1147	1610	3619	0	1610	1725	3441	1533	1739	3545	13
Grp Volume(v), veh/h	13	0	28	316	0	0	13	1355	355	323	533	560
Grp Sat Flow(s),veh/h/ln	1864	0	1610	1810	0	1610	1725	1721	1533	1739	1735	1824
Q Serve(g_s), s	0.6	0.0	1.6	8.2	0.0	0.0	0.7	34.5	12.8	17.4	15.8	15.8
Cycle Q Clear(g_c), s	0.6	0.0	1.6	8.2	0.0	0.0	0.7	34.5	12.8	17.4	15.8	15.8
Prop In Lane	0.38		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	90	0	78	408	0	182	37	1537	858	356	1093	1149
V/C Ratio(X)	0.14	0.00	0.36	0.77	0.00	0.00	0.35	0.88	0.41	0.91	0.49	0.49
Avail Cap(c_a), veh/h	136	0	117	678	0	302	126	1622	896	393	1093	1149
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	0.0	44.3	41.4	0.0	0.0	46.4	24.3	12.1	37.3	9.5	9.5
Incr Delay (d2), s/veh	0.7	0.0	2.8	3.2	0.0	0.0	5.6	5.8	0.3	23.0	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	0.3	0.0	0.7	3.8	0.0	0.0	0.4	14.5	5.6	9.6	5.5	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	0.0	47.1	44.6	0.0	0.0	52.0	30.1	12.5	60.4	9.8	9.8
LnGrp LOS	D	A	D	D	A	A	D	C	B	E	A	A
Approach Vol, veh/h		41			316			1723			1416	
Approach Delay, s/veh		46.3			44.6			26.6			21.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	47.4		9.2	6.6	65.1		15.3
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	21.5	45.3		7.0	7.0	60.0		18.0
Max Q Clear Time (g_c+I1), s	19.4	36.5		3.6	2.7	17.8		10.2
Green Ext Time (p_c), s	0.2	6.4		0.0	0.0	9.3		0.7

Intersection Summary	
HCM 6th Ctrl Delay	26.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	117

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	158	208	993	161	255	1261
Future Vol, veh/h	158	208	993	161	255	1261
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	9	9	10	9	9	10
Mvmt Flow	172	226	1079	175	277	1371

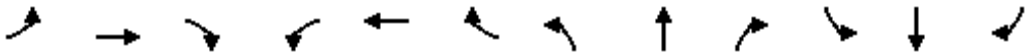
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2407	627	0	0	1254	0
Stage 1	1167	-	-	-	-	-
Stage 2	1240	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.28	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	~ 25	410	-	-	514	-
Stage 1	244	-	-	-	-	-
Stage 2	223	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 12	410	-	-	514	-
Mov Cap-2 Maneuver	~ 71	-	-	-	-	-
Stage 1	244	-	-	-	-	-
Stage 2	~ 103	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 956.7	0	3.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	134	514	-
HCM Lane V/C Ratio	-	-	2.969	0.539	-
HCM Control Delay (s)	-	-	$ 956.7	19.9	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	37	3.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO WITHOUT ORANGE STREET EXTENSION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	226	157	427	221	15	89	3	117	22	18	4
Future Volume (veh/h)	0	226	157	427	221	15	89	3	117	22	18	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1722	1648	1714	1796	1868	1796	1856	1930	1856	1870	1945	1870
Adj Flow Rate, veh/h	0	246	171	464	240	16	97	3	127	24	20	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	12	17	17	7	7	7	3	3	3	2	2	2
Cap, veh/h	4	400	267	556	2143	142	219	26	171	246	181	28
Arrive On Green	0.00	0.22	0.22	0.32	0.63	0.63	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1640	1790	1195	1711	3378	224	561	132	880	673	933	146
Grp Volume(v), veh/h	0	214	203	464	125	131	227	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	1640	1566	1420	1711	1775	1827	1573	0	0	1752	0	0
Q Serve(g_s), s	0.0	5.7	6.0	11.7	1.3	1.3	4.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.7	6.0	11.7	1.3	1.3	6.3	0.0	0.0	1.0	0.0	0.0
Prop In Lane	1.00		0.84	1.00		0.12	0.43		0.56	0.50		0.08
Lane Grp Cap(c), veh/h	4	350	318	556	1126	1159	415	0	0	456	0	0
V/C Ratio(X)	0.00	0.61	0.64	0.83	0.11	0.11	0.55	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	247	773	701	1359	2001	2060	712	0	0	754	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	16.3	16.4	14.6	3.3	3.4	17.6	0.0	0.0	15.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	2.1	3.4	0.0	0.0	1.1	0.0	0.0	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	1.8	1.8	4.0	0.2	0.2	2.2	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.0	18.5	17.9	3.4	3.4	18.7	0.0	0.0	15.6	0.0	0.0
LnGrp LOS	A	B	B	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		417			720			227			48	
Approach Delay, s/veh		18.2			12.8			18.7			15.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.1	14.4		13.0	0.0	33.5		13.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	37.0	23.0		18.0	7.0	52.5		18.0				
Max Q Clear Time (g_c+I1), s	13.7	8.0		3.0	0.0	3.3		8.3				
Green Ext Time (p_c), s	1.4	2.1		0.1	0.0	1.5		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		15.4	
HCM 6th LOS		B	

Intersection	
Intersection Delay, s/veh	124.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	481	81	63	127	5	42	88	28	139	368	0
Future Vol, veh/h	1	481	81	63	127	5	42	88	28	139	368	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	8	18	8	2	5	2	5	5	4	2	5	2
Mvmt Flow	1	523	88	68	138	5	46	96	30	151	400	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	180.8	21.4	17.3	133.8
HCM LOS	F	C	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	32%	0%	0%	33%	0%	27%
Vol Thru, %	68%	0%	85%	67%	0%	73%
Vol Right, %	0%	100%	14%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	28	563	190	5	507
LT Vol	42	0	1	63	0	139
Through Vol	88	0	481	127	0	368
RT Vol	0	28	81	0	5	0
Lane Flow Rate	141	30	612	207	5	551
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.347	0.068	1.312	0.493	0.012	1.188
Departure Headway (Hd)	10.238	9.332	8.338	9.844	8.989	8.603
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	353	386	441	370	401	424
Service Time	7.938	7.032	6.338	7.544	6.689	6.603
HCM Lane V/C Ratio	0.399	0.078	1.388	0.559	0.012	1.3
HCM Control Delay	18.3	12.7	180.8	21.7	11.8	133.8
HCM Lane LOS	C	B	F	C	B	F
HCM 95th-tile Q	1.5	0.2	25.3	2.6	0	19.4

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	277	58	35	0	0	0	45	58	1	95	0
Future Vol, veh/h	38	277	58	35	0	0	0	45	58	1	95	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	11	24	11	12	12	12	3	3	6	2	2	2
Mvmt Flow	41	301	63	38	0	0	0	49	63	1	103	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.5	8.7	8.7	9.1
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	10%	100%	1%
Vol Thru, %	44%	74%	0%	99%
Vol Right, %	56%	16%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	103	373	35	96
LT Vol	0	38	35	1
Through Vol	45	277	0	95
RT Vol	58	58	0	0
Lane Flow Rate	112	405	38	104
Geometry Grp	1	1	1	1
Degree of Util (X)	0.15	0.518	0.056	0.149
Departure Headway (Hd)	4.824	4.598	5.324	5.151
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	739	782	668	693
Service Time	2.88	2.64	3.389	3.208
HCM Lane V/C Ratio	0.152	0.518	0.057	0.15
HCM Control Delay	8.7	12.5	8.7	9.1
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.5	3	0.2	0.5

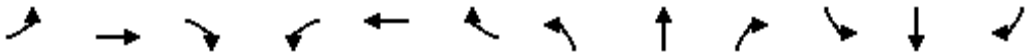
Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	350	15	20	584	5	122	1	213	4	0	27
Future Vol, veh/h	0	350	15	20	584	5	122	1	213	4	0	27
Conflicting Peds, #/hr	5	0	1	1	0	5	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	-	-	-	115	-	-	-
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, %	4	13	4	6	9	6	46	11	11	4	4	4
Mvmt Flow	0	380	16	22	635	5	133	1	232	4	0	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	645	0	-	381	0	0	743	1070	192	879	1068	325
Stage 1	-	-	-	-	-	-	381	381	-	687	687	-
Stage 2	-	-	-	-	-	-	362	689	-	192	381	-
Critical Hdwy	4.18	-	-	4.22	-	-	8.42	6.72	7.12	7.58	6.58	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-	7.42	5.72	-	6.58	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.42	5.72	-	6.58	5.58	-
Follow-up Hdwy	2.24	-	-	2.26	-	-	3.96	4.11	3.41	3.54	4.04	3.34
Pot Cap-1 Maneuver	923	-	0	1146	-	-	234	206	790	239	217	665
Stage 1	-	-	0	-	-	-	507	590	-	399	441	-
Stage 2	-	-	0	-	-	-	523	423	-	786	607	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	919	-	-	1145	-	-	220	201	788	165	212	662
Mov Cap-2 Maneuver	-	-	-	-	-	-	220	201	-	165	212	-
Stage 1	-	-	-	-	-	-	506	589	-	397	430	-
Stage 2	-	-	-	-	-	-	490	413	-	554	606	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	23.3	13.1
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	220	788	919	-	1145	-	-	477
HCM Lane V/C Ratio	0.608	0.294	-	-	0.019	-	-	0.071
HCM Control Delay (s)	43.8	11.5	0	-	8.2	-	-	13.1
HCM Lane LOS	E	B	A	-	A	-	-	B
HCM 95th %tile Q(veh)	3.5	1.2	0	-	0.1	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	661	0	0	470	482	0	0	0	371	0	140
Future Volume (veh/h)	187	661	0	0	470	482	0	0	0	371	0	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1767	1767	1767	1678	1737	1737	1900	1900	1900	1826	1826	1826
Adj Flow Rate, veh/h	203	718	0	0	511	0	0	0	0	278	176	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	9	15	11	11	0	0	0	5	5	5
Cap, veh/h	262	1748	0	4	863		0	539	0	659	255	220
Arrive On Green	0.16	0.52	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.28	0.28	0.28
Sat Flow, veh/h	1682	3445	0	1598	3387	0	0	1900	0	1739	898	776
Grp Volume(v), veh/h	203	718	0	0	511	0	0	0	0	278	0	328
Grp Sat Flow(s),veh/h/ln	1682	1678	0	1598	1650	0	0	1900	0	1739	0	1674
Q Serve(g_s), s	5.0	5.7	0.0	0.0	5.9	0.0	0.0	0.0	0.0	5.9	0.0	7.6
Cycle Q Clear(g_c), s	5.0	5.7	0.0	0.0	5.9	0.0	0.0	0.0	0.0	5.9	0.0	7.6
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.46
Lane Grp Cap(c), veh/h	262	1748	0	4	863		0	539	0	659	0	475
V/C Ratio(X)	0.78	0.41	0.00	0.00	0.59		0.00	0.00	0.00	0.42	0.00	0.69
Avail Cap(c_a), veh/h	639	3284	0	257	2507		0	1203	0	1267	0	1060
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	6.3	0.0	0.0	14.0	0.0	0.0	0.0	0.0	13.3	0.0	13.9
Incr Delay (d2), s/veh	4.9	0.2	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.4	0.0	1.8
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	1.2	0.0	0.0	1.7	0.0	0.0	0.0	0.0	2.0	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	6.5	0.0	0.0	14.7	0.0	0.0	0.0	0.0	13.7	0.0	15.7
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		921			511	A		0			606	
Approach Delay, s/veh		10.0			14.7			0.0			14.8	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	26.6		16.8	11.3	15.4		16.8				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	42.5		27.5	16.5	33.0		27.5				
Max Q Clear Time (g_c+I1), s	0.0	7.7		9.6	7.0	7.9		0.0				
Green Ext Time (p_c), s	0.0	5.3		2.7	0.4	3.2		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		12.6	
HCM 6th LOS		B	

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	50.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	119	541	7	15	341	3	7	30	18	332	42	201
Future Vol, veh/h	119	541	7	15	341	3	7	30	18	332	42	201
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	20	18	20	5	4	5	2	2	2	2	2	2
Mvmt Flow	129	588	8	16	371	3	8	33	20	361	46	218
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	53.1	54.4	13.4	47.9
HCM LOS	F	F	B	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	19%	0%	31%	0%	4%	0%	89%	0%
Vol Thru, %	81%	0%	69%	97%	96%	0%	11%	0%
Vol Right, %	0%	100%	0%	3%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	18	390	278	356	3	374	201
LT Vol	7	0	119	0	15	0	332	0
Through Vol	30	0	271	271	341	0	42	0
RT Vol	0	18	0	7	0	3	0	201
Lane Flow Rate	40	20	423	302	387	3	407	218
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.111	0.049	0.993	0.69	0.916	0.007	0.965	0.447
Departure Headway (Hd)	9.897	9.061	8.441	8.23	8.525	7.761	8.542	7.361
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	362	394	432	437	426	460	427	489
Service Time	7.679	6.843	6.203	5.992	6.29	5.526	6.29	5.108
HCM Lane V/C Ratio	0.11	0.051	0.979	0.691	0.908	0.007	0.953	0.446
HCM Control Delay	13.9	12.3	71.3	27.5	54.8	10.6	65	16
HCM Lane LOS	B	B	F	D	F	B	F	C
HCM 95th-tile Q	0.4	0.2	12.4	5.1	10	0	11.4	2.3

Intersection	
Int Delay, s/veh	156.8

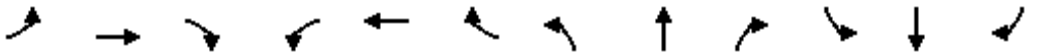
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	207	713	486	111	173	23
Future Vol, veh/h	207	713	486	111	173	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	13	12	4	5	12	12
Mvmt Flow	225	775	528	121	188	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1365	-	188	0	-	0
Stage 1	188	-	-	-	-	-
Stage 2	1177	-	-	-	-	-
Critical Hdwy	6.53	-	4.14	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	-	2.236	-	-	-
Pot Cap-1 Maneuver	~ 154	0	1374	-	-	0
Stage 1	818	0	-	-	-	0
Stage 2	278	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 95	-	1374	-	-	-
Mov Cap-2 Maneuver	~ 95	-	-	-	-	-
Stage 1	504	-	-	-	-	-
Stage 2	278	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 718.5	7.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1374	-	95	-	-
HCM Lane V/C Ratio	0.384	-	2.368	-	-
HCM Control Delay (s)	9.2	-	$ 718.5	0	-
HCM Lane LOS	A	-	F	A	-
HCM 95th %tile Q(veh)	1.8	-	20.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	848	30	27	595	385	30	57	57	529	30	327
Future Volume (veh/h)	155	848	30	27	595	385	30	57	57	529	30	327
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	168	922	33	29	647	418	33	62	62	575	33	355
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	203	1293	566	68	974	424	266	86	86	593	582	664
Arrive On Green	0.12	0.37	0.37	0.04	0.30	0.30	0.05	0.10	0.10	0.30	0.35	0.35
Sat Flow, veh/h	1753	3497	1530	1654	3300	1437	1781	885	885	1598	1678	1434
Grp Volume(v), veh/h	168	922	33	29	647	418	33	0	124	575	33	355
Grp Sat Flow(s),veh/h/ln	1753	1749	1530	1654	1650	1437	1781	0	1771	1598	1678	1434
Q Serve(g_s), s	7.6	18.3	1.1	1.4	14.0	23.5	1.3	0.0	5.5	24.0	1.1	14.4
Cycle Q Clear(g_c), s	7.6	18.3	1.1	1.4	14.0	23.5	1.3	0.0	5.5	24.0	1.1	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	203	1293	566	68	974	424	266	0	172	593	582	664
V/C Ratio(X)	0.83	0.71	0.06	0.42	0.66	0.99	0.12	0.00	0.72	0.97	0.06	0.53
Avail Cap(c_a), veh/h	216	1293	566	142	974	424	338	0	348	593	681	748
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	1.00	1.00
Uniform Delay (d), s/veh	35.1	21.9	16.5	38.0	25.1	28.5	30.5	0.0	35.6	22.6	17.7	15.6
Incr Delay (d2), s/veh	21.7	1.9	0.0	4.1	1.7	39.7	0.2	0.0	5.7	29.3	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	7.0	0.4	0.6	5.2	12.3	0.6	0.0	2.6	14.0	0.4	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	23.8	16.5	42.1	26.8	68.1	30.7	0.0	41.3	51.9	17.7	16.3
LnGrp LOS	E	C	B	D	C	E	C	A	D	D	B	B
Approach Vol, veh/h		1123			1094			157			963	
Approach Delay, s/veh		28.5			43.0			39.1			37.6	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	34.1	7.7	32.2	13.4	28.0	28.0	11.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	27.0	7.0	33.0	10.0	24.0	24.0	16.0
Max Q Clear Time (g_c+I1), s	3.4	20.3	3.3	16.4	9.6	25.5	26.0	7.5
Green Ext Time (p_c), s	0.0	3.2	0.0	1.3	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	36.4
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	286.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	194	1	327	2	630	184	245	857	6
Future Vol, veh/h	0	0	0	194	1	327	2	630	184	245	857	6
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	100	-	-	100	-	-
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	16	16	40	14	7	14	55	7	13
Mvmt Flow	0	0	0	211	1	355	2	685	200	266	932	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1817	2359	472	1787	2262	443	941	0	0	885	0	0
Stage 1	1470	1470	-	789	789	-	-	-	-	-	-	-
Stage 2	347	889	-	998	1473	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.82	6.82	7.7	4.38	-	-	5.2	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.66	4.16	3.7	2.34	-	-	2.75	-	-
Pot Cap-1 Maneuver	50	36	544	~ 44	34	470	655	-	-	502	-	-
Stage 1	136	193	-	321	368	-	-	-	-	-	-	-
Stage 2	648	364	-	236	166	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	7	17	543	~ 26	16	470	654	-	-	502	-	-
Mov Cap-2 Maneuver	7	17	-	~ 26	16	-	-	-	-	-	-	-
Stage 1	135	91	-	320	367	-	-	-	-	-	-	-
Stage 2	157	363	-	~ 111	78	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 1332.7	0	4.4
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	654	-	-	-	26	470	502	-	-
HCM Lane V/C Ratio	0.003	-	-	-	8.152	0.756	0.53	-	-
HCM Control Delay (s)	10.5	-	-	$	$ 3512.7	32.7	20	-	-
HCM Lane LOS	B	-	-	A	F	D	C	-	-
HCM 95th %tile Q(veh)	0	-	-	-	26.3	6.4	3.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

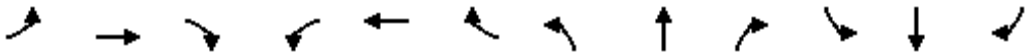
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	2	24	14	0	25	74	948	36	39	852	38
Future Vol, veh/h	6	2	24	14	0	25	74	948	36	39	852	38
Conflicting Peds, #/hr	7	0	0	0	0	7	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	-	0	140	-	-	170	-	-
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, %	15	15	15	25	25	25	8	5	8	14	8	14
Mvmt Flow	7	2	26	15	0	27	80	1030	39	42	926	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1713	2260	484	1758	-	542	967	0	0	1069	0	0
Stage 1	1031	1031	-	1210	-	-	-	-	-	-	-	-
Stage 2	682	1229	-	548	-	-	-	-	-	-	-	-
Critical Hdwy	7.8	6.8	7.2	8	-	7.4	4.26	-	-	4.38	-	-
Critical Hdwy Stg 1	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4.15	3.45	3.75	-	3.55	2.28	-	-	2.34	-	-
Pot Cap-1 Maneuver	51	34	495	42	0	430	672	-	-	581	-	-
Stage 1	227	282	-	161	0	-	-	-	-	-	-	-
Stage 2	377	224	-	434	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	41	28	495	32	-	427	672	-	-	581	-	-
Mov Cap-2 Maneuver	41	28	-	32	-	-	-	-	-	-	-	-
Stage 1	200	262	-	142	-	-	-	-	-	-	-	-
Stage 2	309	197	-	378	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	46.8	78.8	0.8	0.5
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	672	-	-	120	32	427	581	-	-
HCM Lane V/C Ratio	0.12	-	-	0.29	0.476	0.064	0.073	-	-
HCM Control Delay (s)	11.1	-	-	46.8	194.4	14	11.7	-	-
HCM Lane LOS	B	-	-	E	F	B	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.1	1.6	0.2	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	244	78	137	74	221	15	862	180	315	737	20
Future Volume (veh/h)	25	244	78	137	74	221	15	862	180	315	737	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1870	1870	1870	1781	1707	1853	1856	1856	1856	1781	1781	1781
Adj Flow Rate, veh/h	27	265	85	149	80	240	16	937	196	342	801	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	8	13	8	3	3	3	8	8	8
Cap, veh/h	70	295	95	182	488	449	46	1137	505	426	1432	39
Arrive On Green	0.04	0.22	0.22	0.11	0.29	0.29	0.03	0.32	0.32	0.13	0.43	0.43
Sat Flow, veh/h	1781	1357	435	1697	1707	1570	1767	3526	1567	3291	3364	92
Grp Volume(v), veh/h	27	0	350	149	80	240	16	937	196	342	403	420
Grp Sat Flow(s),veh/h/ln	1781	0	1792	1697	1707	1570	1767	1763	1567	1646	1692	1764
Q Serve(g_s), s	1.2	0.0	15.3	6.9	2.8	10.4	0.7	19.8	7.8	8.2	14.5	14.5
Cycle Q Clear(g_c), s	1.2	0.0	15.3	6.9	2.8	10.4	0.7	19.8	7.8	8.2	14.5	14.5
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	70	0	390	182	488	449	46	1137	505	426	721	751
V/C Ratio(X)	0.38	0.00	0.90	0.82	0.16	0.53	0.35	0.82	0.39	0.80	0.56	0.56
Avail Cap(c_a), veh/h	154	0	411	221	488	449	153	1332	592	510	755	787
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	0.0	30.7	35.3	21.6	24.3	38.6	25.2	21.2	34.2	17.5	17.5
Incr Delay (d2), s/veh	3.4	0.0	21.2	17.8	0.2	1.2	4.4	3.8	0.5	7.7	0.8	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	0.6	0.0	8.6	3.6	1.1	3.7	0.4	8.0	2.7	3.5	5.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.2	0.0	51.9	53.1	21.8	25.6	43.0	29.0	21.7	41.9	18.3	18.3
LnGrp LOS	D	A	D	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		377			469			1149			1165	
Approach Delay, s/veh		51.1			33.7			27.9			25.2	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	30.5	13.2	22.1	6.6	38.9	7.7	27.6
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	12.5	30.5	10.5	18.5	7.0	36.0	7.0	22.0
Max Q Clear Time (g_c+I1), s	10.2	21.8	8.9	17.3	2.7	16.5	3.2	12.4
Green Ext Time (p_c), s	0.3	4.3	0.1	0.2	0.0	4.4	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	85	65	17	57	23	24	808	99	52	863	101
Future Volume (veh/h)	91	85	65	17	57	23	24	808	99	52	863	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		0.98
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	1870	1945	1870	1870	1870	1870	1930	1856	1856	1796	1796	1796
Adj Flow Rate, veh/h	99	92	71	18	62	25	26	878	108	57	938	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	7	7	7
Cap, veh/h	351	193	149	290	242	97	79	1384	170	134	1454	170
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.04	0.44	0.44	0.08	0.47	0.47
Sat Flow, veh/h	1301	1007	777	1216	1258	507	1838	3158	388	1711	3068	360
Grp Volume(v), veh/h	99	0	163	18	0	87	26	490	496	57	522	526
Grp Sat Flow(s),veh/h/ln	1301	0	1784	1216	0	1765	1838	1763	1784	1711	1706	1721
Q Serve(g_s), s	3.2	0.0	3.8	0.6	0.0	1.9	0.6	10.0	10.0	1.5	10.7	10.7
Cycle Q Clear(g_c), s	5.2	0.0	3.8	4.4	0.0	1.9	0.6	10.0	10.0	1.5	10.7	10.7
Prop In Lane	1.00		0.44	1.00		0.29	1.00		0.22	1.00		0.21
Lane Grp Cap(c), veh/h	351	0	343	290	0	339	79	773	782	134	809	816
V/C Ratio(X)	0.28	0.00	0.48	0.06	0.00	0.26	0.33	0.63	0.63	0.42	0.65	0.65
Avail Cap(c_a), veh/h	676	0	789	594	0	780	305	1768	1789	350	1777	1793
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	16.7	18.6	0.0	15.9	21.5	10.1	10.1	20.4	9.2	9.2
Incr Delay (d2), s/veh	0.4	0.0	1.0	0.1	0.0	0.4	2.4	0.9	0.9	2.1	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	0.9	0.0	1.5	0.2	0.0	0.7	0.3	3.3	3.3	0.6	2.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	17.7	18.7	0.0	16.3	23.9	11.0	11.0	22.5	10.1	10.1
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		262			105			1012			1105	
Approach Delay, s/veh		18.0			16.7			11.3			10.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	24.8		13.4	6.5	26.5		13.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.5	46.5		20.5	7.7	48.3		20.5				
Max Q Clear Time (g_c+I1), s	3.5	12.0		7.2	2.6	12.7		6.4				
Green Ext Time (p_c), s	0.0	8.3		1.0	0.0	7.4		0.4				

Intersection Summary		
HCM 6th Ctrl Delay		12.0
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	78	138	458	234	465	0	0	917	145
Future Volume (veh/h)	0	0	0	78	138	458	234	465	0	0	917	145
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1841	1841	0	0	1811	1811
Adj Flow Rate, veh/h				85	150	498	254	505	0	0	997	158
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	4	4	0	0	6	6
Cap, veh/h				166	293	412	298	2221	0	0	1211	192
Arrive On Green				0.25	0.25	0.25	0.17	0.64	0.00	0.00	0.41	0.41
Sat Flow, veh/h				664	1173	1648	1753	3589	0	0	3065	471
Grp Volume(v), veh/h				235	0	498	254	505	0	0	576	579
Grp Sat Flow(s),veh/h/ln				1837	0	1648	1753	1749	0	0	1721	1724
Q Serve(g_s), s				8.6	0.0	19.5	11.0	4.8	0.0	0.0	23.3	23.4
Cycle Q Clear(g_c), s				8.6	0.0	19.5	11.0	4.8	0.0	0.0	23.3	23.4
Prop In Lane				0.36		1.00	1.00		0.00	0.00		0.27
Lane Grp Cap(c), veh/h				459	0	412	298	2221	0	0	701	702
V/C Ratio(X)				0.51	0.00	1.21	0.85	0.23	0.00	0.00	0.82	0.82
Avail Cap(c_a), veh/h				459	0	412	415	2755	0	0	848	850
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				25.2	0.0	29.3	31.4	6.1	0.0	0.0	20.6	20.6
Incr Delay (d2), s/veh				1.0	0.0	115.1	11.5	0.1	0.0	0.0	5.5	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
%ile BackOfQ(50%),veh/ln				3.7	0.0	20.5	5.4	1.5	0.0	0.0	9.7	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				26.2	0.0	144.3	43.0	6.1	0.0	0.0	26.2	26.2
LnGrp LOS				C	A	F	D	A	A	A	C	C
Approach Vol, veh/h					733			759			1155	
Approach Delay, s/veh					106.5			18.5			26.2	
Approach LOS					F			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	54.1		17.8	36.3		24.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	61.5		18.5	38.5		19.5
Max Q Clear Time (g_c+I1), s	6.8		13.0	25.4		21.5
Green Ext Time (p_c), s	3.9		0.4	6.4		0.0

Intersection Summary	
HCM 6th Ctrl Delay	46.2
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	0	200	0	0	0	0	474	229	501	490	0
Future Volume (veh/h)	238	0	200	0	0	0	0	474	229	501	490	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				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	1900	1856	1900				0	1856	1856	1841	1841	0
Adj Flow Rate, veh/h	259	0	217				0	515	249	545	533	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	0				0	3	3	4	4	0
Cap, veh/h	354	0	309				0	798	356	619	2284	0
Arrive On Green	0.20	0.00	0.20				0.00	0.23	0.23	0.35	0.65	0.00
Sat Flow, veh/h	1767	0	1544				0	3618	1572	1753	3589	0
Grp Volume(v), veh/h	259	0	217				0	515	249	545	533	0
Grp Sat Flow(s),veh/h/ln	1767	0	1544				0	1763	1572	1753	1749	0
Q Serve(g_s), s	8.4	0.0	8.0				0.0	8.1	8.9	17.9	3.8	0.0
Cycle Q Clear(g_c), s	8.4	0.0	8.0				0.0	8.1	8.9	17.9	3.8	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	354	0	309				0	798	356	619	2284	0
V/C Ratio(X)	0.73	0.00	0.70				0.00	0.65	0.70	0.88	0.23	0.00
Avail Cap(c_a), veh/h	519	0	454				0	1151	513	1101	3596	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.0	0.0	22.8				0.0	21.5	21.8	18.6	4.4	0.0
Incr Delay (d2), s/veh	2.9	0.0	2.9				0.0	0.9	2.5	4.3	0.1	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	3.5	0.0	3.0				0.0	3.2	3.3	7.2	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	0.0	25.7				0.0	22.4	24.3	22.9	4.4	0.0
LnGrp LOS	C	A	C				A	C	C	C	A	A
Approach Vol, veh/h		476						764			1078	
Approach Delay, s/veh		25.8						23.0			13.7	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	26.1	18.4	16.8	44.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	38.5	20.0	18.0	63.0
Max Q Clear Time (g_c+I1), s	19.9	10.9	10.4	5.8
Green Ext Time (p_c), s	1.8	3.0	1.8	4.2

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	85	24	88	60	172	5	432	13	185	485	12
Future Volume (veh/h)	23	85	24	88	60	172	5	432	13	185	485	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	25	92	26	96	65	187	5	470	14	201	527	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	264	330	93	386	99	285	374	589	18	484	823	20
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.01	0.33	0.33	0.14	0.46	0.46
Sat Flow, veh/h	1115	1394	394	1252	418	1202	1767	1792	53	1753	1788	44
Grp Volume(v), veh/h	25	0	118	96	0	252	5	0	484	201	0	540
Grp Sat Flow(s),veh/h/ln	1115	0	1788	1252	0	1620	1767	0	1845	1753	0	1832
Q Serve(g_s), s	1.0	0.0	2.5	3.1	0.0	6.5	0.1	0.0	11.0	2.9	0.0	10.4
Cycle Q Clear(g_c), s	7.4	0.0	2.5	5.6	0.0	6.5	0.1	0.0	11.0	2.9	0.0	10.4
Prop In Lane	1.00		0.22	1.00		0.74	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	264	0	424	386	0	384	374	0	607	484	0	843
V/C Ratio(X)	0.09	0.00	0.28	0.25	0.00	0.66	0.01	0.00	0.80	0.42	0.00	0.64
Avail Cap(c_a), veh/h	436	0	700	579	0	634	626	0	855	512	0	857
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	14.3	16.6	0.0	15.9	10.3	0.0	14.0	8.5	0.0	9.5
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.3	0.0	1.9	0.0	0.0	3.6	0.6	0.0	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	0.2	0.0	0.9	0.8	0.0	2.3	0.0	0.0	4.2	0.8	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	0.0	14.7	17.0	0.0	17.8	10.3	0.0	17.6	9.1	0.0	11.1
LnGrp LOS	B	A	B	B	A	B	B	A	B	A	A	B
Approach Vol, veh/h		143			348			489			741	
Approach Delay, s/veh		15.5			17.5			17.6			10.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	19.6		15.4	4.9	25.7		15.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.3	21.3		18.0	7.0	21.5		18.0
Max Q Clear Time (g_c+I1), s	14.9	13.0		9.4	2.1	12.4		8.5
Green Ext Time (p_c), s	0.1	1.9		0.4	0.0	2.3		1.4

Intersection Summary		
HCM 6th Ctrl Delay	14.4	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	113	546	81	44	223	0	0	364	184
Future Volume (veh/h)	0	0	0	113	546	81	44	223	0	0	364	184
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.95
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				1900	1841	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				123	593	88	48	242	0	0	396	200
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	4	0	2	2	0	0	2	2
Cap, veh/h				180	908	141	121	896	0	0	603	486
Arrive On Green				0.34	0.34	0.34	0.07	0.48	0.00	0.00	0.32	0.32
Sat Flow, veh/h				522	2638	410	1781	1870	0	0	1870	1507
Grp Volume(v), veh/h				427	0	377	48	242	0	0	396	200
Grp Sat Flow(s),veh/h/ln				1815	0	1756	1781	1870	0	0	1870	1507
Q Serve(g_s), s				10.3	0.0	9.1	1.3	3.9	0.0	0.0	9.3	5.3
Cycle Q Clear(g_c), s				10.3	0.0	9.1	1.3	3.9	0.0	0.0	9.3	5.3
Prop In Lane				0.29		0.23	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				624	0	604	121	896	0	0	603	486
V/C Ratio(X)				0.68	0.00	0.62	0.40	0.27	0.00	0.00	0.66	0.41
Avail Cap(c_a), veh/h				1160	0	1122	263	1784	0	0	1343	1082
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				14.3	0.0	13.9	22.7	7.9	0.0	0.0	14.8	13.5
Incr Delay (d2), s/veh				1.3	0.0	1.1	2.1	0.2	0.0	0.0	1.2	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				3.8	0.0	3.2	0.6	1.3	0.0	0.0	3.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.6	0.0	15.0	24.8	8.1	0.0	0.0	16.0	14.0
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					804			290			596	
Approach Delay, s/veh					15.3			10.9			15.3	
Approach LOS					B			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	28.8		7.9	20.9		22.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	48.5		7.5	36.5		32.5
Max Q Clear Time (g_c+I1), s	5.9		3.3	11.3		12.3
Green Ext Time (p_c), s	1.5		0.0	3.3		5.2

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	41	98	75	41	6	36	131	41	5	318	37
Future Volume (veh/h)	100	41	98	75	41	6	36	131	41	5	318	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	0.98		0.96	0.97		0.96
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	1841	1841	1841	1870	1945	1870	1841	1914	1841	1870	1945	1870
Adj Flow Rate, veh/h	109	45	107	82	45	7	39	142	45	5	346	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	2	2	2	4	4	4	2	2	2
Cap, veh/h	326	119	180	454	215	25	209	468	130	136	648	74
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	484	413	623	837	745	87	143	1224	340	7	1696	194
Grp Volume(v), veh/h	261	0	0	134	0	0	226	0	0	391	0	0
Grp Sat Flow(s),veh/h/ln	1520	0	0	1670	0	0	1707	0	0	1897	0	0
Q Serve(g_s), s	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.9	0.0	0.0	1.5	0.0	0.0	2.4	0.0	0.0	4.4	0.0	0.0
Prop In Lane	0.42		0.41	0.61		0.05	0.17		0.20	0.01		0.10
Lane Grp Cap(c), veh/h	626	0	0	694	0	0	807	0	0	858	0	0
V/C Ratio(X)	0.42	0.00	0.00	0.19	0.00	0.00	0.28	0.00	0.00	0.46	0.00	0.00
Avail Cap(c_a), veh/h	1518	0	0	1578	0	0	1741	0	0	1965	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)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.2	0.0	0.0	7.4	0.0	0.0	6.0	0.0	0.0	6.6	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.4	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	0.9	0.0	0.0	0.4	0.0	0.0	0.6	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.7	0.0	0.0	7.6	0.0	0.0	6.1	0.0	0.0	7.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		261			134			226			391	
Approach Delay, s/veh		8.7			7.6			6.1			7.0	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.0	12.4	15.0	12.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.5	24.5	26.5	24.5
Max Q Clear Time (g_c+I1), s	4.4	5.9	6.4	3.5
Green Ext Time (p_c), s	1.4	1.6	2.3	0.7

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	785	24	96	415	35	32	96	159	130	115	44
Future Volume (veh/h)	37	785	24	96	415	35	32	96	159	130	115	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.99		0.98	0.99		0.97
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	1811	1811	1811	1811	1811	1811	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	40	853	26	104	451	38	35	104	173	141	125	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	6	6	3	3	3	3	3	3
Cap, veh/h	102	1187	36	180	1261	106	107	185	269	257	195	63
Arrive On Green	0.06	0.35	0.35	0.10	0.39	0.39	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1725	3406	104	1725	3201	268	106	641	931	543	675	220
Grp Volume(v), veh/h	40	431	448	104	241	248	312	0	0	314	0	0
Grp Sat Flow(s),veh/h/ln	1725	1721	1789	1725	1721	1749	1678	0	0	1438	0	0
Q Serve(g_s), s	1.2	11.4	11.4	3.0	5.2	5.2	0.0	0.0	0.0	1.8	0.0	0.0
Cycle Q Clear(g_c), s	1.2	11.4	11.4	3.0	5.2	5.2	8.3	0.0	0.0	10.1	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.15	0.11		0.55	0.45		0.15
Lane Grp Cap(c), veh/h	102	600	624	180	678	689	561	0	0	515	0	0
V/C Ratio(X)	0.39	0.72	0.72	0.58	0.36	0.36	0.56	0.00	0.00	0.61	0.00	0.00
Avail Cap(c_a), veh/h	241	1038	1079	347	1143	1162	1148	0	0	1025	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.7	14.8	14.8	22.3	11.2	11.2	16.2	0.0	0.0	16.6	0.0	0.0
Incr Delay (d2), s/veh	2.5	1.6	1.6	2.9	0.3	0.3	0.9	0.0	0.0	1.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.7	3.8	1.2	1.5	1.6	2.9	0.0	0.0	3.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.1	16.4	16.4	25.2	11.5	11.5	17.1	0.0	0.0	17.8	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		919			593			312			314	
Approach Delay, s/veh		16.8			13.9			17.1			17.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	22.7		19.6	7.6	25.1		19.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.5	31.5		34.5	7.3	34.7		34.5
Max Q Clear Time (g_c+I1), s	5.0	13.4		12.1	3.2	7.2		10.3
Green Ext Time (p_c), s	0.1	4.8		2.0	0.0	2.7		2.0

Intersection Summary		
HCM 6th Ctrl Delay		16.2
HCM 6th LOS		B

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	19	0	140	123	1
Future Vol, veh/h	0	19	0	140	123	1
Conflicting Peds, #/hr	1	0	5	0	0	5
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, %	2	2	4	4	3	3
Mvmt Flow	0	21	0	152	134	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	293	140	140	0	-	0
Stage 1	140	-	-	-	-	-
Stage 2	153	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.14	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.236	-	-	-
Pot Cap-1 Maneuver	698	908	1431	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	691	904	1424	-	-	-
Mov Cap-2 Maneuver	691	-	-	-	-	-
Stage 1	883	-	-	-	-	-
Stage 2	871	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1424	-	904	-	-
HCM Lane V/C Ratio	-	-	0.023	-	-
HCM Control Delay (s)	0	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	251	2	79	261	20	6	4	168	8	4	4
Future Vol, veh/h	7	251	2	79	261	20	6	4	168	8	4	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	18	45	18	5	32	10	10	10	5	23	23	23
Mvmt Flow	8	273	2	86	284	22	7	4	183	9	4	4
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay	11.3	10.7	11.1	10
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	3%	100%	0%	0%	100%	0%	0%	50%
Vol Thru, %	2%	0%	100%	98%	0%	100%	81%	25%
Vol Right, %	94%	0%	0%	2%	0%	0%	19%	25%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	178	7	167	86	79	174	107	16
LT Vol	6	7	0	0	79	0	0	8
Through Vol	4	0	167	84	0	174	87	4
RT Vol	168	0	0	2	0	0	20	4
Lane Flow Rate	193	8	182	93	86	189	116	17
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.311	0.014	0.325	0.154	0.146	0.32	0.18	0.034
Departure Headway (Hd)	5.78	6.481	6.439	5.958	6.138	6.096	5.586	7.036
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	625	553	560	602	586	590	643	509
Service Time	3.48	4.208	4.166	3.685	3.864	3.822	3.312	4.774
HCM Lane V/C Ratio	0.309	0.014	0.325	0.154	0.147	0.32	0.18	0.033
HCM Control Delay	11.1	9.3	12.2	9.8	9.9	11.7	9.5	10
HCM Lane LOS	B	A	B	A	A	B	A	A
HCM 95th-tile Q	1.3	0	1.4	0.5	0.5	1.4	0.7	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	7	339	1	0	12	681	391	86	1057	7
Future Volume (veh/h)	3	0	7	339	1	0	12	681	391	86	1057	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1648	1648	1648	1885	1885	1885	1781	1781	1781	1752	1752	1752
Adj Flow Rate, veh/h	3	0	8	369	0	0	13	740	425	93	1149	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	17	17	17	1	1	1	8	8	8	10	10	10
Cap, veh/h	31	0	28	548	0	244	39	1336	826	163	1591	11
Arrive On Green	0.02	0.00	0.02	0.15	0.00	0.00	0.02	0.39	0.39	0.10	0.47	0.47
Sat Flow, veh/h	1570	0	1397	3591	0	1598	1697	3385	1510	1668	3388	24
Grp Volume(v), veh/h	3	0	8	369	0	0	13	740	425	93	564	593
Grp Sat Flow(s),veh/h/ln	1570	0	1397	1795	0	1598	1697	1692	1510	1668	1664	1748
Q Serve(g_s), s	0.1	0.0	0.3	5.2	0.0	0.0	0.4	9.1	9.5	2.9	14.6	14.6
Cycle Q Clear(g_c), s	0.1	0.0	0.3	5.2	0.0	0.0	0.4	9.1	9.5	2.9	14.6	14.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	31	0	28	548	0	244	39	1336	826	163	781	820
V/C Ratio(X)	0.10	0.00	0.29	0.67	0.00	0.00	0.33	0.55	0.51	0.57	0.72	0.72
Avail Cap(c_a), veh/h	205	0	182	1224	0	545	221	2244	1231	345	1231	1292
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	25.9	21.5	0.0	0.0	25.8	12.6	7.7	23.1	11.4	11.4
Incr Delay (d2), s/veh	1.3	0.0	5.7	1.5	0.0	0.0	4.9	0.4	0.5	3.1	1.3	1.2
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	0.1	2.1	0.0	0.0	0.2	3.0	3.7	1.2	4.6	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	0.0	31.6	22.9	0.0	0.0	30.7	12.9	8.2	26.2	12.7	12.7
LnGrp LOS	C	A	C	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		11			369			1178			1250	
Approach Delay, s/veh		30.4			22.9			11.4			13.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	25.7		5.6	5.7	29.7		12.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	11.1	35.6		7.0	7.0	39.7		18.3
Max Q Clear Time (g_c+I1), s	4.9	11.5		2.3	2.4	16.6		7.2
Green Ext Time (p_c), s	0.1	7.4		0.0	0.0	8.6		1.0

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	136.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	181	138	734	223	271	927
Future Vol, veh/h	181	138	734	223	271	927
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	31	31	14	31	31	13
Mvmt Flow	197	150	798	242	295	1008

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2013	520	0	0	1040	0
Stage 1	919	-	-	-	-	-
Stage 2	1094	-	-	-	-	-
Critical Hdwy	7.42	7.52	-	-	4.72	-
Critical Hdwy Stg 1	6.42	-	-	-	-	-
Critical Hdwy Stg 2	6.42	-	-	-	-	-
Follow-up Hdwy	3.81	3.61	-	-	2.51	-
Pot Cap-1 Maneuver	~ 36	432	-	-	516	-
Stage 1	287	-	-	-	-	-
Stage 2	227	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 15	432	-	-	516	-
Mov Cap-2 Maneuver	~ 71	-	-	-	-	-
Stage 1	287	-	-	-	-	-
Stage 2	~ 97	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 1038.7	0	4.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	111	516	-
HCM Lane V/C Ratio	-	-	3.124	0.571	-
HCM Control Delay (s)	-	-	$ 1038.7	20.9	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	33.4	3.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	325	224	276	170	10	100	5	100	8	5	3
Future Volume (veh/h)	1	325	224	276	170	10	100	5	100	8	5	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.98
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	1841	1767	1837	1826	1899	1826	1796	1868	1796	1870	1945	1870
Adj Flow Rate, veh/h	1	353	243	300	185	11	109	5	109	9	5	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	9	9	5	5	5	7	7	7	2	2	2
Cap, veh/h	4	565	382	392	1760	104	251	29	150	273	142	62
Arrive On Green	0.00	0.30	0.30	0.23	0.51	0.51	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1753	1906	1287	1739	3460	204	632	144	742	727	706	307
Grp Volume(v), veh/h	1	310	286	300	96	100	223	0	0	17	0	0
Grp Sat Flow(s),veh/h/ln	1753	1678	1514	1739	1804	1860	1519	0	0	1740	0	0
Q Serve(g_s), s	0.0	6.9	7.1	7.0	1.2	1.2	4.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.9	7.1	7.0	1.2	1.2	5.9	0.0	0.0	0.3	0.0	0.0
Prop In Lane	1.00		0.85	1.00		0.11	0.49		0.49	0.53		0.18
Lane Grp Cap(c), veh/h	4	498	449	392	918	946	430	0	0	478	0	0
V/C Ratio(X)	0.25	0.62	0.64	0.77	0.10	0.11	0.52	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	303	1120	1010	1120	2034	2097	849	0	0	904	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.7	13.2	13.3	15.8	5.5	5.5	16.1	0.0	0.0	14.0	0.0	0.0
Incr Delay (d2), s/veh	29.3	1.3	1.5	3.1	0.0	0.0	1.0	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	2.1	2.0	2.5	0.3	0.3	1.9	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.9	14.5	14.8	18.9	5.6	5.6	17.1	0.0	0.0	14.0	0.0	0.0
LnGrp LOS	D	B	B	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		597			496			223			17	
Approach Delay, s/veh		14.7			13.6			17.1			14.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.8	16.9		12.8	4.6	26.1		12.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	28.0	29.0		21.0	7.5	49.0		21.0				
Max Q Clear Time (g_c+I1), s	9.0	9.1		2.3	2.0	3.2		7.9				
Green Ext Time (p_c), s	0.8	3.5		0.0	0.0	1.1		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			14.7									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	126.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	331	95	52	110	8	48	265	8	128	419	0
Future Vol, veh/h	1	331	95	52	110	8	48	265	8	128	419	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	6	16	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	1	360	103	57	120	9	52	288	9	139	455	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	103.9	22.4	43.6	225.2
HCM LOS	F	C	E	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	15%	0%	0%	32%	0%	23%
Vol Thru, %	85%	0%	78%	68%	0%	77%
Vol Right, %	0%	100%	22%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	313	8	427	162	8	547
LT Vol	48	0	1	52	0	128
Through Vol	265	0	331	110	0	419
RT Vol	0	8	95	0	8	0
Lane Flow Rate	340	9	464	176	9	595
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.817	0.019	1.09	0.467	0.021	1.414
Departure Headway (Hd)	9.875	9.059	9.495	10.941	10.032	8.996
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	371	398	385	331	359	410
Service Time	7.575	6.759	7.495	8.641	7.732	6.996
HCM Lane V/C Ratio	0.916	0.023	1.205	0.532	0.025	1.451
HCM Control Delay	44.4	11.9	103.9	22.9	12.9	225.2
HCM Lane LOS	E	B	F	C	B	F
HCM 95th-tile Q	7.2	0.1	14.8	2.4	0.1	28.2

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	320	14	36	0	7	0	108	95	0	91	0
Future Vol, veh/h	44	320	14	36	0	7	0	108	95	0	91	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	20	5	8	8	8	3	3	3	3	3	3
Mvmt Flow	48	348	15	39	0	8	0	117	103	0	99	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.8	9	10.2	9.5
HCM LOS	B	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	12%	84%	0%
Vol Thru, %	53%	85%	0%	100%
Vol Right, %	47%	4%	16%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	203	378	43	91
LT Vol	0	44	36	0
Through Vol	108	320	0	91
RT Vol	95	14	7	0
Lane Flow Rate	221	411	47	99
Geometry Grp	1	1	1	1
Degree of Util (X)	0.303	0.553	0.072	0.151
Departure Headway (Hd)	4.947	4.842	5.555	5.494
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	717	740	648	657
Service Time	3.038	2.922	3.561	3.496
HCM Lane V/C Ratio	0.308	0.555	0.073	0.151
HCM Control Delay	10.2	13.8	9	9.5
HCM Lane LOS	B	B	A	A
HCM 95th-tile Q	1.3	3.4	0.2	0.5

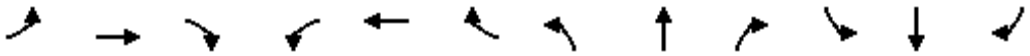
Intersection	
Int Delay, s/veh	6.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	401	31	12	377	4	119	0	296	7	0	38
Future Vol, veh/h	3	401	31	12	377	4	119	0	296	7	0	38
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	5	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	-	-	-	115	-	-	-
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, %	4	8	4	3	9	3	48	5	5	9	9	9
Mvmt Flow	3	436	34	13	410	4	129	0	322	8	0	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	426	0	-	436	0	0	673	894	223	679	892	219
Stage 1	-	-	-	-	-	-	442	442	-	450	450	-
Stage 2	-	-	-	-	-	-	231	452	-	229	442	-
Critical Hdwy	4.18	-	-	4.16	-	-	8.46	6.6	7	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	7.46	5.6	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.46	5.6	-	6.68	5.68	-
Follow-up Hdwy	2.24	-	-	2.23	-	-	3.98	4.05	3.35	3.59	4.09	3.39
Pot Cap-1 Maneuver	1116	-	0	1113	-	-	264	274	771	324	268	764
Stage 1	-	-	0	-	-	-	458	567	-	540	553	-
Stage 2	-	-	0	-	-	-	635	561	-	733	557	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1103	-	-	1113	-	-	247	267	767	183	261	755
Mov Cap-2 Maneuver	-	-	-	-	-	-	247	267	-	183	261	-
Stage 1	-	-	-	-	-	-	457	565	-	532	540	-
Stage 2	-	-	-	-	-	-	593	548	-	422	555	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	19.2	12.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	247	767	1103	-	1113	-	-	508
HCM Lane V/C Ratio	0.524	0.419	0.003	-	0.012	-	-	0.096
HCM Control Delay (s)	34.6	13	8.3	-	8.3	-	-	12.8
HCM Lane LOS	D	B	A	-	A	-	-	B
HCM 95th %tile Q(veh)	2.8	2.1	0	-	0	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	773	0	0	577	676	0	0	0	316	0	170
Future Volume (veh/h)	175	773	0	0	577	676	0	0	0	316	0	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1841	1841	1841	1811	1841	1841	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	190	840	0	0	627	0	0	0	0	264	111	185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	6	4	4	0	0	0	3	3	3
Cap, veh/h	253	1909	0	4	1042		0	493	0	623	162	270
Arrive On Green	0.14	0.55	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.26	0.26	0.26
Sat Flow, veh/h	1753	3589	0	1725	3589	0	0	1900	0	1767	625	1042
Grp Volume(v), veh/h	190	840	0	0	627	0	0	0	0	264	0	296
Grp Sat Flow(s),veh/h/ln	1753	1749	0	1725	1749	0	0	1900	0	1767	0	1668
Q Serve(g_s), s	4.5	6.3	0.0	0.0	6.7	0.0	0.0	0.0	0.0	5.7	0.0	7.0
Cycle Q Clear(g_c), s	4.5	6.3	0.0	0.0	6.7	0.0	0.0	0.0	0.0	5.7	0.0	7.0
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.63
Lane Grp Cap(c), veh/h	253	1909	0	4	1042		0	493	0	623	0	433
V/C Ratio(X)	0.75	0.44	0.00	0.00	0.60		0.00	0.00	0.00	0.42	0.00	0.68
Avail Cap(c_a), veh/h	567	3682	0	277	3112		0	1050	0	1142	0	922
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.9	5.9	0.0	0.0	13.1	0.0	0.0	0.0	0.0	14.1	0.0	14.5
Incr Delay (d2), s/veh	4.4	0.2	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.5	0.0	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	1.8	1.2	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	6.1	0.0	0.0	13.7	0.0	0.0	0.0	0.0	14.5	0.0	16.5
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		1030			627	A		0			560	
Approach Delay, s/veh		9.1			13.7			0.0			15.5	
Approach LOS		A			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	27.8		15.8	10.8	17.0		15.8				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	45.9		24.1	14.1	38.8		24.1				
Max Q Clear Time (g_c+I1), s	0.0	8.3		9.0	6.5	8.7		0.0				
Green Ext Time (p_c), s	0.0	6.5		2.4	0.3	4.2		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		12.0
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	76.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	136	706	8	23	203	7	3	194	11	296	72	206
Future Vol, veh/h	136	706	8	23	203	7	3	194	11	296	72	206
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	7	6	7	3	3	3	6	6	6	2	2	2
Mvmt Flow	148	767	9	25	221	8	3	211	12	322	78	224
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	119.4	26.7	23.2	51.3
HCM LOS	F	D	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	2%	0%	28%	0%	10%	0%	80%	0%
Vol Thru, %	98%	0%	72%	98%	90%	0%	20%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	197	11	489	361	226	7	368	206
LT Vol	3	0	136	0	23	0	296	0
Through Vol	194	0	353	353	203	0	72	0
RT Vol	0	11	0	8	0	7	0	206
Lane Flow Rate	214	12	532	392	246	8	400	224
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.554	0.029	1.274	0.921	0.629	0.018	0.977	0.479
Departure Headway (Hd)	9.714	8.973	8.631	8.454	9.592	8.807	9.097	7.954
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	375	401	425	428	378	409	400	457
Service Time	7.414	6.673	6.375	6.197	7.292	6.507	6.797	5.654
HCM Lane V/C Ratio	0.571	0.03	1.252	0.916	0.651	0.02	1	0.49
HCM Control Delay	23.8	11.9	166.7	55.4	27.2	11.7	70.1	17.8
HCM Lane LOS	C	B	F	F	D	B	F	C
HCM 95th-tile Q	3.2	0.1	22.9	10.2	4.1	0.1	11.5	2.5

Intersection	
Int Delay, s/veh	74.6

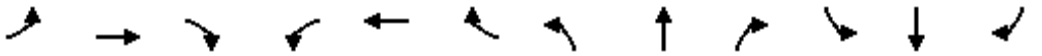
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	274	678	141	276	63
Future Vol, veh/h	70	274	678	141	276	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	22	20	2	2	2	2
Mvmt Flow	76	298	737	153	300	68

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1927	-	300	0	-	0
Stage 1	300	-	-	-	-	-
Stage 2	1627	-	-	-	-	-
Critical Hdwy	6.62	-	4.12	-	-	-
Critical Hdwy Stg 1	5.62	-	-	-	-	-
Critical Hdwy Stg 2	5.62	-	-	-	-	-
Follow-up Hdwy	3.698	-	2.218	-	-	-
Pot Cap-1 Maneuver	~ 65	0	1261	-	-	0
Stage 1	708	0	-	-	-	0
Stage 2	158	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 27	-	1261	-	-	-
Mov Cap-2 Maneuver	~ 27	-	-	-	-	-
Stage 1	295	-	-	-	-	-
Stage 2	158	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 1127.4	9.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1261	-	27	-	-
HCM Lane V/C Ratio	0.584	-	2.818	-	-
HCM Control Delay (s)	11.8	-	$ 1127.4	0	-
HCM Lane LOS	B	-	F	A	-
HCM 95th %tile Q(veh)	4	-	9.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	840	48	41	954	516	32	102	26	207	75	267
Future Volume (veh/h)	201	840	48	41	954	516	32	102	26	207	75	267
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	0.99		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	218	913	52	45	1037	561	35	111	28	225	82	290
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	260	1737	766	99	1439	620	301	185	47	346	335	510
Arrive On Green	0.15	0.50	0.50	0.06	0.41	0.41	0.05	0.12	0.12	0.12	0.19	0.19
Sat Flow, veh/h	1753	3469	1530	1767	3526	1519	1781	1494	377	1668	1752	1495
Grp Volume(v), veh/h	218	913	52	45	1037	561	35	0	139	225	82	290
Grp Sat Flow(s),veh/h/ln	1753	1735	1530	1767	1763	1519	1781	0	1871	1668	1752	1495
Q Serve(g_s), s	9.5	13.9	1.4	1.9	19.3	27.1	1.3	0.0	5.5	9.0	3.1	12.4
Cycle Q Clear(g_c), s	9.5	13.9	1.4	1.9	19.3	27.1	1.3	0.0	5.5	9.0	3.1	12.4
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	260	1737	766	99	1439	620	301	0	232	346	335	510
V/C Ratio(X)	0.84	0.53	0.07	0.46	0.72	0.90	0.12	0.00	0.60	0.65	0.24	0.57
Avail Cap(c_a), veh/h	359	1864	822	158	1488	641	376	0	383	346	403	568
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	1.00	1.00
Uniform Delay (d), s/veh	32.4	13.2	10.1	35.8	19.4	21.7	27.4	0.0	32.4	24.9	26.8	21.2
Incr Delay (d2), s/veh	11.9	0.2	0.0	3.3	1.7	16.1	0.2	0.0	2.5	4.2	0.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	4.6	0.4	0.9	7.2	11.6	0.6	0.0	2.6	3.8	1.3	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	13.5	10.1	39.0	21.1	37.8	27.5	0.0	34.9	29.1	27.2	22.2
LnGrp LOS	D	B	B	D	C	D	C	A	C	C	C	C
Approach Vol, veh/h		1183			1643			174			597	
Approach Delay, s/veh		19.0			27.3			33.4			25.5	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	43.1	7.7	19.0	15.6	35.9	13.0	13.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	42.0	7.0	18.0	16.0	33.0	9.0	16.0
Max Q Clear Time (g_c+I1), s	3.9	15.9	3.3	14.4	11.5	29.1	11.0	7.5
Green Ext Time (p_c), s	0.0	6.6	0.0	0.5	0.2	2.8	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	929.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	1	138	1	281	2	792	196	343	1018	0
Future Vol, veh/h	0	1	1	138	1	281	2	792	196	343	1018	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	-	-	-	-	-	0	100	-	-	100	-	-
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, %	2	2	2	10	10	44	10	5	10	45	3	6
Mvmt Flow	0	1	1	150	1	305	2	861	213	373	1107	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2288	2931	554	2272	2825	537	1107	0	0	1074	0	0
Stage 1	1853	1853	-	972	972	-	-	-	-	-	-	-
Stage 2	435	1078	-	1300	1853	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.7	6.7	7.78	4.3	-	-	5	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.6	4.1	3.74	2.3	-	-	2.65	-	-
Pot Cap-1 Maneuver	21	15	476	~ 20	15	394	582	-	-	442	-	-
Stage 1	76	122	-	256	312	-	-	-	-	-	-	-
Stage 2	570	293	-	159	112	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	1	2	476	~ 4	2	394	582	-	-	442	-	-
Mov Cap-2 Maneuver	1	2	-	~ 4	2	-	-	-	-	-	-	-
Stage 1	76	19	-	255	311	-	-	-	-	-	-	-
Stage 2	127	292	-	~ 23	17	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 1282.6	$ 6092.8	0	11
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	582	-	-	4	4	394	442	-	-
HCM Lane V/C Ratio	0.004	-	-	0.543	37.772	0.775	0.843	-	-
HCM Control Delay (s)	11.2	-	-	$ 1282.6	$ 6092.8	30.2	39.4	43.7	-	-
HCM Lane LOS	B	-	-	F	F	E	E	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	21.1	6.5	8.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

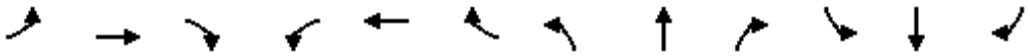
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	0	60	8	0	5	7	815	6	5	964	8
Future Vol, veh/h	31	0	60	8	0	5	7	815	6	5	964	8
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	-	0	140	-	-	170	-	-
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, %	3	3	3	27	27	27	9	5	9	6	3	6
Mvmt Flow	34	0	65	9	0	5	8	886	7	5	1048	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1522	1972	529	1440	-	447	1057	0	0	893	0	0
Stage 1	1063	1063	-	906	-	-	-	-	-	-	-	-
Stage 2	459	909	-	534	-	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	8.04	-	7.44	4.28	-	-	4.22	-	-
Critical Hdwy Stg 1	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.77	-	3.57	2.29	-	-	2.26	-	-
Pot Cap-1 Maneuver	80	61	492	74	0	496	615	-	-	731	-	-
Stage 1	237	296	-	251	0	-	-	-	-	-	-	-
Stage 2	549	350	-	439	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	78	60	492	63	-	496	615	-	-	731	-	-
Mov Cap-2 Maneuver	78	60	-	63	-	-	-	-	-	-	-	-
Stage 1	234	294	-	248	-	-	-	-	-	-	-	-
Stage 2	536	345	-	378	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	49.4	48.5	0.1	0.1
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	615	-	-	175	63	496	731	-	-
HCM Lane V/C Ratio	0.012	-	-	0.565	0.138	0.011	0.007	-	-
HCM Control Delay (s)	10.9	-	-	49.4	71.1	12.3	10	-	-
HCM Lane LOS	B	-	-	E	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	3	0.5	0	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	134	34	171	132	155	48	614	158	436	811	23
Future Volume (veh/h)	20	134	34	171	132	155	48	614	158	436	811	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
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	1870	1870	1870	1826	1781	1899	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	22	146	37	186	143	168	52	667	172	474	882	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	8	5	4	4	4	3	3	3
Cap, veh/h	199	200	51	233	287	259	117	914	405	613	1309	37
Arrive On Green	0.11	0.14	0.14	0.13	0.16	0.16	0.07	0.26	0.26	0.18	0.37	0.37
Sat Flow, veh/h	1781	1440	365	1739	1781	1609	1753	3497	1551	3428	3500	99
Grp Volume(v), veh/h	22	0	183	186	143	168	52	667	172	474	444	463
Grp Sat Flow(s),veh/h/ln	1781	0	1805	1739	1781	1609	1753	1749	1551	1714	1763	1837
Q Serve(g_s), s	0.7	0.0	6.1	6.5	4.6	6.1	1.8	10.9	5.8	8.3	13.2	13.2
Cycle Q Clear(g_c), s	0.7	0.0	6.1	6.5	4.6	6.1	1.8	10.9	5.8	8.3	13.2	13.2
Prop In Lane	1.00		0.20	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	199	0	251	233	287	259	117	914	405	613	659	687
V/C Ratio(X)	0.11	0.00	0.73	0.80	0.50	0.65	0.45	0.73	0.42	0.77	0.67	0.67
Avail Cap(c_a), veh/h	199	0	518	402	724	654	198	1266	561	918	911	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	0.00	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	25.1	0.0	25.9	26.3	24.0	24.6	28.2	21.1	19.2	24.5	16.4	16.4
Incr Delay (d2), s/veh	0.2	0.0	4.1	6.2	1.3	2.7	2.7	1.4	0.7	2.4	1.2	1.2
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	2.7	2.8	1.8	2.3	0.8	4.0	1.9	3.1	4.4	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	30.0	32.6	25.3	27.3	30.8	22.5	19.9	26.9	17.6	17.6
LnGrp LOS	C	A	C	C	C	C	C	C	B	C	B	B
Approach Vol, veh/h		205			497			891			1381	
Approach Delay, s/veh		29.5			28.7			22.5			20.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	20.9	12.9	13.2	8.7	27.9	11.5	14.6
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	16.8	22.7	14.5	18.0	7.1	32.4	7.0	25.5
Max Q Clear Time (g_c+I1), s	10.3	12.9	8.5	8.1	3.8	15.2	2.7	8.1
Green Ext Time (p_c), s	1.0	3.3	0.2	0.6	0.0	4.7	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	23.2
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	191	52	33	55	37	37	876	103	50	833	56
Future Volume (veh/h)	102	191	52	33	55	37	37	876	103	50	833	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.97	1.00		0.98	1.00		0.96
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	1870	1945	1870	1870	1870	1870	1914	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	111	208	57	36	60	40	40	952	112	54	905	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	4	4	4	2	2	2
Cap, veh/h	376	349	96	256	248	166	106	1392	164	127	1536	103
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.06	0.44	0.44	0.07	0.46	0.46
Sat Flow, veh/h	1264	1453	398	1097	1033	689	1823	3144	370	1781	3367	227
Grp Volume(v), veh/h	111	0	265	36	0	100	40	529	535	54	478	488
Grp Sat Flow(s),veh/h/ln	1264	0	1851	1097	0	1721	1823	1749	1765	1781	1777	1818
Q Serve(g_s), s	4.3	0.0	7.0	1.7	0.0	2.6	1.2	13.3	13.3	1.6	11.0	11.0
Cycle Q Clear(g_c), s	6.8	0.0	7.0	8.6	0.0	2.6	1.2	13.3	13.3	1.6	11.0	11.0
Prop In Lane	1.00		0.22	1.00		0.40	1.00		0.21	1.00		0.12
Lane Grp Cap(c), veh/h	376	0	445	256	0	414	106	774	781	127	810	829
V/C Ratio(X)	0.30	0.00	0.60	0.14	0.00	0.24	0.38	0.68	0.68	0.42	0.59	0.59
Avail Cap(c_a), veh/h	565	0	723	420	0	672	248	1477	1491	275	1533	1568
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	18.5	22.4	0.0	16.9	25.0	12.3	12.3	24.5	11.1	11.1
Incr Delay (d2), s/veh	0.4	0.0	1.3	0.2	0.0	0.3	2.2	1.1	1.1	2.2	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	1.2	0.0	2.9	0.4	0.0	1.0	0.5	4.7	4.7	0.7	3.3	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.0	0.0	19.8	22.6	0.0	17.2	27.2	13.3	13.3	26.7	11.8	11.8
LnGrp LOS	C	A	B	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		376			136			1104			1020	
Approach Delay, s/veh		19.9			18.6			13.8			12.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	28.9		17.7	7.7	29.6		17.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.5	46.5		21.5	7.5	47.5		21.5
Max Q Clear Time (g_c+I1), s	3.6	15.3		9.0	3.2	13.0		10.6
Green Ext Time (p_c), s	0.0	9.0		1.6	0.0	6.5		0.4

Intersection Summary		
HCM 6th Ctrl Delay	14.5	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	70	160	381	352	778	0	0	755	188
Future Volume (veh/h)	0	0	0	70	160	381	352	778	0	0	755	188
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1841	1826	1914	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				76	174	414	383	846	0	0	821	204
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	5	4	3	3	0	0	3	3
Cap, veh/h				132	303	388	429	2278	0	0	969	241
Arrive On Green				0.24	0.24	0.24	0.24	0.65	0.00	0.00	0.35	0.35
Sat Flow, veh/h				547	1252	1601	1767	3618	0	0	2883	693
Grp Volume(v), veh/h				250	0	414	383	846	0	0	519	506
Grp Sat Flow(s),veh/h/ln				1799	0	1601	1767	1763	0	0	1763	1720
Q Serve(g_s), s				9.9	0.0	19.5	16.9	9.0	0.0	0.0	21.9	21.9
Cycle Q Clear(g_c), s				9.9	0.0	19.5	16.9	9.0	0.0	0.0	21.9	21.9
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.40
Lane Grp Cap(c), veh/h				436	0	388	429	2278	0	0	612	598
V/C Ratio(X)				0.57	0.00	1.07	0.89	0.37	0.00	0.00	0.85	0.85
Avail Cap(c_a), veh/h				436	0	388	551	2692	0	0	698	681
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.9	0.0	30.5	29.5	6.6	0.0	0.0	24.3	24.3
Incr Delay (d2), s/veh				1.8	0.0	64.8	14.1	0.1	0.0	0.0	8.6	8.8
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				4.3	0.0	14.2	8.6	2.8	0.0	0.0	10.1	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				28.7	0.0	95.4	43.6	6.7	0.0	0.0	32.9	33.1
LnGrp LOS				C	A	F	D	A	A	A	C	C
Approach Vol, veh/h					664			1229			1025	
Approach Delay, s/veh					70.3			18.2			33.0	
Approach LOS					E			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	56.5		24.0	32.5		24.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	61.5		25.1	31.9		19.5
Max Q Clear Time (g_c+I1), s	11.0		18.9	23.9		21.5
Green Ext Time (p_c), s	7.4		0.7	4.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	35.3
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	9	193	0	0	0	0	1004	172	336	521	0
Future Volume (veh/h)	130	9	193	0	0	0	0	1004	172	336	521	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
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	1900	1781	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	141	10	210				0	1091	187	365	566	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	8	0				0	2	2	2	2	0
Cap, veh/h	283	20	269				0	1401	624	421	2467	0
Arrive On Green	0.18	0.18	0.18				0.00	0.39	0.39	0.24	0.69	0.00
Sat Flow, veh/h	1589	113	1510				0	3647	1583	1781	3647	0
Grp Volume(v), veh/h	151	0	210				0	1091	187	365	566	0
Grp Sat Flow(s),veh/h/ln	1702	0	1510				0	1777	1583	1781	1777	0
Q Serve(g_s), s	5.6	0.0	9.4				0.0	18.9	5.7	13.9	4.1	0.0
Cycle Q Clear(g_c), s	5.6	0.0	9.4				0.0	18.9	5.7	13.9	4.1	0.0
Prop In Lane	0.93		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	303	0	269				0	1401	624	421	2467	0
V/C Ratio(X)	0.50	0.00	0.78				0.00	0.78	0.30	0.87	0.23	0.00
Avail Cap(c_a), veh/h	435	0	386				0	1714	764	619	3177	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.1	0.0	27.7				0.0	18.7	14.7	25.9	3.9	0.0
Incr Delay (d2), s/veh	1.3	0.0	6.4				0.0	1.9	0.3	8.7	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	2.3	0.0	3.7				0.0	7.4	1.9	6.6	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	0.0	34.1				0.0	20.6	14.9	34.6	4.0	0.0
LnGrp LOS	C	A	C				A	C	B	C	A	A
Approach Vol, veh/h		361						1278			931	
Approach Delay, s/veh		31.3						19.7			16.0	
Approach LOS		C						B			B	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	11.1	32.3		17.0		53.4			
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5			
Max Green Setting (Gmax), s	24.5	34.0		18.0		63.0			
Max Q Clear Time (g_c+I1), s	15.9	20.9		11.4		6.1			
Green Ext Time (p_c), s	0.8	6.9		1.2		4.5			

Intersection Summary	
HCM 6th Ctrl Delay	20.0
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	165	24	50	36	155	3	664	35	148	431	14
Future Volume (veh/h)	62	165	24	50	36	155	3	664	35	148	431	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.99	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	179	26	54	39	168	3	722	38	161	468	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	345	50	252	66	285	497	818	43	365	1015	33
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.01	0.46	0.46	0.10	0.56	0.56
Sat Flow, veh/h	1167	1589	231	1169	305	1312	1781	1760	93	1781	1802	58
Grp Volume(v), veh/h	67	0	205	54	0	207	3	0	760	161	0	483
Grp Sat Flow(s),veh/h/ln	1167	0	1820	1169	0	1616	1781	0	1853	1781	0	1860
Q Serve(g_s), s	3.5	0.0	6.3	2.7	0.0	7.3	0.1	0.0	23.5	2.5	0.0	9.7
Cycle Q Clear(g_c), s	10.7	0.0	6.3	9.0	0.0	7.3	0.1	0.0	23.5	2.5	0.0	9.7
Prop In Lane	1.00		0.13	1.00		0.81	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	234	0	396	252	0	351	497	0	861	365	0	1047
V/C Ratio(X)	0.29	0.00	0.52	0.21	0.00	0.59	0.01	0.00	0.88	0.44	0.00	0.46
Avail Cap(c_a), veh/h	314	0	521	333	0	463	687	0	1058	385	0	1068
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.0	0.0	21.8	25.8	0.0	22.2	9.0	0.0	15.3	12.1	0.0	8.1
Incr Delay (d2), s/veh	0.7	0.0	1.1	0.4	0.0	1.6	0.0	0.0	7.6	0.8	0.0	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	1.0	0.0	2.6	0.8	0.0	2.8	0.0	0.0	9.9	0.9	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.7	0.0	22.9	26.2	0.0	23.8	9.0	0.0	23.0	13.0	0.0	8.5
LnGrp LOS	C	A	C	C	A	C	A	A	C	B	A	A
Approach Vol, veh/h		272			261			763			644	
Approach Delay, s/veh		24.0			24.3			22.9			9.6	
Approach LOS		C			C			C			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	33.9		18.2	4.9	40.1		18.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.3	36.1		18.1	7.1	36.3		18.1				
Max Q Clear Time (g_c+I1), s	14.5	25.5		12.7	2.1	11.7		11.0				
Green Ext Time (p_c), s	0.1	3.9		0.6	0.0	3.1		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	73	443	258	88	262	0	0	321	97
Future Volume (veh/h)	0	0	0	73	443	258	88	262	0	0	321	97
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.98
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				1900	1841	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				79	482	280	96	285	0	0	349	105
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	4	0	2	2	0	0	2	2
Cap, veh/h				113	700	438	181	860	0	0	507	423
Arrive On Green				0.37	0.37	0.37	0.10	0.46	0.00	0.00	0.27	0.27
Sat Flow, veh/h				308	1915	1197	1781	1870	0	0	1870	1560
Grp Volume(v), veh/h				468	0	373	96	285	0	0	349	105
Grp Sat Flow(s),veh/h/ln				1825	0	1595	1781	1870	0	0	1870	1560
Q Serve(g_s), s				11.3	0.0	10.0	2.6	5.0	0.0	0.0	8.6	2.7
Cycle Q Clear(g_c), s				11.3	0.0	10.0	2.6	5.0	0.0	0.0	8.6	2.7
Prop In Lane				0.17		0.75	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				667	0	583	181	860	0	0	507	423
V/C Ratio(X)				0.70	0.00	0.64	0.53	0.33	0.00	0.00	0.69	0.25
Avail Cap(c_a), veh/h				1151	0	1006	432	1760	0	0	1143	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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				13.9	0.0	13.5	22.0	8.9	0.0	0.0	16.8	14.7
Incr Delay (d2), s/veh				1.4	0.0	1.2	2.4	0.2	0.0	0.0	1.7	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
%ile BackOfQ(50%),veh/ln				4.1	0.0	3.2	1.1	1.7	0.0	0.0	3.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.3	0.0	14.7	24.4	9.1	0.0	0.0	18.5	15.0
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					841			381			454	
Approach Delay, s/veh					15.0			13.0			17.7	
Approach LOS					B			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	28.2		9.7	18.5		23.3
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	48.5		12.5	31.5		32.5
Max Q Clear Time (g_c+I1), s	7.0		4.6	10.6		13.3
Green Ext Time (p_c), s	1.8		0.1	2.4		5.6

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	114	71	71	41	3	63	303	122	6	213	18
Future Volume (veh/h)	141	114	71	71	41	3	63	303	122	6	213	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	0.99		0.98	0.99		0.98
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	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	153	124	77	77	45	3	68	329	133	7	232	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	210	108	430	221	12	176	504	188	114	740	62
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	570	672	345	835	708	38	135	1186	443	14	1740	147
Grp Volume(v), veh/h	354	0	0	125	0	0	530	0	0	259	0	0
Grp Sat Flow(s),veh/h/ln	1588	0	0	1581	0	0	1764	0	0	1901	0	0
Q Serve(g_s), s	4.9	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.6	0.0	0.0	1.7	0.0	0.0	8.2	0.0	0.0	3.1	0.0	0.0
Prop In Lane	0.43		0.22	0.62		0.02	0.13		0.25	0.03		0.08
Lane Grp Cap(c), veh/h	646	0	0	663	0	0	869	0	0	916	0	0
V/C Ratio(X)	0.55	0.00	0.00	0.19	0.00	0.00	0.61	0.00	0.00	0.28	0.00	0.00
Avail Cap(c_a), veh/h	1090	0	0	1071	0	0	1666	0	0	1785	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)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.3	0.0	0.0	8.7	0.0	0.0	7.9	0.0	0.0	6.5	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.0	0.7	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	0.5	0.0	0.0	2.2	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.0	0.0	0.0	8.8	0.0	0.0	8.6	0.0	0.0	6.7	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		354			125			530			259	
Approach Delay, s/veh		11.0			8.8			8.6			6.7	
Approach LOS		B			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	19.1	15.2	19.1	15.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	30.5	20.5	30.5	20.5
Max Q Clear Time (g_c+I1), s	10.2	8.6	5.1	3.7
Green Ext Time (p_c), s	3.9	1.8	1.5	0.6

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	621	23	134	538	98	39	186	140	45	88	23
Future Volume (veh/h)	87	621	23	134	538	98	39	186	140	45	88	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	0.99		0.99
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	1826	1826	1826	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	675	25	146	585	107	42	202	152	49	96	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	2	2	2
Cap, veh/h	179	1008	37	217	932	170	112	290	201	190	333	74
Arrive On Green	0.10	0.30	0.30	0.12	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1739	3410	126	1767	2960	540	103	940	650	313	1078	240
Grp Volume(v), veh/h	95	343	357	146	348	344	396	0	0	170	0	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1801	1767	1763	1737	1693	0	0	1630	0	0
Q Serve(g_s), s	2.6	8.6	8.6	3.9	8.3	8.4	4.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.6	8.6	8.6	3.9	8.3	8.4	10.3	0.0	0.0	3.5	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.31	0.11		0.38	0.29		0.15
Lane Grp Cap(c), veh/h	179	513	532	217	555	547	603	0	0	597	0	0
V/C Ratio(X)	0.53	0.67	0.67	0.67	0.63	0.63	0.66	0.00	0.00	0.28	0.00	0.00
Avail Cap(c_a), veh/h	391	1000	1039	554	1174	1157	1183	0	0	1112	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.0	15.3	15.3	20.7	14.4	14.5	15.3	0.0	0.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	2.4	1.5	1.5	3.6	1.2	1.2	1.2	0.0	0.0	0.3	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	1.0	2.8	2.9	1.6	2.7	2.7	3.5	0.0	0.0	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	16.8	16.8	24.4	15.6	15.7	16.5	0.0	0.0	13.3	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		795			838			396			170	
Approach Delay, s/veh		17.6			17.2			16.5			13.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.6	19.1		19.8	9.6	20.1		19.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	15.5	28.5		32.5	11.1	32.9		32.5
Max Q Clear Time (g_c+I1), s	5.9	10.6		5.5	4.6	10.4		12.3
Green Ext Time (p_c), s	0.2	3.7		1.0	0.1	3.9		2.4

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	9	12	204	114	9
Future Vol, veh/h	7	9	12	204	114	9
Conflicting Peds, #/hr	0	0	2	0	0	2
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, %	10	10	2	2	2	2
Mvmt Flow	8	10	13	222	124	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	379	131	136	0	-	0
Stage 1	131	-	-	-	-	-
Stage 2	248	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.12	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.218	-	-	-
Pot Cap-1 Maneuver	607	898	1448	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	599	896	1445	-	-	-
Mov Cap-2 Maneuver	599	-	-	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	773	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1445	-	736	-	-
HCM Lane V/C Ratio	0.009	-	0.024	-	-
HCM Control Delay (s)	7.5	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	371	15	95	205	3	11	2	181	19	4	1
Future Vol, veh/h	1	371	15	95	205	3	11	2	181	19	4	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	40	3	5	43	10	4	4	4	33	33	33
Mvmt Flow	1	403	16	103	223	3	12	2	197	21	4	1
Number of Lanes	1	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	3
HCM Control Delay	13.3	10.9	11.8	11
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	6%	100%	0%	0%	100%	0%	0%	79%
Vol Thru, %	1%	0%	100%	89%	0%	100%	96%	17%
Vol Right, %	93%	0%	0%	11%	0%	0%	4%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	194	1	247	139	95	137	71	24
LT Vol	11	1	0	0	95	0	0	19
Through Vol	2	0	247	124	0	137	68	4
RT Vol	181	0	0	15	0	0	3	1
Lane Flow Rate	211	1	269	151	103	149	78	26
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.346	0.002	0.48	0.239	0.185	0.272	0.129	0.056
Departure Headway (Hd)	5.905	6.298	6.429	5.715	6.443	6.591	5.992	7.78
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	609	569	562	629	558	545	599	460
Service Time	3.645	4.031	4.161	3.447	4.178	4.326	3.727	5.535
HCM Lane V/C Ratio	0.346	0.002	0.479	0.24	0.185	0.273	0.13	0.057
HCM Control Delay	11.8	9	15	10.2	10.6	11.8	9.6	11
HCM Lane LOS	B	A	B	B	B	B	A	B
HCM 95th-tile Q	1.5	0	2.6	0.9	0.7	1.1	0.4	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	5	23	257	0	0	11	923	288	157	937	1
Future Volume (veh/h)	3	5	23	257	0	0	11	923	288	157	937	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1900	1900	1900	1811	1811	1811	1826	1826	1826
Adj Flow Rate, veh/h	3	5	25	279	0	0	12	1003	313	171	1018	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	5	5	5
Cap, veh/h	35	58	79	427	0	190	36	1404	807	217	1820	2
Arrive On Green	0.05	0.05	0.05	0.12	0.00	0.00	0.02	0.41	0.41	0.12	0.51	0.51
Sat Flow, veh/h	699	1166	1610	3619	0	1610	1725	3441	1533	1739	3556	3
Grp Volume(v), veh/h	8	0	25	279	0	0	12	1003	313	171	497	522
Grp Sat Flow(s),veh/h/ln	1865	0	1610	1810	0	1610	1725	1721	1533	1739	1735	1825
Q Serve(g_s), s	0.2	0.0	0.9	4.4	0.0	0.0	0.4	14.6	7.3	5.7	11.8	11.8
Cycle Q Clear(g_c), s	0.2	0.0	0.9	4.4	0.0	0.0	0.4	14.6	7.3	5.7	11.8	11.8
Prop In Lane	0.37		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	92	0	79	427	0	190	36	1404	807	217	887	934
V/C Ratio(X)	0.09	0.00	0.31	0.65	0.00	0.00	0.33	0.71	0.39	0.79	0.56	0.56
Avail Cap(c_a), veh/h	217	0	188	1085	0	483	201	1920	1037	391	1156	1216
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	27.6	25.3	0.0	0.0	29.0	14.8	8.5	25.5	10.0	10.0
Incr Delay (d2), s/veh	0.4	0.0	2.2	1.7	0.0	0.0	5.1	0.8	0.3	6.3	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	0.4	1.9	0.0	0.0	0.2	5.1	2.8	2.6	3.8	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	0.0	29.8	27.0	0.0	0.0	34.1	15.6	8.8	31.8	10.6	10.6
LnGrp LOS	C	A	C	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		33			279			1328			1190	
Approach Delay, s/veh		29.3			27.0			14.2			13.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	29.0		7.5	5.8	35.2		11.6
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		7.0	7.0	40.0		18.0
Max Q Clear Time (g_c+I1), s	7.7	16.6		2.9	2.4	13.8		6.4
Green Ext Time (p_c), s	0.2	7.9		0.0	0.0	7.5		0.7

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	198.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	204	159	887	186	276	1156
Future Vol, veh/h	204	159	887	186	276	1156
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	22	22	10	22	22	10
Mvmt Flow	222	173	964	202	300	1257

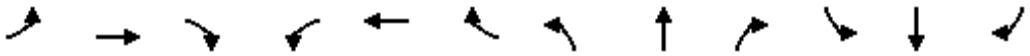
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2294	583	0	0	1166	0
Stage 1	1065	-	-	-	-	-
Stage 2	1229	-	-	-	-	-
Critical Hdwy	7.24	7.34	-	-	4.54	-
Critical Hdwy Stg 1	6.24	-	-	-	-	-
Critical Hdwy Stg 2	6.24	-	-	-	-	-
Follow-up Hdwy	3.72	3.52	-	-	2.42	-
Pot Cap-1 Maneuver	~ 25	409	-	-	493	-
Stage 1	252	-	-	-	-	-
Stage 2	~ 203	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 10	409	-	-	493	-
Mov Cap-2 Maneuver	~ 58	-	-	-	-	-
Stage 1	252	-	-	-	-	-
Stage 2	~ 79	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 1551.9	0	4.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	93	493	-
HCM Lane V/C Ratio	-	-	4.243	0.609	-
HCM Control Delay (s)	-	-	$ 1551.9	23	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	41.3	4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO WITH ORANGE STREET EXTENSION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	260	340	480	294	17	100	3	132	24	20	5
Future Volume (veh/h)	0	260	340	480	294	17	100	3	132	24	20	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1722	1648	1714	1796	1868	1796	1856	1930	1856	1870	1945	1870
Adj Flow Rate, veh/h	0	283	370	522	320	18	109	3	143	26	22	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	12	17	17	7	7	7	3	3	3	2	2	2
Cap, veh/h	2	468	415	580	2372	133	187	18	170	192	149	28
Arrive On Green	0.00	0.30	0.30	0.34	0.69	0.69	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1640	1566	1387	1711	3416	191	593	95	879	602	768	143
Grp Volume(v), veh/h	0	283	370	522	166	172	255	0	0	53	0	0
Grp Sat Flow(s),veh/h/ln	1640	1566	1387	1711	1775	1833	1567	0	0	1513	0	0
Q Serve(g_s), s	0.0	11.0	18.2	20.7	2.2	2.3	9.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.0	18.2	20.7	2.2	2.3	11.1	0.0	0.0	1.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.10	0.43		0.56	0.49		0.09
Lane Grp Cap(c), veh/h	2	468	415	580	1232	1272	375	0	0	368	0	0
V/C Ratio(X)	0.00	0.60	0.89	0.90	0.13	0.14	0.68	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	161	506	448	889	1309	1352	467	0	0	459	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	21.4	23.9	22.4	3.7	3.7	27.5	0.0	0.0	23.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	18.8	8.3	0.0	0.0	2.9	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.9	7.5	8.7	0.5	0.5	4.3	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.2	42.7	30.6	3.7	3.7	30.4	0.0	0.0	24.0	0.0	0.0
LnGrp LOS	A	C	D	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		653			860			255			53	
Approach Delay, s/veh		34.2			20.1			30.4			24.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	28.1	25.3		17.8	0.0	53.4		17.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	37.0	23.0		18.0	7.0	52.5		18.0				
Max Q Clear Time (g_c+I1), s	22.7	20.2		3.6	0.0	4.3		13.1				
Green Ext Time (p_c), s	1.5	1.1		0.2	0.0	2.0		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			26.7									
HCM 6th LOS			C									

Intersection	
Intersection Delay, s/veh	276.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	705	91	71	143	6	47	99	32	157	413	0
Future Vol, veh/h	2	705	91	71	143	6	47	99	32	157	413	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	8	18	8	2	5	2	5	5	4	2	5	2
Mvmt Flow	2	766	99	77	155	7	51	108	35	171	449	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	445.8	28.1	21.7	214.3
HCM LOS	F	D	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	32%	0%	0%	33%	0%	28%
Vol Thru, %	68%	0%	88%	67%	0%	72%
Vol Right, %	0%	100%	11%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	146	32	798	214	6	570
LT Vol	47	0	2	71	0	157
Through Vol	99	0	705	143	0	413
RT Vol	0	32	91	0	6	0
Lane Flow Rate	159	35	867	233	7	620
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	0.397	0.079	1.924	0.563	0.014	1.378
Departure Headway (Hd)	12.457	11.536	9.021	11.72	10.85	10.099
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	292	313	416	312	332	366
Service Time	10.157	9.236	7.021	9.42	8.55	8.099
HCM Lane V/C Ratio	0.545	0.112	2.084	0.747	0.021	1.694
HCM Control Delay	23.1	15.2	445.8	28.5	13.7	214.3
HCM Lane LOS	C	C	F	D	B	F
HCM 95th-tile Q	1.8	0.3	51.7	3.2	0	24.4

Intersection	
Intersection Delay, s/veh	13.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	352	65	40	0	0	0	50	65	2	106	0
Future Vol, veh/h	43	352	65	40	0	0	0	50	65	2	106	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	11	24	11	12	12	12	3	3	6	2	2	2
Mvmt Flow	47	383	71	43	0	0	0	54	71	2	115	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16.3	9.1	9.3	9.7
HCM LOS	C	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	9%	100%	2%
Vol Thru, %	43%	77%	0%	98%
Vol Right, %	57%	14%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	460	40	108
LT Vol	0	43	40	2
Through Vol	50	352	0	106
RT Vol	65	65	0	0
Lane Flow Rate	125	500	43	117
Geometry Grp	1	1	1	1
Degree of Util (X)	0.177	0.653	0.067	0.177
Departure Headway (Hd)	5.11	4.702	5.549	5.439
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	694	765	638	653
Service Time	3.199	2.762	3.646	3.53
HCM Lane V/C Ratio	0.18	0.654	0.067	0.179
HCM Control Delay	9.3	16.3	9.1	9.7
HCM Lane LOS	A	C	A	A
HCM 95th-tile Q	0.6	4.9	0.2	0.6

Intersection	
Int Delay, s/veh	18.8

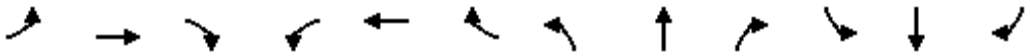
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	400	17	23	654	6	177	2	240	5	0	30
Future Vol, veh/h	0	400	17	23	654	6	177	2	240	5	0	30
Conflicting Peds, #/hr	5	0	1	1	0	5	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	-	-	-	115	-	-	-
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, %	4	13	4	6	9	6	46	11	11	4	4	4
Mvmt Flow	0	435	18	25	711	7	192	2	261	5	0	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	723	0	-	436	0	0	842	1209	220	990	1206	364
Stage 1	-	-	-	-	-	-	436	436	-	770	770	-
Stage 2	-	-	-	-	-	-	406	773	-	220	436	-
Critical Hdwy	4.18	-	-	4.22	-	-	8.42	6.72	7.12	7.58	6.58	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-	7.42	5.72	-	6.58	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.42	5.72	-	6.58	5.58	-
Follow-up Hdwy	2.24	-	-	2.26	-	-	3.96	4.11	3.41	3.54	4.04	3.34
Pot Cap-1 Maneuver	862	-	0	1092	-	-	195	169	757	198	179	627
Stage 1	-	-	0	-	-	-	466	556	-	355	403	-
Stage 2	-	-	0	-	-	-	488	386	-	756	573	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	858	-	-	1091	-	-	~ 181	164	756	125	174	624
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 181	164	-	125	174	-
Stage 1	-	-	-	-	-	-	466	555	-	353	392	-
Stage 2	-	-	-	-	-	-	452	375	-	493	572	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	67.4	15
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	181	756	858	-	1091	-	-	397
HCM Lane V/C Ratio	1.075	0.345	-	-	0.023	-	-	0.096
HCM Control Delay (s)	141.3	12.3	0	-	8.4	-	-	15
HCM Lane LOS	F	B	A	-	A	-	-	C
HCM 95th %tile Q(veh)	9.4	1.5	0	-	0.1	-	-	0.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	746	0	0	531	543	0	0	0	418	0	158
Future Volume (veh/h)	214	746	0	0	531	543	0	0	0	418	0	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
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	1767	1767	1767	1678	1737	1737	1900	1900	1900	1826	1826	1826
Adj Flow Rate, veh/h	233	811	0	0	577	0	0	0	0	313	197	172
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	9	15	11	11	0	0	0	5	5	5
Cap, veh/h	291	1791	0	3	894		0	564	0	660	265	232
Arrive On Green	0.17	0.53	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.30	0.30	0.30
Sat Flow, veh/h	1682	3445	0	1598	3387	0	0	1900	0	1739	893	780
Grp Volume(v), veh/h	233	811	0	0	577	0	0	0	0	313	0	369
Grp Sat Flow(s),veh/h/ln	1682	1678	0	1598	1650	0	0	1900	0	1739	0	1674
Q Serve(g_s), s	6.7	7.5	0.0	0.0	7.8	0.0	0.0	0.0	0.0	7.7	0.0	10.0
Cycle Q Clear(g_c), s	6.7	7.5	0.0	0.0	7.8	0.0	0.0	0.0	0.0	7.7	0.0	10.0
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.47
Lane Grp Cap(c), veh/h	291	1791	0	3	894		0	564	0	660	0	497
V/C Ratio(X)	0.80	0.45	0.00	0.00	0.65		0.00	0.00	0.00	0.47	0.00	0.74
Avail Cap(c_a), veh/h	520	2909	0	223	2301		0	1003	0	1062	0	884
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.9	7.2	0.0	0.0	16.2	0.0	0.0	0.0	0.0	15.1	0.0	15.9
Incr Delay (d2), s/veh	5.1	0.2	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.5	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	2.6	1.7	0.0	0.0	2.4	0.0	0.0	0.0	0.0	2.7	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	7.4	0.0	0.0	16.9	0.0	0.0	0.0	0.0	15.7	0.0	18.1
LnGrp LOS	C	A	A	A	B		A	A	A	B	A	B
Approach Vol, veh/h		1044			577	A		0			682	
Approach Delay, s/veh		11.3			16.9			0.0			17.0	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	30.8		19.4	13.2	17.6		19.4				
Change Period (Y+Rc), s	4.5	4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s	7.0	43.5		26.5	15.5	35.0		26.5				
Max Q Clear Time (g_c+I1), s	0.0	9.5		12.0	8.7	9.8		0.0				
Green Ext Time (p_c), s	0.0	6.1		2.9	0.4	3.7		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	14.4	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	75.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	134	612	8	17	384	3	8	33	20	374	47	226
Future Vol, veh/h	134	612	8	17	384	3	8	33	20	374	47	226
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	20	18	20	5	4	5	2	2	2	2	2	2
Mvmt Flow	146	665	9	18	417	3	9	36	22	407	51	246
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	81.1	84.7	14	70.1
HCM LOS	F	F	B	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	20%	0%	30%	0%	4%	0%	89%	0%
Vol Thru, %	80%	0%	70%	97%	96%	0%	11%	0%
Vol Right, %	0%	100%	0%	3%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	41	20	440	314	401	3	421	226
LT Vol	8	0	134	0	17	0	374	0
Through Vol	33	0	306	306	384	0	47	0
RT Vol	0	20	0	8	0	3	0	226
Lane Flow Rate	45	22	478	341	436	3	458	246
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.123	0.055	1.127	0.785	1.037	0.007	1.082	0.503
Departure Headway (Hd)	10.436	9.592	8.861	8.649	8.988	8.222	8.83	7.643
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	346	376	411	420	405	438	416	474
Service Time	8.136	7.292	6.561	6.349	6.688	5.922	6.53	5.343
HCM Lane V/C Ratio	0.13	0.059	1.163	0.812	1.077	0.007	1.101	0.519
HCM Control Delay	14.6	12.8	113	36.4	85.3	11	98.1	17.8
HCM Lane LOS	B	B	F	E	F	B	F	C
HCM 95th-tile Q	0.4	0.2	16.7	6.8	13.4	0	15.1	2.8

Intersection	
Int Delay, s/veh	296.7

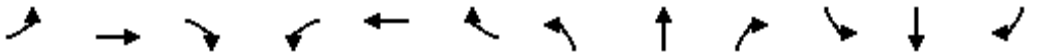
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	233	805	548	125	195	26
Future Vol, veh/h	233	805	548	125	195	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	13	12	4	5	12	12
Mvmt Flow	253	875	596	136	212	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1540	-	212	0	-	0
Stage 1	212	-	-	-	-	-
Stage 2	1328	-	-	-	-	-
Critical Hdwy	6.53	-	4.14	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	-	2.236	-	-	-
Pot Cap-1 Maneuver	~ 120	0	1347	-	-	0
Stage 1	798	0	-	-	-	0
Stage 2	~ 234	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 67	-	1347	-	-	-
Mov Cap-2 Maneuver	~ 67	-	-	-	-	-
Stage 1	445	-	-	-	-	-
Stage 2	~ 234	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 1379	8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1347	-	67	-	-
HCM Lane V/C Ratio	0.442	-	3.78	-	-
HCM Control Delay (s)	9.8	-	$ 1379	0	-
HCM Lane LOS	A	-	F	A	-
HCM 95th %tile Q(veh)	2.3	-	26.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	955	33	30	670	433	33	64	64	596	33	370
Future Volume (veh/h)	176	955	33	30	670	433	33	64	64	596	33	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	191	1038	36	33	728	471	36	70	70	648	36	402
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	227	1271	556	75	922	401	273	94	94	586	586	687
Arrive On Green	0.13	0.36	0.36	0.05	0.28	0.28	0.05	0.11	0.11	0.29	0.35	0.35
Sat Flow, veh/h	1753	3497	1530	1654	3300	1435	1781	885	885	1598	1678	1434
Grp Volume(v), veh/h	191	1038	36	33	728	471	36	0	140	648	36	402
Grp Sat Flow(s),veh/h/ln	1753	1749	1530	1654	1650	1435	1781	0	1771	1598	1678	1434
Q Serve(g_s), s	8.8	22.1	1.3	1.6	16.8	23.0	1.4	0.0	6.3	24.0	1.2	16.7
Cycle Q Clear(g_c), s	8.8	22.1	1.3	1.6	16.8	23.0	1.4	0.0	6.3	24.0	1.2	16.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	227	1271	556	75	922	401	273	0	187	586	586	687
V/C Ratio(X)	0.84	0.82	0.06	0.44	0.79	1.18	0.13	0.00	0.75	1.11	0.06	0.59
Avail Cap(c_a), veh/h	234	1271	556	141	922	401	339	0	344	586	672	760
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	1.00	1.00
Uniform Delay (d), s/veh	35.0	23.7	17.1	38.3	27.4	29.7	30.1	0.0	35.8	23.1	17.8	15.5
Incr Delay (d2), s/veh	22.9	4.3	0.0	4.1	4.7	102.1	0.2	0.0	5.9	69.9	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	8.9	0.4	0.7	6.6	18.9	0.6	0.0	3.0	20.9	0.4	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	28.0	17.1	42.4	32.1	131.7	30.3	0.0	41.6	93.0	17.9	16.5
LnGrp LOS	E	C	B	D	C	F	C	A	D	F	B	B
Approach Vol, veh/h		1265			1232			176			1086	
Approach Delay, s/veh		32.2			70.5			39.3			62.2	
Approach LOS		C			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	33.9	7.9	32.8	14.6	27.0	28.0	12.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	27.0	7.0	33.0	11.0	23.0	24.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	24.1	3.4	18.7	10.8	25.0	26.0	8.3
Green Ext Time (p_c), s	0.0	1.8	0.0	1.5	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	53.7
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	337

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	244	1	314	2	621	202	204	846	7
Future Vol, veh/h	0	0	0	244	1	314	2	621	202	204	846	7
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	100	-	-	100	-	-
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	16	16	40	14	7	14	55	7	13
Mvmt Flow	0	0	0	265	1	341	2	675	220	222	920	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1712	2269	466	1693	2163	448	930	0	0	895	0	0
Stage 1	1370	1370	-	789	789	-	-	-	-	-	-	-
Stage 2	342	899	-	904	1374	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.82	6.82	7.7	4.38	-	-	5.2	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.82	5.82	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.66	4.16	3.7	2.34	-	-	2.75	-	-
Pot Cap-1 Maneuver	60	41	549	~ 52	39	466	661	-	-	496	-	-
Stage 1	157	216	-	321	368	-	-	-	-	-	-	-
Stage 2	652	360	-	271	187	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	10	23	548	~ 34	21	466	660	-	-	496	-	-
Mov Cap-2 Maneuver	10	23	-	~ 34	21	-	-	-	-	-	-	-
Stage 1	156	119	-	320	367	-	-	-	-	-	-	-
Stage 2	173	359	-	~ 150	103	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 1464.9	0	3.5
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	660	-	-	-	34	466	496	-	-
HCM Lane V/C Ratio	0.003	-	-	-	7.832	0.732	0.447	-	-
HCM Control Delay (s)	10.5	-	-	$	$ 3302.4	31.1	18	-	-
HCM Lane LOS	B	-	-	A	F	D	C	-	-
HCM 95th %tile Q(veh)	0	-	-	-	32.1	5.9	2.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

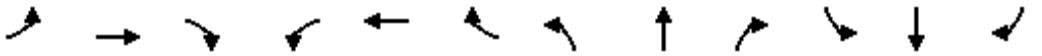
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	2	24	14	0	24	74	948	37	38	860	38
Future Vol, veh/h	6	2	24	14	0	24	74	948	37	38	860	38
Conflicting Peds, #/hr	7	0	0	0	0	7	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	-	0	140	-	-	170	-	-
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, %	15	15	15	25	25	25	8	5	8	14	8	14
Mvmt Flow	7	2	26	15	0	26	80	1030	40	41	935	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1720	2268	488	1761	-	542	976	0	0	1070	0	0
Stage 1	1038	1038	-	1210	-	-	-	-	-	-	-	-
Stage 2	682	1230	-	551	-	-	-	-	-	-	-	-
Critical Hdwy	7.8	6.8	7.2	8	-	7.4	4.26	-	-	4.38	-	-
Critical Hdwy Stg 1	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.8	5.8	-	7	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.65	4.15	3.45	3.75	-	3.55	2.28	-	-	2.34	-	-
Pot Cap-1 Maneuver	50	34	492	42	0	430	667	-	-	581	-	-
Stage 1	224	279	-	161	0	-	-	-	-	-	-	-
Stage 2	377	224	-	432	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	40	28	492	32	-	427	667	-	-	581	-	-
Mov Cap-2 Maneuver	40	28	-	32	-	-	-	-	-	-	-	-
Stage 1	197	259	-	142	-	-	-	-	-	-	-	-
Stage 2	309	197	-	377	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	47.8	80.5	0.8	0.5
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	667	-	-	118	32	427	581	-	-
HCM Lane V/C Ratio	0.121	-	-	0.295	0.476	0.061	0.071	-	-
HCM Control Delay (s)	11.1	-	-	47.8	194.4	14	11.7	-	-
HCM Lane LOS	B	-	-	E	F	B	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.1	1.6	0.2	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	248	81	137	74	220	15	862	176	314	753	20
Future Volume (veh/h)	26	248	81	137	74	220	15	862	176	314	753	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1870	1870	1870	1781	1707	1853	1856	1856	1856	1781	1781	1781
Adj Flow Rate, veh/h	28	270	88	149	80	239	16	937	191	341	818	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	8	13	8	3	3	3	8	8	8
Cap, veh/h	72	301	98	182	495	455	46	1133	503	419	1423	38
Arrive On Green	0.04	0.22	0.22	0.11	0.29	0.29	0.03	0.32	0.32	0.13	0.42	0.42
Sat Flow, veh/h	1781	1351	440	1697	1707	1570	1767	3526	1567	3291	3366	91
Grp Volume(v), veh/h	28	0	358	149	80	239	16	937	191	341	411	429
Grp Sat Flow(s),veh/h/ln	1781	0	1791	1697	1707	1570	1767	1763	1567	1646	1692	1765
Q Serve(g_s), s	1.2	0.0	15.8	7.0	2.8	10.4	0.7	20.0	7.7	8.2	15.1	15.1
Cycle Q Clear(g_c), s	1.2	0.0	15.8	7.0	2.8	10.4	0.7	20.0	7.7	8.2	15.1	15.1
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	72	0	399	182	495	455	46	1133	503	419	715	746
V/C Ratio(X)	0.39	0.00	0.90	0.82	0.16	0.52	0.35	0.83	0.38	0.81	0.57	0.57
Avail Cap(c_a), veh/h	153	0	429	219	495	455	152	1320	586	465	727	758
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	0.0	30.7	35.6	21.5	24.2	39.0	25.6	21.4	34.6	17.9	17.9
Incr Delay (d2), s/veh	3.4	0.0	20.2	18.2	0.2	1.1	4.4	3.9	0.5	9.8	1.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	8.7	3.6	1.1	3.7	0.4	8.1	2.6	3.6	5.3	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.5	0.0	50.9	53.8	21.7	25.3	43.4	29.5	21.8	44.4	19.0	19.0
LnGrp LOS	D	A	D	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		386			468			1144			1181	
Approach Delay, s/veh		50.2			33.8			28.4			26.3	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	30.7	13.2	22.7	6.6	38.9	7.8	28.1
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	11.5	30.5	10.5	19.5	7.0	35.0	7.0	23.0
Max Q Clear Time (g_c+I1), s	10.2	22.0	9.0	17.8	2.7	17.1	3.2	12.4
Green Ext Time (p_c), s	0.2	4.2	0.1	0.4	0.0	4.4	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	85	65	17	56	23	24	807	98	54	865	102
Future Volume (veh/h)	91	85	65	17	56	23	24	807	98	54	865	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		0.98
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	1870	1945	1870	1870	1870	1870	1930	1856	1856	1796	1796	1796
Adj Flow Rate, veh/h	99	92	71	18	61	25	26	877	107	59	940	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	7	7	7
Cap, veh/h	350	193	149	289	240	98	79	1383	169	137	1455	172
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.04	0.44	0.44	0.08	0.47	0.47
Sat Flow, veh/h	1302	1007	777	1216	1251	513	1838	3162	386	1711	3065	362
Grp Volume(v), veh/h	99	0	163	18	0	86	26	489	495	59	523	528
Grp Sat Flow(s),veh/h/ln	1302	0	1784	1216	0	1764	1838	1763	1785	1711	1706	1721
Q Serve(g_s), s	3.2	0.0	3.8	0.6	0.0	1.9	0.6	10.0	10.0	1.5	10.8	10.8
Cycle Q Clear(g_c), s	5.2	0.0	3.8	4.4	0.0	1.9	0.6	10.0	10.0	1.5	10.8	10.8
Prop In Lane	1.00		0.44	1.00		0.29	1.00		0.22	1.00		0.21
Lane Grp Cap(c), veh/h	350	0	342	289	0	338	79	771	780	137	810	817
V/C Ratio(X)	0.28	0.00	0.48	0.06	0.00	0.25	0.33	0.63	0.63	0.43	0.65	0.65
Avail Cap(c_a), veh/h	676	0	788	593	0	779	305	1766	1788	350	1776	1791
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	16.7	18.7	0.0	15.9	21.6	10.2	10.2	20.3	9.2	9.2
Incr Delay (d2), s/veh	0.4	0.0	1.0	0.1	0.0	0.4	2.4	0.9	0.9	2.1	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	0.9	0.0	1.5	0.2	0.0	0.7	0.3	3.3	3.3	0.6	2.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	17.7	18.7	0.0	16.3	24.0	11.0	11.0	22.4	10.1	10.1
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		262			104			1010			1110	
Approach Delay, s/veh		18.1			16.8			11.4			10.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	24.8		13.4	6.5	26.5		13.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.5	46.5		20.5	7.7	48.3		20.5				
Max Q Clear Time (g_c+I1), s	3.5	12.0		7.2	2.6	12.8		6.4				
Green Ext Time (p_c), s	0.0	8.3		1.0	0.0	7.4		0.4				

Intersection Summary		
HCM 6th Ctrl Delay		12.0
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	84	152	550	253	456	0	0	921	151
Future Volume (veh/h)	0	0	0	84	152	550	253	456	0	0	921	151
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1841	1841	0	0	1811	1811
Adj Flow Rate, veh/h				91	165	598	275	496	0	0	1001	164
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	4	4	0	0	6	6
Cap, veh/h				170	308	428	314	2209	0	0	1177	193
Arrive On Green				0.26	0.26	0.26	0.18	0.63	0.00	0.00	0.40	0.40
Sat Flow, veh/h				653	1184	1648	1753	3589	0	0	3049	484
Grp Volume(v), veh/h				256	0	598	275	496	0	0	582	583
Grp Sat Flow(s),veh/h/ln				1838	0	1648	1753	1749	0	0	1721	1722
Q Serve(g_s), s				9.9	0.0	21.5	12.6	5.0	0.0	0.0	25.5	25.5
Cycle Q Clear(g_c), s				9.9	0.0	21.5	12.6	5.0	0.0	0.0	25.5	25.5
Prop In Lane				0.36		1.00	1.00		0.00	0.00		0.28
Lane Grp Cap(c), veh/h				477	0	428	314	2209	0	0	684	685
V/C Ratio(X)				0.54	0.00	1.40	0.87	0.22	0.00	0.00	0.85	0.85
Avail Cap(c_a), veh/h				477	0	428	371	2514	0	0	779	780
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.4	0.0	30.6	33.1	6.5	0.0	0.0	22.7	22.7
Incr Delay (d2), s/veh				1.2	0.0	192.3	18.0	0.1	0.0	0.0	8.0	8.1
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				4.4	0.0	31.0	6.8	1.6	0.0	0.0	11.2	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				27.5	0.0	222.9	51.1	6.6	0.0	0.0	30.7	30.8
LnGrp LOS				C	A	F	D	A	A	A	C	C
Approach Vol, veh/h					854			771			1165	
Approach Delay, s/veh					164.3			22.5			30.8	
Approach LOS					F			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	56.8		19.4	37.4		26.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	59.5		17.5	37.5		21.5
Max Q Clear Time (g_c+I1), s	7.0		14.6	27.5		23.5
Green Ext Time (p_c), s	3.8		0.2	5.4		0.0

Intersection Summary		
HCM 6th Ctrl Delay		69.4
HCM 6th LOS		E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	0	204	0	0	0	0	468	225	515	486	0
Future Volume (veh/h)	254	0	204	0	0	0	0	468	225	515	486	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				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	1900	1856	1900				0	1856	1856	1841	1841	0
Adj Flow Rate, veh/h	276	0	222				0	509	245	560	528	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	0				0	3	3	4	4	0
Cap, veh/h	365	0	319				0	778	347	631	2279	0
Arrive On Green	0.21	0.00	0.21				0.00	0.22	0.22	0.36	0.65	0.00
Sat Flow, veh/h	1767	0	1545				0	3618	1572	1753	3589	0
Grp Volume(v), veh/h	276	0	222				0	509	245	560	528	0
Grp Sat Flow(s),veh/h/ln	1767	0	1545				0	1763	1572	1753	1749	0
Q Serve(g_s), s	9.3	0.0	8.5				0.0	8.3	9.1	19.1	3.9	0.0
Cycle Q Clear(g_c), s	9.3	0.0	8.5				0.0	8.3	9.1	19.1	3.9	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	365	0	319				0	778	347	631	2279	0
V/C Ratio(X)	0.76	0.00	0.70				0.00	0.65	0.71	0.89	0.23	0.00
Avail Cap(c_a), veh/h	501	0	438				0	1111	496	1064	3473	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.7	0.0	23.3				0.0	22.5	22.8	19.1	4.5	0.0
Incr Delay (d2), s/veh	4.4	0.0	2.9				0.0	0.9	2.6	5.2	0.1	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	3.1				0.0	3.3	3.4	7.8	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.0	0.0	26.2				0.0	23.5	25.5	24.3	4.6	0.0
LnGrp LOS	C	A	C				A	C	C	C	A	A
Approach Vol, veh/h		498						754			1088	
Approach Delay, s/veh		27.2						24.1			14.7	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	27.3	18.5		17.6		45.8						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	38.5	20.0		18.0		63.0						
Max Q Clear Time (g_c+I1), s	21.1	11.1		11.3		5.9						
Green Ext Time (p_c), s	1.8	2.9		1.7		4.1						

Intersection Summary			
HCM 6th Ctrl Delay		20.4	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	86	24	94	60	165	5	395	19	182	489	21
Future Volume (veh/h)	22	86	24	94	60	165	5	395	19	182	489	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	24	93	26	102	65	179	5	429	21	198	532	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	275	330	92	389	102	281	357	555	27	502	790	34
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.01	0.32	0.32	0.14	0.45	0.45
Sat Flow, veh/h	1122	1398	391	1251	432	1190	1767	1753	86	1753	1751	76
Grp Volume(v), veh/h	24	0	119	102	0	244	5	0	450	198	0	555
Grp Sat Flow(s),veh/h/ln	1122	0	1789	1251	0	1623	1767	0	1839	1753	0	1826
Q Serve(g_s), s	0.9	0.0	2.4	3.2	0.0	6.0	0.1	0.0	9.8	2.8	0.0	10.7
Cycle Q Clear(g_c), s	6.9	0.0	2.4	5.7	0.0	6.0	0.1	0.0	9.8	2.8	0.0	10.7
Prop In Lane	1.00		0.22	1.00		0.73	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	275	0	422	389	0	383	357	0	582	502	0	824
V/C Ratio(X)	0.09	0.00	0.28	0.26	0.00	0.64	0.01	0.00	0.77	0.39	0.00	0.67
Avail Cap(c_a), veh/h	465	0	725	600	0	657	619	0	881	534	0	884
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	13.9	16.2	0.0	15.3	10.4	0.0	13.7	8.1	0.0	9.6
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.4	0.0	1.8	0.0	0.0	2.4	0.5	0.0	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	0.2	0.0	0.9	0.9	0.0	2.1	0.0	0.0	3.6	0.7	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	0.0	14.3	16.6	0.0	17.0	10.4	0.0	16.1	8.6	0.0	11.5
LnGrp LOS	B	A	B	B	A	B	B	A	B	A	A	B
Approach Vol, veh/h		143			346			455			753	
Approach Delay, s/veh		15.0			16.9			16.1			10.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.9	18.6		15.0	4.9	24.5		15.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.3	21.3		18.0	7.0	21.5		18.0
Max Q Clear Time (g_c+I1), s	14.8	11.8		8.9	2.1	12.7		8.0
Green Ext Time (p_c), s	0.1	1.9		0.4	0.0	2.3		1.4

Intersection Summary		
HCM 6th Ctrl Delay	13.8	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	113	544	82	40	204	0	0	398	207
Future Volume (veh/h)	0	0	0	113	544	82	40	204	0	0	398	207
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.95
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				1900	1841	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				123	591	89	43	222	0	0	433	225
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	4	0	2	2	0	0	2	2
Cap, veh/h				179	901	142	111	902	0	0	622	502
Arrive On Green				0.34	0.34	0.34	0.06	0.48	0.00	0.00	0.33	0.33
Sat Flow, veh/h				523	2631	415	1781	1870	0	0	1870	1509
Grp Volume(v), veh/h				427	0	376	43	222	0	0	433	225
Grp Sat Flow(s),veh/h/ln				1815	0	1755	1781	1870	0	0	1870	1509
Q Serve(g_s), s				10.4	0.0	9.2	1.2	3.6	0.0	0.0	10.3	6.0
Cycle Q Clear(g_c), s				10.4	0.0	9.2	1.2	3.6	0.0	0.0	10.3	6.0
Prop In Lane				0.29		0.24	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				621	0	601	111	902	0	0	622	502
V/C Ratio(X)				0.69	0.00	0.63	0.39	0.25	0.00	0.00	0.70	0.45
Avail Cap(c_a), veh/h				1147	0	1110	260	1765	0	0	1328	1072
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				14.5	0.0	14.1	23.1	7.8	0.0	0.0	14.9	13.5
Incr Delay (d2), s/veh				1.4	0.0	1.1	2.2	0.1	0.0	0.0	1.4	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				3.9	0.0	3.3	0.5	1.2	0.0	0.0	4.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.9	0.0	15.2	25.3	8.0	0.0	0.0	16.3	14.1
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					803			265			658	
Approach Delay, s/veh					15.6			10.8			15.6	
Approach LOS					B			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	29.3		7.7	21.6		22.1
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	48.5		7.5	36.5		32.5
Max Q Clear Time (g_c+I1), s	5.6		3.2	12.3		12.4
Green Ext Time (p_c), s	1.4		0.0	3.7		5.2

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	40	88	71	41	8	36	132	41	6	372	41
Future Volume (veh/h)	111	40	88	71	41	8	36	132	41	6	372	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	0.99		0.96	0.98		0.96
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	1841	1841	1841	1870	1945	1870	1841	1914	1841	1870	1945	1870
Adj Flow Rate, veh/h	121	43	96	77	45	9	39	143	45	7	404	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	2	2	2	4	4	4	2	2	2
Cap, veh/h	339	113	158	426	218	33	201	497	137	130	690	76
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	552	397	556	805	767	116	138	1225	337	9	1702	187
Grp Volume(v), veh/h	260	0	0	131	0	0	227	0	0	456	0	0
Grp Sat Flow(s),veh/h/ln	1505	0	0	1688	0	0	1699	0	0	1898	0	0
Q Serve(g_s), s	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.2	0.0	0.0	1.5	0.0	0.0	2.4	0.0	0.0	5.4	0.0	0.0
Prop In Lane	0.47		0.37	0.59		0.07	0.17		0.20	0.02		0.10
Lane Grp Cap(c), veh/h	610	0	0	677	0	0	834	0	0	896	0	0
V/C Ratio(X)	0.43	0.00	0.00	0.19	0.00	0.00	0.27	0.00	0.00	0.51	0.00	0.00
Avail Cap(c_a), veh/h	1426	0	0	1506	0	0	1633	0	0	1854	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)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.9	0.0	0.0	8.0	0.0	0.0	5.9	0.0	0.0	6.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.4	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	1.0	0.0	0.0	0.5	0.0	0.0	0.6	0.0	0.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.3	0.0	0.0	8.1	0.0	0.0	6.0	0.0	0.0	7.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		260			131			227			456	
Approach Delay, s/veh		9.3			8.1			6.0			7.2	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.3	12.7	16.3	12.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.5	24.5	26.5	24.5
Max Q Clear Time (g_c+I1), s	4.4	6.2	7.4	3.5
Green Ext Time (p_c), s	1.5	1.6	2.7	0.7

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	760	24	96	394	41	32	90	172	192	155	56
Future Volume (veh/h)	38	760	24	96	394	41	32	90	172	192	155	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.99	0.99		0.97
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	1811	1811	1811	1811	1811	1811	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	41	826	26	104	428	45	35	98	187	209	168	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	6	6	3	3	3	3	3	3
Cap, veh/h	98	1060	33	161	1088	114	102	225	371	308	215	71
Arrive On Green	0.06	0.31	0.31	0.09	0.35	0.35	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1725	3402	107	1725	3128	327	101	593	975	588	565	187
Grp Volume(v), veh/h	41	418	434	104	234	239	320	0	0	438	0	0
Grp Sat Flow(s),veh/h/ln	1725	1721	1788	1725	1721	1734	1669	0	0	1340	0	0
Q Serve(g_s), s	1.4	13.9	13.9	3.7	6.5	6.5	0.0	0.0	0.0	9.7	0.0	0.0
Cycle Q Clear(g_c), s	1.4	13.9	13.9	3.7	6.5	6.5	9.3	0.0	0.0	19.0	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.19	0.11		0.58	0.48		0.14
Lane Grp Cap(c), veh/h	98	536	557	161	599	603	698	0	0	594	0	0
V/C Ratio(X)	0.42	0.78	0.78	0.65	0.39	0.40	0.46	0.00	0.00	0.74	0.00	0.00
Avail Cap(c_a), veh/h	200	741	771	250	791	797	1106	0	0	946	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.6	19.7	19.7	27.5	15.5	15.5	14.9	0.0	0.0	17.9	0.0	0.0
Incr Delay (d2), s/veh	2.8	3.6	3.5	4.3	0.4	0.4	0.5	0.0	0.0	1.8	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	0.6	5.2	5.4	1.6	2.2	2.2	3.1	0.0	0.0	5.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.5	23.3	23.2	31.8	15.9	15.9	15.4	0.0	0.0	19.7	0.0	0.0
LnGrp LOS	C	C	C	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		893			577			320			438	
Approach Delay, s/veh		23.6			18.8			15.4			19.7	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	24.1		28.4	8.1	26.4		28.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.1	27.1		40.3	7.3	28.9		40.3				
Max Q Clear Time (g_c+I1), s	15.7	15.9		21.0	3.4	8.5		11.3				
Green Ext Time (p_c), s	0.1	3.7		2.9	0.0	2.4		2.1				

Intersection Summary		
HCM 6th Ctrl Delay	20.4	
HCM 6th LOS	C	

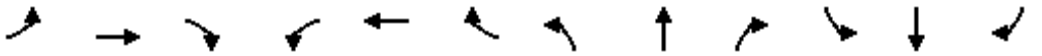
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	11	0	190	210	1
Future Vol, veh/h	0	11	0	190	210	1
Conflicting Peds, #/hr	1	0	5	0	0	5
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, %	2	2	4	4	3	3
Mvmt Flow	0	12	0	207	228	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	442	234	234	0	-	0
Stage 1	234	-	-	-	-	-
Stage 2	208	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.14	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.236	-	-	-
Pot Cap-1 Maneuver	573	805	1322	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	827	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	567	801	1316	-	-	-
Mov Cap-2 Maneuver	567	-	-	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	823	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1316	-	801	-	-
HCM Lane V/C Ratio	-	-	0.015	-	-
HCM Control Delay (s)	0	-	9.6	-	-
HCM Lane LOS	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)	42	187	2	96	235	95	5	0	156	235	0	109
Future Volume (veh/h)	42	187	2	96	235	95	5	0	156	235	0	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1233	1233	1826	1426	1426	1752	1752	1826	1559	1559	1559
Adj Flow Rate, veh/h	46	203	2	104	255	103	5	0	170	255	0	118
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	18	45	45	5	32	32	10	10	5	23	23	23
Cap, veh/h	398	687	7	496	548	215	659	0	633	591	0	540
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.41	0.00	0.41	0.41	0.00	0.41
Sat Flow, veh/h	892	2377	23	1146	1898	745	1021	0	1547	1013	0	1321
Grp Volume(v), veh/h	46	100	105	104	180	178	5	0	170	255	0	118
Grp Sat Flow(s),veh/h/ln	892	1171	1229	1146	1354	1289	1021	0	1547	1013	0	1321
Q Serve(g_s), s	1.3	2.0	2.0	2.3	3.2	3.4	0.1	0.0	2.2	6.6	0.0	1.7
Cycle Q Clear(g_c), s	4.7	2.0	2.0	4.3	3.2	3.4	1.8	0.0	2.2	8.5	0.0	1.7
Prop In Lane	1.00		0.02	1.00		0.58	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	398	339	355	496	391	372	659	0	633	591	0	540
V/C Ratio(X)	0.12	0.30	0.30	0.21	0.46	0.48	0.01	0.00	0.27	0.43	0.00	0.22
Avail Cap(c_a), veh/h	813	884	928	1031	1023	973	1312	0	1480	1146	0	1264
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	10.7	8.2	8.2	9.9	8.7	8.7	6.3	0.0	5.8	8.5	0.0	5.7
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.2	0.8	1.0	0.0	0.0	0.2	0.5	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	0.2	0.3	0.3	0.4	0.6	0.6	0.0	0.0	0.4	0.9	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.8	8.7	8.7	10.1	9.5	9.7	6.3	0.0	6.1	9.0	0.0	5.9
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		251			462			175			373	
Approach Delay, s/veh		9.1			9.7			6.1			8.0	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.1		16.7		13.1		16.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		22.5		28.5		22.5		28.5				
Max Q Clear Time (g_c+I1), s		6.7		10.5		6.3		4.2				
Green Ext Time (p_c), s		1.1		1.9		2.2		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			8.6									
HCM 6th LOS			A									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	7	339	1	0	12	681	391	86	1057	7
Future Volume (veh/h)	3	0	7	339	1	0	12	681	391	86	1057	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1648	1648	1648	1885	1885	1885	1781	1781	1781	1752	1752	1752
Adj Flow Rate, veh/h	3	0	8	369	0	0	13	740	425	93	1149	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	17	17	17	1	1	1	8	8	8	10	10	10
Cap, veh/h	31	0	28	548	0	244	39	1336	826	163	1591	11
Arrive On Green	0.02	0.00	0.02	0.15	0.00	0.00	0.02	0.39	0.39	0.10	0.47	0.47
Sat Flow, veh/h	1570	0	1397	3591	0	1598	1697	3385	1510	1668	3388	24
Grp Volume(v), veh/h	3	0	8	369	0	0	13	740	425	93	564	593
Grp Sat Flow(s),veh/h/ln	1570	0	1397	1795	0	1598	1697	1692	1510	1668	1664	1748
Q Serve(g_s), s	0.1	0.0	0.3	5.2	0.0	0.0	0.4	9.1	9.5	2.9	14.6	14.6
Cycle Q Clear(g_c), s	0.1	0.0	0.3	5.2	0.0	0.0	0.4	9.1	9.5	2.9	14.6	14.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	31	0	28	548	0	244	39	1336	826	163	781	820
V/C Ratio(X)	0.10	0.00	0.29	0.67	0.00	0.00	0.33	0.55	0.51	0.57	0.72	0.72
Avail Cap(c_a), veh/h	205	0	182	1224	0	545	221	2244	1231	345	1231	1292
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	25.9	21.5	0.0	0.0	25.8	12.6	7.7	23.1	11.4	11.4
Incr Delay (d2), s/veh	1.3	0.0	5.7	1.5	0.0	0.0	4.9	0.4	0.5	3.1	1.3	1.2
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	0.1	2.1	0.0	0.0	0.2	3.0	3.7	1.2	4.6	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	0.0	31.6	22.9	0.0	0.0	30.7	12.9	8.2	26.2	12.7	12.7
LnGrp LOS	C	A	C	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		11			369			1178			1250	
Approach Delay, s/veh		30.4			22.9			11.4			13.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	25.7		5.6	5.7	29.7		12.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	11.1	35.6		7.0	7.0	39.7		18.3
Max Q Clear Time (g_c+I1), s	4.9	11.5		2.3	2.4	16.6		7.2
Green Ext Time (p_c), s	0.1	7.4		0.0	0.0	8.6		1.0

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	69.4

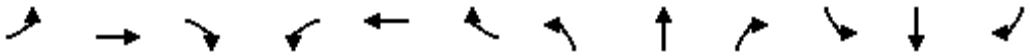
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	124	138	734	201	271	933
Future Vol, veh/h	124	138	734	201	271	933
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	31	31	14	31	31	13
Mvmt Flow	135	150	798	218	295	1014

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2004	508	0	0	1016	0
Stage 1	907	-	-	-	-	-
Stage 2	1097	-	-	-	-	-
Critical Hdwy	7.42	7.52	-	-	4.72	-
Critical Hdwy Stg 1	6.42	-	-	-	-	-
Critical Hdwy Stg 2	6.42	-	-	-	-	-
Follow-up Hdwy	3.81	3.61	-	-	2.51	-
Pot Cap-1 Maneuver	~ 37	440	-	-	528	-
Stage 1	292	-	-	-	-	-
Stage 2	226	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 16	440	-	-	528	-
Mov Cap-2 Maneuver	~ 73	-	-	-	-	-
Stage 1	292	-	-	-	-	-
Stage 2	~ 100	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 615.3	0	4.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	130	528	-
HCM Lane V/C Ratio	-	-	2.191	0.558	-
HCM Control Delay (s)	-	-	$ 615.3	20.1	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	23.8	3.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	411	418	345	314	12	126	6	126	10	6	3
Future Volume (veh/h)	1	411	418	345	314	12	126	6	126	10	6	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.98
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	1841	1767	1837	1826	1899	1826	1796	1868	1796	1870	1945	1870
Adj Flow Rate, veh/h	1	447	454	375	341	13	137	7	137	11	7	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	9	9	5	5	5	7	7	7	2	2	2
Cap, veh/h	3	602	531	432	2119	81	225	22	162	223	134	46
Arrive On Green	0.00	0.36	0.36	0.25	0.60	0.60	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1753	1678	1480	1739	3543	135	672	99	734	652	607	210
Grp Volume(v), veh/h	1	447	454	375	173	181	281	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1753	1678	1480	1739	1804	1874	1506	0	0	1469	0	0
Q Serve(g_s), s	0.0	16.2	19.7	14.4	3.0	3.0	11.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	16.2	19.7	14.4	3.0	3.0	12.4	0.0	0.0	0.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.07	0.49		0.49	0.52		0.14
Lane Grp Cap(c), veh/h	3	602	531	432	1079	1121	409	0	0	402	0	0
V/C Ratio(X)	0.30	0.74	0.85	0.87	0.16	0.16	0.69	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	189	699	617	700	1270	1319	530	0	0	525	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.7	19.5	20.6	25.1	6.2	6.2	25.9	0.0	0.0	21.4	0.0	0.0
Incr Delay (d2), s/veh	42.7	3.6	10.1	6.7	0.1	0.1	2.5	0.0	0.0	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	0.1	6.1	7.4	6.2	0.9	0.9	4.6	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.4	23.1	30.7	31.8	6.3	6.3	28.4	0.0	0.0	21.4	0.0	0.0
LnGrp LOS	E	C	C	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		902			729			281			21	
Approach Delay, s/veh		27.0			19.4			28.4			21.4	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.3	29.0		19.3	4.6	45.6		19.3				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	28.0	29.0		21.0	7.5	49.0		21.0				
Max Q Clear Time (g_c+I1), s	16.4	21.7		2.6	2.0	5.0		14.4				
Green Ext Time (p_c), s	0.9	3.2		0.0	0.0	2.0		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		24.3	
HCM 6th LOS		C	

Intersection	
Intersection Delay, s/veh	325.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	551	118	65	138	10	61	334	10	160	527	0
Future Vol, veh/h	1	551	118	65	138	10	61	334	10	160	527	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	6	16	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	1	599	128	71	150	11	66	363	11	174	573	0
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	1
HCM Control Delay	420.3	37.3	111.7	449.4
HCM LOS	F	E	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	15%	0%	0%	32%	0%	23%
Vol Thru, %	85%	0%	82%	68%	0%	77%
Vol Right, %	0%	100%	18%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	395	10	670	203	10	687
LT Vol	61	0	1	65	0	160
Through Vol	334	0	551	138	0	527
RT Vol	0	10	118	0	10	0
Lane Flow Rate	429	11	728	221	11	747
Geometry Grp	7	7	6	7	7	6
Degree of Util (X)	1.069	0.025	1.849	0.608	0.027	1.913
Departure Headway (Hd)	13.586	12.748	11.552	14.89	13.964	11.936
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	270	283	320	245	258	314
Service Time	11.286	10.448	9.552	12.59	11.664	9.936
HCM Lane V/C Ratio	1.589	0.039	2.275	0.902	0.043	2.379
HCM Control Delay	114.1	15.8	420.3	38.3	17.1	449.4
HCM Lane LOS	F	C	F	E	C	F
HCM 95th-tile Q	11.5	0.1	38.7	3.6	0.1	39.9

Intersection	
Intersection Delay, s/veh	24.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	474	18	44	0	9	0	135	118	0	114	0
Future Vol, veh/h	55	474	18	44	0	9	0	135	118	0	114	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	5	20	5	8	8	8	3	3	3	3	3	3
Mvmt Flow	60	515	20	48	0	10	0	147	128	0	124	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	33.6	10.1	13.2	11.1
HCM LOS	D	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	10%	83%	0%
Vol Thru, %	53%	87%	0%	100%
Vol Right, %	47%	3%	17%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	253	547	53	114
LT Vol	0	55	44	0
Through Vol	135	474	0	114
RT Vol	118	18	9	0
Lane Flow Rate	275	595	58	124
Geometry Grp	1	1	1	1
Degree of Util (X)	0.438	0.872	0.101	0.217
Departure Headway (Hd)	5.737	5.282	6.295	6.307
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	624	684	565	565
Service Time	3.804	3.327	4.378	4.386
HCM Lane V/C Ratio	0.441	0.87	0.103	0.219
HCM Control Delay	13.2	33.6	10.1	11.1
HCM Lane LOS	B	D	B	B
HCM 95th-tile Q	2.2	10.4	0.3	0.8

Intersection	
Int Delay, s/veh	38.7

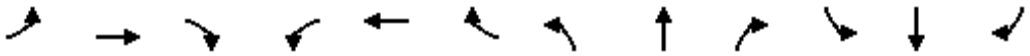
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	506	38	15	480	4	221	0	370	9	0	47
Future Vol, veh/h	3	506	38	15	480	4	221	0	370	9	0	47
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	5	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	-	-	-	115	-	-	-
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, %	4	8	4	3	9	3	48	5	5	9	9	9
Mvmt Flow	3	550	41	16	522	4	240	0	402	10	0	51

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	538	0	-	550	0	0	849	1126	280	854	1124	275
Stage 1	-	-	-	-	-	-	556	556	-	568	568	-
Stage 2	-	-	-	-	-	-	293	570	-	286	556	-
Critical Hdwy	4.18	-	-	4.16	-	-	8.46	6.6	7	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	7.46	5.6	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.46	5.6	-	6.68	5.68	-
Follow-up Hdwy	2.24	-	-	2.23	-	-	3.98	4.05	3.35	3.59	4.09	3.39
Pot Cap-1 Maneuver	1013	-	0	1009	-	-	~ 190	199	708	241	194	702
Stage 1	-	-	0	-	-	-	383	504	-	458	488	-
Stage 2	-	-	0	-	-	-	577	496	-	678	494	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1001	-	-	1009	-	-	~ 173	193	705	100	188	694
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 173	193	-	100	188	-
Stage 1	-	-	-	-	-	-	382	502	-	452	475	-
Stage 2	-	-	-	-	-	-	526	483	-	289	493	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	106.5	17.2
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	173	705	1001	-	1009	-	-	355
HCM Lane V/C Ratio	1.389	0.57	0.003	-	0.016	-	-	0.171
HCM Control Delay (s)	256.9	16.7	8.6	-	8.6	-	-	17.2
HCM Lane LOS	F	C	A	-	A	-	-	C
HCM 95th %tile Q(veh)	14.6	3.6	0	-	0	-	-	0.6

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	997	0	0	725	845	0	0	0	435	0	253
Future Volume (veh/h)	224	997	0	0	725	845	0	0	0	435	0	253
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1841	1841	1841	1811	1841	1841	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	243	1084	0	0	788	0	0	0	0	374	139	275
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	6	4	4	0	0	0	3	3	3
Cap, veh/h	292	1942	0	116	1105		0	584	0	660	171	339
Arrive On Green	0.17	0.56	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.31	0.31	0.31
Sat Flow, veh/h	1753	3589	0	504	3589	0	0	1900	0	1767	556	1101
Grp Volume(v), veh/h	243	1084	0	0	788	0	0	0	0	374	0	414
Grp Sat Flow(s),veh/h/ln	1753	1749	0	504	1749	0	0	1900	0	1767	0	1657
Q Serve(g_s), s	8.3	12.4	0.0	0.0	12.3	0.0	0.0	0.0	0.0	11.5	0.0	14.3
Cycle Q Clear(g_c), s	8.3	12.4	0.0	0.0	12.3	0.0	0.0	0.0	0.0	11.5	0.0	14.3
Prop In Lane	1.00		0.00	1.00		0.00	0.00		0.00	1.00		0.66
Lane Grp Cap(c), veh/h	292	1942	0	116	1105		0	584	0	660	0	510
V/C Ratio(X)	0.83	0.56	0.00	0.00	0.71		0.00	0.00	0.00	0.57	0.00	0.81
Avail Cap(c_a), veh/h	357	3165	0	274	2198		0	783	0	845	0	683
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.0	8.9	0.0	0.0	18.7	0.0	0.0	0.0	0.0	18.8	0.0	19.8
Incr Delay (d2), s/veh	13.1	0.3	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.8	0.0	5.5
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	4.2	3.5	0.0	0.0	4.3	0.0	0.0	0.0	0.0	4.4	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.0	9.1	0.0	0.0	19.6	0.0	0.0	0.0	0.0	19.6	0.0	25.3
LnGrp LOS	D	A	A	A	B		A	A	A	B	A	C
Approach Vol, veh/h		1327			788	A		0			788	
Approach Delay, s/veh		14.4			19.6			0.0			22.6	
Approach LOS		B			B						C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		38.4		23.5	14.8	23.6		23.5				
Change Period (Y+Rc), s		4.0		4.5	4.5	4.0		4.5				
Max Green Setting (Gmax), s		56.0		25.5	12.6	38.9		25.5				
Max Q Clear Time (g_c+I1), s		14.4		16.3	10.3	14.3		0.0				
Green Ext Time (p_c), s		9.3		2.8	0.2	5.2		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			18.0									
HCM 6th LOS			B									

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	171.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	170	888	10	30	271	9	3	243	13	370	90	258
Future Vol, veh/h	170	888	10	30	271	9	3	243	13	370	90	258
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	7	6	7	3	3	3	6	6	6	2	2	2
Mvmt Flow	185	965	11	33	295	10	3	264	14	402	98	280
Number of Lanes	0	2	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	269.9	53.1	35.2	124.3
HCM LOS	F	F	E	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	1%	0%	28%	0%	10%	0%	80%	0%
Vol Thru, %	99%	0%	72%	98%	90%	0%	20%	0%
Vol Right, %	0%	100%	0%	2%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	246	13	614	454	301	9	460	258
LT Vol	3	0	170	0	30	0	370	0
Through Vol	243	0	444	444	271	0	90	0
RT Vol	0	13	0	10	0	9	0	258
Lane Flow Rate	267	14	667	493	327	10	500	280
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.727	0.036	1.709	1.24	0.872	0.024	1.3	0.643
Departure Headway (Hd)	10.398	9.656	9.715	9.536	10.391	9.605	9.46	8.256
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	350	373	380	385	350	375	390	437
Service Time	8.098	7.356	7.415	7.236	8.091	7.305	7.16	6.011
HCM Lane V/C Ratio	0.763	0.038	1.755	1.281	0.934	0.027	1.282	0.641
HCM Control Delay	36.4	12.7	353.4	157	54.3	12.5	180.1	24.8
HCM Lane LOS	E	B	F	F	F	B	F	C
HCM 95th-tile Q	5.5	0.1	38.9	20.1	8.2	0.1	22.5	4.4

Intersection	
Int Delay, s/veh	567.1

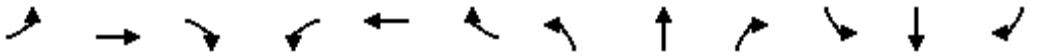
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	87	346	877	176	345	78
Future Vol, veh/h	87	346	877	176	345	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	20	-	-	55
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	22	20	2	2	2	2
Mvmt Flow	95	376	953	191	375	85

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2472	-	375	0	-	0
Stage 1	375	-	-	-	-	-
Stage 2	2097	-	-	-	-	-
Critical Hdwy	6.62	-	4.12	-	-	-
Critical Hdwy Stg 1	5.62	-	-	-	-	-
Critical Hdwy Stg 2	5.62	-	-	-	-	-
Follow-up Hdwy	3.698	-	2.218	-	-	-
Pot Cap-1 Maneuver	~ 28	0	1183	-	-	0
Stage 1	653	0	-	-	-	0
Stage 2	~ 90	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 5	-	1183	-	-	-
Mov Cap-2 Maneuver	~ 5	-	-	-	-	-
Stage 1	127	-	-	-	-	-
Stage 2	~ 90	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	9485.4	16	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	1183	-	5	-	-
HCM Lane V/C Ratio	0.806	-	18.913	-	-
HCM Control Delay (s)	19.2	$	9485.4	0	-
HCM Lane LOS	C	-	F	A	-
HCM 95th %tile Q(veh)	9.4	-	13.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	1051	61	52	1193	645	40	127	33	259	95	337
Future Volume (veh/h)	280	1051	61	52	1193	645	40	127	33	259	95	337
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	0.99		0.99	0.99		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	304	1142	66	57	1297	701	43	138	36	282	103	366
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	337	1770	781	106	1332	573	307	230	60	312	341	582
Arrive On Green	0.19	0.51	0.51	0.06	0.38	0.38	0.05	0.15	0.15	0.09	0.19	0.19
Sat Flow, veh/h	1753	3469	1531	1767	3526	1517	1781	1483	387	1668	1752	1496
Grp Volume(v), veh/h	304	1142	66	57	1297	701	43	0	174	282	103	366
Grp Sat Flow(s),veh/h/ln	1753	1735	1531	1767	1763	1517	1781	0	1870	1668	1752	1496
Q Serve(g_s), s	14.8	21.0	1.9	2.7	31.6	33.0	1.7	0.0	7.6	8.0	4.4	17.0
Cycle Q Clear(g_c), s	14.8	21.0	1.9	2.7	31.6	33.0	1.7	0.0	7.6	8.0	4.4	17.0
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	337	1770	781	106	1332	573	307	0	290	312	341	582
V/C Ratio(X)	0.90	0.65	0.08	0.54	0.97	1.22	0.14	0.00	0.60	0.90	0.30	0.63
Avail Cap(c_a), veh/h	341	1770	781	142	1332	573	358	0	343	312	341	582
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	1.00	1.00
Uniform Delay (d), s/veh	34.5	15.6	10.9	39.9	26.7	27.2	28.2	0.0	34.4	32.6	30.1	21.7
Incr Delay (d2), s/veh	25.6	0.8	0.0	4.2	18.6	115.3	0.2	0.0	2.1	27.8	0.5	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	8.3	7.3	0.6	1.3	15.3	29.6	0.7	0.0	3.6	4.7	1.9	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.0	16.4	11.0	44.0	45.4	142.5	28.4	0.0	36.5	60.4	30.6	23.9
LnGrp LOS	E	B	B	D	D	F	C	A	D	E	C	C
Approach Vol, veh/h		1512			2055			217			751	
Approach Delay, s/veh		25.0			78.5			34.9			38.5	
Approach LOS		C			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	48.6	8.5	21.0	20.8	37.0	12.0	17.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	17.0	17.0	33.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	4.7	23.0	3.7	19.0	16.8	35.0	10.0	9.6
Green Ext Time (p_c), s	0.0	7.9	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	51.9
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	12

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	1	225	1	300	2	890	313	347	1173	0
Future Vol, veh/h	0	1	1	225	1	300	2	890	313	347	1173	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	-	-	-	-	-	0	100	-	-	100	-	-
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, %	2	2	2	10	10	44	10	5	10	45	3	6
Mvmt Flow	0	1	1	245	1	326	2	967	340	377	1275	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2517	3340	638	2533	3170	654	1275	0	0	1307	0	0
Stage 1	2029	2029	-	1141	1141	-	-	-	-	-	-	-
Stage 2	488	1311	-	1392	2029	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.7	6.7	7.78	4.3	-	-	5	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.6	4.1	3.74	2.3	-	-	2.65	-	-
Pot Cap-1 Maneuver	14	8	419	~ 12	9	~ 323	499	-	-	~ 344	-	-
Stage 1	59	100	-	~ 201	258	-	-	-	-	-	-	-
Stage 2	530	227	-	~ 139	91	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	419	-	0	~ 323	499	-	-	~ 344	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	59	0	-	~ 200	257	-	-	-	-	-	-	-
Stage 2	-	226	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0	25.6
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	499	-	-	-	-	323	~ 344	-	-
HCM Lane V/C Ratio	0.004	-	-	-	-	1.01	1.096	-	-
HCM Control Delay (s)	12.2	-	-	-	-	89.5	112.2	-	-
HCM Lane LOS	B	-	-	-	-	F	F	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	11.3	14.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

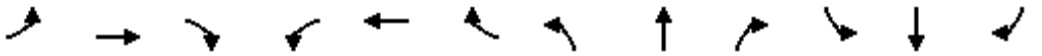
Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	75	11	0	6	7	987	10	14	1112	8
Future Vol, veh/h	37	0	75	11	0	6	7	987	10	14	1112	8
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	-	0	140	-	-	170	-	-
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, %	3	3	3	27	27	27	9	5	9	6	3	6
Mvmt Flow	40	0	82	12	0	7	8	1073	11	15	1209	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1797	2344	609	1730	-	542	1218	0	0	1084	0	0
Stage 1	1244	1244	-	1095	-	-	-	-	-	-	-	-
Stage 2	553	1100	-	635	-	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	8.04	-	7.44	4.28	-	-	4.22	-	-
Critical Hdwy Stg 1	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	7.04	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.77	-	3.57	2.29	-	-	2.26	-	-
Pot Cap-1 Maneuver	50	35	436	43	0	425	531	-	-	616	-	-
Stage 1	183	242	-	189	0	-	-	-	-	-	-	-
Stage 2	482	284	-	378	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	48	34	436	34	-	425	531	-	-	616	-	-
Mov Cap-2 Maneuver	48	34	-	34	-	-	-	-	-	-	-	-
Stage 1	180	236	-	186	-	-	-	-	-	-	-	-
Stage 2	467	280	-	300	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	158.6	108.3	0.1	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	531	-	-	119	34	425	616	-	-
HCM Lane V/C Ratio	0.014	-	-	1.023	0.352	0.015	0.025	-	-
HCM Control Delay (s)	11.9	-	-	158.6	160	13.6	11	-	-
HCM Lane LOS	B	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	6.9	1.1	0	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	158	42	199	157	185	52	777	178	492	949	31
Future Volume (veh/h)	36	158	42	199	157	185	52	777	178	492	949	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
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	1870	1870	1870	1826	1781	1899	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	39	172	46	216	171	201	57	845	193	535	1032	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	8	5	4	4	4	3	3	3
Cap, veh/h	161	214	57	255	368	333	112	1004	445	632	1419	47
Arrive On Green	0.09	0.15	0.15	0.15	0.21	0.21	0.06	0.29	0.29	0.18	0.41	0.41
Sat Flow, veh/h	1781	1422	380	1739	1781	1609	1753	3497	1552	3428	3482	115
Grp Volume(v), veh/h	39	0	218	216	171	201	57	845	193	535	522	544
Grp Sat Flow(s),veh/h/ln	1781	0	1802	1739	1781	1609	1753	1749	1552	1714	1763	1834
Q Serve(g_s), s	1.6	0.0	9.1	9.4	6.5	8.8	2.4	17.6	7.9	11.7	19.4	19.4
Cycle Q Clear(g_c), s	1.6	0.0	9.1	9.4	6.5	8.8	2.4	17.6	7.9	11.7	19.4	19.4
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	161	0	271	255	368	333	112	1004	445	632	718	747
V/C Ratio(X)	0.24	0.00	0.80	0.85	0.46	0.60	0.51	0.84	0.43	0.85	0.73	0.73
Avail Cap(c_a), veh/h	161	0	418	284	544	491	160	1117	496	729	777	808
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.9	0.0	31.9	32.3	27.0	27.9	35.2	26.0	22.5	30.6	19.4	19.4
Incr Delay (d2), s/veh	0.8	0.0	6.4	19.2	0.9	1.8	3.6	5.5	0.7	8.2	3.2	3.1
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	0.7	0.0	4.3	5.0	2.6	3.3	1.1	7.3	2.7	5.1	7.3	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	0.0	38.2	51.5	27.9	29.7	38.7	31.5	23.2	38.8	22.5	22.4
LnGrp LOS	C	A	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		257			588			1095			1601	
Approach Delay, s/veh		37.5			37.2			30.4			27.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	26.8	15.9	16.2	9.5	36.1	11.5	20.5
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	16.5	24.8	12.7	18.0	7.1	34.2	7.0	23.7
Max Q Clear Time (g_c+I1), s	13.7	19.6	11.4	11.1	4.4	21.4	3.6	10.8
Green Ext Time (p_c), s	0.6	2.6	0.1	0.6	0.0	5.0	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	228	59	35	59	57	42	1028	134	64	964	77
Future Volume (veh/h)	120	228	59	35	59	57	42	1028	134	64	964	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.97	1.00		0.98	1.00		0.96
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	1870	1945	1870	1870	1870	1870	1914	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	130	248	64	38	64	62	46	1117	146	70	1048	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	4	4	4	2	2	2
Cap, veh/h	330	355	92	199	207	200	110	1493	195	136	1651	132
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.06	0.48	0.48	0.08	0.50	0.50
Sat Flow, veh/h	1237	1474	380	1053	859	832	1823	3102	405	1781	3320	266
Grp Volume(v), veh/h	130	0	312	38	0	126	46	629	634	70	561	571
Grp Sat Flow(s),veh/h/ln	1237	0	1855	1053	0	1690	1823	1749	1758	1781	1777	1809
Q Serve(g_s), s	6.4	0.0	10.3	2.3	0.0	4.1	1.6	19.5	19.6	2.5	15.5	15.5
Cycle Q Clear(g_c), s	10.5	0.0	10.3	12.5	0.0	4.1	1.6	19.5	19.6	2.5	15.5	15.5
Prop In Lane	1.00		0.21	1.00		0.49	1.00		0.23	1.00		0.15
Lane Grp Cap(c), veh/h	330	0	446	199	0	407	110	841	846	136	883	899
V/C Ratio(X)	0.39	0.00	0.70	0.19	0.00	0.31	0.42	0.75	0.75	0.52	0.63	0.64
Avail Cap(c_a), veh/h	430	0	597	285	0	544	205	1217	1224	227	1263	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	0.00	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	25.1	0.0	23.2	28.9	0.0	20.8	30.3	14.0	14.1	29.7	12.3	12.3
Incr Delay (d2), s/veh	0.8	0.0	2.3	0.5	0.0	0.4	2.5	1.5	1.5	3.0	0.8	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	1.9	0.0	4.6	0.6	0.0	1.6	0.8	7.2	7.3	1.1	4.9	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	0.0	25.5	29.3	0.0	21.2	32.8	15.5	15.6	32.7	13.1	13.1
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		442			164			1309			1202	
Approach Delay, s/veh		25.6			23.1			16.2			14.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.6	36.7		20.6	8.5	37.7		20.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.5	46.5		21.5	7.5	47.5		21.5
Max Q Clear Time (g_c+I1), s	4.5	21.6		12.5	3.6	17.5		14.5
Green Ext Time (p_c), s	0.0	10.6		1.7	0.0	7.9		0.4

Intersection Summary		
HCM 6th Ctrl Delay		17.1
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	73	177	435	421	940	0	0	907	244
Future Volume (veh/h)	0	0	0	73	177	435	421	940	0	0	907	244
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1841	1826	1914	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				79	192	473	458	1022	0	0	986	265
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	5	4	3	3	0	0	3	3
Cap, veh/h				110	268	336	469	2433	0	0	1027	275
Arrive On Green				0.21	0.21	0.21	0.27	0.69	0.00	0.00	0.37	0.37
Sat Flow, veh/h				525	1275	1601	1767	3618	0	0	2835	734
Grp Volume(v), veh/h				271	0	473	458	1022	0	0	633	618
Grp Sat Flow(s),veh/h/ln				1800	0	1601	1767	1763	0	0	1763	1713
Q Serve(g_s), s				12.6	0.0	18.9	23.1	11.4	0.0	0.0	31.5	31.8
Cycle Q Clear(g_c), s				12.6	0.0	18.9	23.1	11.4	0.0	0.0	31.5	31.8
Prop In Lane				0.29		1.00	1.00		0.00	0.00		0.43
Lane Grp Cap(c), veh/h				378	0	336	469	2433	0	0	660	641
V/C Ratio(X)				0.72	0.00	1.41	0.98	0.42	0.00	0.00	0.96	0.96
Avail Cap(c_a), veh/h				378	0	336	469	2433	0	0	660	641
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				33.1	0.0	35.6	32.8	6.1	0.0	0.0	27.5	27.6
Incr Delay (d2), s/veh				6.4	0.0	200.0	35.2	0.1	0.0	0.0	25.1	26.8
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				6.0	0.0	25.9	14.1	3.5	0.0	0.0	17.2	17.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				39.5	0.0	235.5	68.0	6.2	0.0	0.0	52.5	54.4
LnGrp LOS				D	A	F	E	A	A	A	D	D
Approach Vol, veh/h					744			1480			1251	
Approach Delay, s/veh					164.1			25.3			53.4	
Approach LOS					F			C			D	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	66.6		28.4	38.2		23.4
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	62.1		23.9	33.7		18.9
Max Q Clear Time (g_c+I1), s	13.4		25.1	33.8		20.9
Green Ext Time (p_c), s	9.7		0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	65.2
HCM 6th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	11	206	0	0	0	0	1187	182	383	589	0
Future Volume (veh/h)	178	11	206	0	0	0	0	1187	182	383	589	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
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	1900	1781	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	193	12	224				0	1290	198	416	640	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	8	0				0	2	2	2	2	0
Cap, veh/h	286	18	270				0	1437	640	455	2536	0
Arrive On Green	0.18	0.18	0.18				0.00	0.40	0.40	0.26	0.71	0.00
Sat Flow, veh/h	1602	100	1510				0	3647	1583	1781	3647	0
Grp Volume(v), veh/h	205	0	224				0	1290	198	416	640	0
Grp Sat Flow(s),veh/h/ln	1701	0	1510				0	1777	1583	1781	1777	0
Q Serve(g_s), s	9.4	0.0	12.0				0.0	28.4	7.1	19.0	5.3	0.0
Cycle Q Clear(g_c), s	9.4	0.0	12.0				0.0	28.4	7.1	19.0	5.3	0.0
Prop In Lane	0.94		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	304	0	270				0	1437	640	455	2536	0
V/C Ratio(X)	0.67	0.00	0.83				0.00	0.90	0.31	0.91	0.25	0.00
Avail Cap(c_a), veh/h	366	0	325				0	1487	662	500	2677	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)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.1	0.0	33.1				0.0	23.3	17.0	30.3	4.2	0.0
Incr Delay (d2), s/veh	3.7	0.0	14.1				0.0	7.5	0.3	20.4	0.1	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	5.3				0.0	12.6	2.5	10.4	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.8	0.0	47.2				0.0	30.8	17.2	50.6	4.2	0.0
LnGrp LOS	D	A	D				A	C	B	D	A	A
Approach Vol, veh/h		429						1488			1056	
Approach Delay, s/veh		41.7						29.0			22.5	
Approach LOS		D						C			C	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	25.9	38.3	19.5	64.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	23.5	35.0	18.0	63.0
Max Q Clear Time (g_c+I1), s	21.0	30.4	14.0	7.3
Green Ext Time (p_c), s	0.4	3.4	1.0	5.2

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	175	28	66	43	199	4	754	44	183	490	14
Future Volume (veh/h)	60	175	28	66	43	199	4	754	44	183	490	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	190	30	72	47	216	4	820	48	199	533	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	365	58	241	67	309	459	876	51	293	1056	30
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.01	0.50	0.50	0.09	0.58	0.58
Sat Flow, veh/h	1111	1568	248	1154	289	1326	1781	1749	102	1781	1810	51
Grp Volume(v), veh/h	65	0	220	72	0	263	4	0	868	199	0	548
Grp Sat Flow(s),veh/h/ln	1111	0	1816	1154	0	1615	1781	0	1851	1781	0	1861
Q Serve(g_s), s	4.4	0.0	8.1	4.5	0.0	11.4	0.1	0.0	33.8	3.7	0.0	13.3
Cycle Q Clear(g_c), s	15.8	0.0	8.1	12.6	0.0	11.4	0.1	0.0	33.8	3.7	0.0	13.3
Prop In Lane	1.00		0.14	1.00		0.82	1.00		0.06	1.00		0.03
Lane Grp Cap(c), veh/h	187	0	423	241	0	376	459	0	928	293	0	1086
V/C Ratio(X)	0.35	0.00	0.52	0.30	0.00	0.70	0.01	0.00	0.94	0.68	0.00	0.50
Avail Cap(c_a), veh/h	190	0	428	244	0	381	610	0	987	307	0	1086
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	25.7	31.2	0.0	27.0	9.6	0.0	18.0	16.5	0.0	9.4
Incr Delay (d2), s/veh	1.1	0.0	1.1	0.7	0.0	5.5	0.0	0.0	15.1	5.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	3.5	1.3	0.0	4.9	0.0	0.0	16.2	2.1	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.3	0.0	26.8	31.8	0.0	32.5	9.6	0.0	33.0	22.2	0.0	9.8
LnGrp LOS	D	A	C	C	A	C	A	A	C	C	A	A
Approach Vol, veh/h		285			335			872			747	
Approach Delay, s/veh		28.7			32.3			32.9			13.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.4	42.9		22.4	5.1	49.3		22.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	40.9		18.1	7.1	41.3		18.1
Max Q Clear Time (g_c+I1), s	15.7	35.8		17.8	2.1	15.3		14.6
Green Ext Time (p_c), s	0.1	2.7		0.0	0.0	3.7		0.7

Intersection Summary		
HCM 6th Ctrl Delay	25.7	
HCM 6th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	80	554	358	110	369	0	0	339	116
Future Volume (veh/h)	0	0	0	80	554	358	110	369	0	0	339	116
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.98
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				1900	1841	1900	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				87	602	389	120	401	0	0	368	126
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	4	0	2	2	0	0	2	2
Cap, veh/h				110	773	540	177	814	0	0	492	410
Arrive On Green				0.42	0.42	0.42	0.10	0.44	0.00	0.00	0.26	0.26
Sat Flow, veh/h				263	1848	1292	1781	1870	0	0	1870	1560
Grp Volume(v), veh/h				604	0	474	120	401	0	0	368	126
Grp Sat Flow(s),veh/h/ln				1828	0	1576	1781	1870	0	0	1870	1560
Q Serve(g_s), s				17.6	0.0	15.4	4.0	9.5	0.0	0.0	11.1	4.0
Cycle Q Clear(g_c), s				17.6	0.0	15.4	4.0	9.5	0.0	0.0	11.1	4.0
Prop In Lane				0.14		0.82	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				764	0	659	177	814	0	0	492	410
V/C Ratio(X)				0.79	0.00	0.72	0.68	0.49	0.00	0.00	0.75	0.31
Avail Cap(c_a), veh/h				967	0	834	363	1477	0	0	959	800
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.5	0.0	14.9	26.7	12.5	0.0	0.0	20.8	18.2
Incr Delay (d2), s/veh				3.5	0.0	2.2	4.5	0.5	0.0	0.0	2.3	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
%ile BackOfQ(50%),veh/ln				7.1	0.0	5.2	1.8	3.5	0.0	0.0	4.8	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				19.0	0.0	17.1	31.2	12.9	0.0	0.0	23.1	18.6
LnGrp LOS				B	A	B	C	B	A	A	C	B
Approach Vol, veh/h					1078			521			494	
Approach Delay, s/veh					18.2			17.1			21.9	
Approach LOS					B			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	31.2		10.6	20.6		30.2
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	48.5		12.5	31.5		32.5
Max Q Clear Time (g_c+I1), s	11.5		6.0	13.1		19.6
Green Ext Time (p_c), s	2.7		0.1	2.5		6.1

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	153	87	81	53	3	67	414	158	7	256	19
Future Volume (veh/h)	174	153	87	81	53	3	67	414	158	7	256	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	0.99		0.98	1.00		0.98
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	1870	1870	1870	1870	1945	1870	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	189	166	95	88	58	3	73	450	172	8	278	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	222	114	357	211	9	141	572	207	85	830	61
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	603	662	338	699	628	27	119	1213	438	13	1758	130
Grp Volume(v), veh/h	450	0	0	149	0	0	695	0	0	307	0	0
Grp Sat Flow(s),veh/h/ln	1603	0	0	1355	0	0	1769	0	0	1901	0	0
Q Serve(g_s), s	8.6	0.0	0.0	0.0	0.0	0.0	8.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.0	0.0	0.0	3.3	0.0	0.0	15.7	0.0	0.0	4.7	0.0	0.0
Prop In Lane	0.42		0.21	0.59		0.02	0.11		0.25	0.03		0.07
Lane Grp Cap(c), veh/h	648	0	0	577	0	0	920	0	0	976	0	0
V/C Ratio(X)	0.69	0.00	0.00	0.26	0.00	0.00	0.76	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	805	0	0	718	0	0	1229	0	0	1308	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)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.1	0.0	0.0	11.3	0.0	0.0	10.6	0.0	0.0	7.8	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	0.2	0.0	0.0	1.9	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.0	1.0	0.0	0.0	5.2	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	0.0	0.0	11.5	0.0	0.0	12.5	0.0	0.0	8.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		450			149			695			307	
Approach Delay, s/veh		16.0			11.5			12.5			8.0	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.6	20.2	26.6	20.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	30.5	20.5	30.5	20.5
Max Q Clear Time (g_c+I1), s	17.7	14.0	6.7	5.3
Green Ext Time (p_c), s	4.4	1.6	1.8	0.7

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	656	26	167	635	205	44	274	185	100	101	38
Future Volume (veh/h)	137	656	26	167	635	205	44	274	185	100	101	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.99
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	1826	1826	1826	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	149	713	28	182	690	223	48	298	201	109	110	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	2	2	2
Cap, veh/h	188	1062	42	226	862	279	92	363	231	199	187	58
Arrive On Green	0.11	0.31	0.31	0.13	0.33	0.33	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1739	3401	134	1767	2596	839	96	999	637	343	516	161
Grp Volume(v), veh/h	149	363	378	182	468	445	547	0	0	260	0	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1800	1767	1763	1672	1732	0	0	1020	0	0
Q Serve(g_s), s	5.7	12.5	12.5	6.9	16.6	16.6	4.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.7	12.5	12.5	6.9	16.6	16.6	19.9	0.0	0.0	15.3	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.50	0.09		0.37	0.42		0.16
Lane Grp Cap(c), veh/h	188	542	562	226	586	556	686	0	0	445	0	0
V/C Ratio(X)	0.79	0.67	0.67	0.81	0.80	0.80	0.80	0.00	0.00	0.58	0.00	0.00
Avail Cap(c_a), veh/h	302	722	749	348	775	735	922	0	0	622	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)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.8	20.5	20.5	29.0	20.8	20.8	20.2	0.0	0.0	17.8	0.0	0.0
Incr Delay (d2), s/veh	7.4	1.5	1.4	7.6	4.5	4.7	3.6	0.0	0.0	1.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.6	4.8	3.1	6.6	6.3	7.8	0.0	0.0	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.2	22.0	21.9	36.7	25.3	25.5	23.8	0.0	0.0	19.0	0.0	0.0
LnGrp LOS	D	C	C	D	C	C	C	A	A	B	A	A
Approach Vol, veh/h		890			1095			547			260	
Approach Delay, s/veh		24.5			27.2			23.8			19.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.3	25.9		29.4	11.9	27.3		29.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	13.5	28.5		34.5	11.9	30.1		34.5
Max Q Clear Time (g_c+I1), s	8.9	14.5		17.3	7.7	18.6		21.9
Green Ext Time (p_c), s	0.2	3.5		1.6	0.1	4.2		2.9

Intersection Summary		
HCM 6th Ctrl Delay	24.9	
HCM 6th LOS	C	

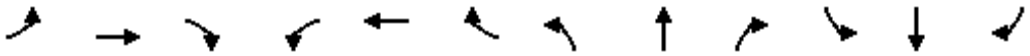
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	4	4	464	198	23
Future Vol, veh/h	18	4	4	464	198	23
Conflicting Peds, #/hr	0	0	2	0	0	2
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, %	10	10	2	2	2	2
Mvmt Flow	20	4	4	504	215	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	742	230	242	0	-	0
Stage 1	230	-	-	-	-	-
Stage 2	512	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.12	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.218	-	-	-
Pot Cap-1 Maneuver	372	790	1324	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	586	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	369	788	1321	-	-	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	785	-	-	-	-	-
Stage 2	585	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1321	-	408	-	-
HCM Lane V/C Ratio	0.003	-	0.059	-	-
HCM Control Delay (s)	7.7	0	14.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	328	77	66	166	413	90	0	263	198	0	61
Future Volume (veh/h)	167	328	77	66	166	413	90	0	263	198	0	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1856	1307	1307	1826	1263	1263	1841	1841	1841	1411	1411	1411
Adj Flow Rate, veh/h	182	357	84	72	180	449	98	0	286	215	0	66
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	40	40	5	43	43	4	4	4	33	33	33
Cap, veh/h	193	949	221	452	570	506	565	0	585	355	0	448
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.38	0.00	0.38	0.38	0.00	0.38
Sat Flow, veh/h	791	1999	465	924	1200	1066	1185	0	1559	824	0	1195
Grp Volume(v), veh/h	182	220	221	72	180	449	98	0	286	215	0	66
Grp Sat Flow(s),veh/h/ln	791	1242	1221	924	1200	1066	1185	0	1559	824	0	1195
Q Serve(g_s), s	5.6	6.8	7.0	3.2	5.6	22.9	3.2	0.0	8.4	15.1	0.0	2.2
Cycle Q Clear(g_c), s	28.5	6.8	7.0	10.2	5.6	22.9	5.4	0.0	8.4	20.5	0.0	2.2
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	193	590	580	452	570	506	565	0	585	355	0	448
V/C Ratio(X)	0.94	0.37	0.38	0.16	0.32	0.89	0.17	0.00	0.49	0.61	0.00	0.15
Avail Cap(c_a), veh/h	193	590	580	452	570	506	565	0	585	355	0	448
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	28.9	10.1	10.1	13.4	9.7	14.3	14.2	0.0	14.4	20.7	0.0	12.4
Incr Delay (d2), s/veh	48.1	0.4	0.4	0.2	0.3	17.2	0.1	0.0	0.6	2.9	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	5.0	1.5	1.5	0.6	1.2	6.6	0.9	0.0	2.7	2.8	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.0	10.4	10.5	13.5	10.0	31.5	14.3	0.0	15.0	23.7	0.0	12.6
LnGrp LOS	E	B	B	B	B	C	B	A	B	C	A	B
Approach Vol, veh/h		623			701			384			281	
Approach Delay, s/veh		29.9			24.1			14.8			21.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0		27.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		28.5		22.5		28.5		22.5				
Max Q Clear Time (g_c+I1), s		30.5		22.5		24.9		10.4				
Green Ext Time (p_c), s		0.0		0.0		1.5		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			23.7									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	6	26	291	0	0	12	1146	327	223	1078	3
Future Volume (veh/h)	4	6	26	291	0	0	12	1146	327	223	1078	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1900	1900	1900	1811	1811	1811	1826	1826	1826
Adj Flow Rate, veh/h	4	7	28	316	0	0	13	1246	355	242	1172	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	5	5	5
Cap, veh/h	35	62	84	439	0	195	38	1455	834	283	1999	5
Arrive On Green	0.05	0.05	0.05	0.12	0.00	0.00	0.02	0.42	0.42	0.16	0.56	0.56
Sat Flow, veh/h	679	1188	1610	3619	0	1610	1725	3441	1533	1739	3550	9
Grp Volume(v), veh/h	11	0	28	316	0	0	13	1246	355	242	573	602
Grp Sat Flow(s),veh/h/ln	1866	0	1610	1810	0	1610	1725	1721	1533	1739	1735	1824
Q Serve(g_s), s	0.4	0.0	1.3	6.3	0.0	0.0	0.6	24.4	10.2	10.1	16.1	16.1
Cycle Q Clear(g_c), s	0.4	0.0	1.3	6.3	0.0	0.0	0.6	24.4	10.2	10.1	16.1	16.1
Prop In Lane	0.36		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	97	0	84	439	0	195	38	1455	834	283	977	1027
V/C Ratio(X)	0.11	0.00	0.33	0.72	0.00	0.00	0.34	0.86	0.43	0.86	0.59	0.59
Avail Cap(c_a), veh/h	175	0	151	874	0	389	162	1546	875	315	977	1027
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	34.1	31.5	0.0	0.0	35.9	19.5	10.1	30.4	10.6	10.6
Incr Delay (d2), s/veh	0.5	0.0	2.3	2.2	0.0	0.0	5.2	4.8	0.3	18.7	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	0.2	0.0	0.5	2.8	0.0	0.0	0.3	9.8	4.3	5.5	5.5	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	0.0	36.4	33.8	0.0	0.0	41.1	24.3	10.4	49.1	11.5	11.5
LnGrp LOS	C	A	D	C	A	A	D	C	B	D	B	B
Approach Vol, veh/h		39			316			1614			1417	
Approach Delay, s/veh		35.8			33.8			21.3			17.9	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.6	36.0		8.4	6.2	46.5		13.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	13.5	33.5		7.0	7.0	40.0		18.0				
Max Q Clear Time (g_c+I1), s	12.1	26.4		3.3	2.6	18.1		8.3				
Green Ext Time (p_c), s	0.1	5.1		0.0	0.0	8.5		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	369.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	204	176	1003	186	305	1316
Future Vol, veh/h	204	176	1003	186	305	1316
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	22	22	10	22	22	10
Mvmt Flow	222	191	1090	202	332	1430

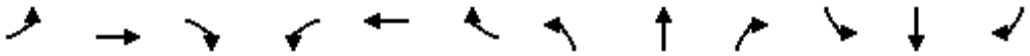
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2570	646	0	0	1292	0
Stage 1	1191	-	-	-	-	-
Stage 2	1379	-	-	-	-	-
Critical Hdwy	7.24	7.34	-	-	4.54	-
Critical Hdwy Stg 1	6.24	-	-	-	-	-
Critical Hdwy Stg 2	6.24	-	-	-	-	-
Follow-up Hdwy	3.72	3.52	-	-	2.42	-
Pot Cap-1 Maneuver	~ 16	370	-	-	436	-
Stage 1	~ 213	-	-	-	-	-
Stage 2	~ 166	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 4	370	-	-	436	-
Mov Cap-2 Maneuver	~ 32	-	-	-	-	-
Stage 1	~ 213	-	-	-	-	-
Stage 2	~ 40	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 3073.6	0	6.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	55	436	-
HCM Lane V/C Ratio	-	-	7.51	0.76	-
HCM Control Delay (s)	-	-	$ 3073.6	35.1	-
HCM Lane LOS	-	-	F	E	-
HCM 95th %tile Q(veh)	-	-	48	6.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

EXISTING + PROJECT SPECIFIC PLAN SCENARIO ONE WITH RECOMMENDED MITIGATION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	220	155	420	213	15	88	3	116	21	17	4
Future Volume (veh/h)	0	220	155	420	213	15	88	3	116	21	17	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1722	1693	1359	1796	1868	1796	1856	1930	1856	1870	1945	1870
Adj Flow Rate, veh/h	0	268	189	483	245	17	99	3	130	37	30	7
Peak Hour Factor	0.82	0.82	0.82	0.87	0.87	0.87	0.89	0.89	0.89	0.57	0.57	0.57
Percent Heavy Veh, %	12	14	40	7	7	7	3	3	3	2	2	2
Cap, veh/h	3	389	262	565	1103	77	214	27	179	243	177	33
Arrive On Green	0.00	0.23	0.23	0.33	0.64	0.64	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1640	1693	1142	1711	1726	120	555	134	878	669	868	161
Grp Volume(v), veh/h	0	268	189	483	0	262	232	0	0	74	0	0
Grp Sat Flow(s),veh/h/ln	1640	1693	1142	1711	0	1846	1567	0	0	1697	0	0
Q Serve(g_s), s	0.0	7.4	7.8	13.4	0.0	3.0	5.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.4	7.8	13.4	0.0	3.0	6.9	0.0	0.0	1.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.06	0.43		0.56	0.50		0.09
Lane Grp Cap(c), veh/h	3	389	262	565	0	1179	420	0	0	452	0	0
V/C Ratio(X)	0.00	0.69	0.72	0.86	0.00	0.22	0.55	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	226	700	472	1045	0	1618	893	0	0	927	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)	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.9	18.0	15.9	0.0	3.9	18.8	0.0	0.0	16.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.2	3.7	3.8	0.0	0.1	1.1	0.0	0.0	0.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.6	2.0	4.7	0.0	0.6	2.5	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	20.1	21.8	19.7	0.0	4.0	19.9	0.0	0.0	16.9	0.0	0.0
LnGrp LOS	A	C	C	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		457			745			232			74	
Approach Delay, s/veh		20.8			14.2			19.9			16.9	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.8	15.7		14.3	0.0	36.4		14.3				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	31.0	21.0		26.0	7.0	44.5		26.0				
Max Q Clear Time (g_c+I1), s	15.4	9.8		3.6	0.0	5.0		8.9				
Green Ext Time (p_c), s	1.4	1.7		0.3	0.0	1.5		1.3				

Intersection Summary			
HCM 6th Ctrl Delay		17.2	
HCM 6th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	475	80	62	125	5	41	85	28	137	359	0
Future Volume (veh/h)	2	475	80	62	125	5	41	85	28	137	359	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1678	1745	1781	1870	1945	1870	1856	1930	1930	1870	1945	1870
Adj Flow Rate, veh/h	2	546	92	75	151	6	49	102	0	165	433	0
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	15	15	8	2	2	2	3	3	3	2	2	2
Cap, veh/h	2	570	495	93	188	233	102	368		199	475	0
Arrive On Green	0.33	0.33	0.33	0.15	0.15	0.15	0.06	0.19	0.00	0.11	0.24	0.00
Sat Flow, veh/h	6	1738	1510	635	1278	1585	1767	1930	0	1781	1945	0
Grp Volume(v), veh/h	548	0	92	226	0	6	49	102	0	165	433	0
Grp Sat Flow(s),veh/h/ln	1744	0	1510	1913	0	1585	1767	1930	0	1781	1945	0
Q Serve(g_s), s	24.8	0.0	3.5	9.2	0.0	0.3	2.2	3.6	0.0	7.3	17.5	0.0
Cycle Q Clear(g_c), s	24.8	0.0	3.5	9.2	0.0	0.3	2.2	3.6	0.0	7.3	17.5	0.0
Prop In Lane	0.00		1.00	0.33		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	572	0	495	281	0	233	102	368		199	475	0
V/C Ratio(X)	0.96	0.00	0.19	0.80	0.00	0.03	0.48	0.28		0.83	0.91	0.00
Avail Cap(c_a), veh/h	572	0	495	426	0	353	153	442		199	494	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.6	0.0	19.4	33.3	0.0	29.5	36.9	27.9	0.0	35.1	29.7	0.0
Incr Delay (d2), s/veh	27.2	0.0	0.2	6.5	0.0	0.0	3.5	0.4	0.0	24.7	20.6	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	14.2	0.0	1.2	4.7	0.0	0.1	1.0	1.6	0.0	4.3	10.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	0.0	19.6	39.8	0.0	29.6	40.3	28.3	0.0	59.9	50.3	0.0
LnGrp LOS	D	A	B	D	A	C	D	C		E	D	A
Approach Vol, veh/h		640			232			151	A		598	
Approach Delay, s/veh		48.9			39.5			32.2			52.9	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.5	19.9		31.0	9.2	24.2		16.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	9.0	18.5		26.5	7.0	20.5		18.0
Max Q Clear Time (g_c+I1), s	19.3	5.6		26.8	4.2	19.5		11.2
Green Ext Time (p_c), s	0.0	0.3		0.0	0.0	0.3		0.7

Intersection Summary		
HCM 6th Ctrl Delay		47.5
HCM 6th LOS		D

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	343	15	20	571	5	121	2	210	4	0	26
Future Volume (veh/h)	0	343	15	20	571	5	121	2	210	4	0	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.98
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	1841	1752	1752	1811	1811	1811	1737	1737	1737	1841	1841	1841
Adj Flow Rate, veh/h	0	418	0	23	656	6	136	2	236	4	0	28
Peak Hour Factor	0.82	0.82	0.82	0.87	0.87	0.87	0.89	0.89	0.89	0.92	0.92	0.92
Percent Heavy Veh, %	4	10	10	6	6	6	11	11	11	4	4	4
Cap, veh/h	216	854		523	874	8	526	6	355	137	31	322
Arrive On Green	0.00	0.49	0.00	0.49	0.49	0.49	0.24	0.24	0.24	0.24	0.00	0.24
Sat Flow, veh/h	761	1752	0	936	1792	16	1285	25	1469	64	126	1332
Grp Volume(v), veh/h	0	418	0	23	0	662	138	0	236	32	0	0
Grp Sat Flow(s),veh/h/ln	761	1752	0	936	0	1808	1310	0	1469	1522	0	0
Q Serve(g_s), s	0.0	5.3	0.0	0.6	0.0	9.8	2.3	0.0	4.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.3	0.0	5.9	0.0	9.8	2.9	0.0	4.8	0.5	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.01	0.99		1.00	0.12		0.87
Lane Grp Cap(c), veh/h	216	854		523	0	882	532	0	355	490	0	0
V/C Ratio(X)	0.00	0.49		0.04	0.00	0.75	0.26	0.00	0.66	0.07	0.00	0.00
Avail Cap(c_a), veh/h	565	1658		952	0	1711	974	0	861	992	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)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.7	0.0	7.7	0.0	6.9	10.6	0.0	11.4	9.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	1.3	0.3	0.0	2.1	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	0.9	0.0	0.1	0.0	1.8	0.7	0.0	1.4	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.2	0.0	7.8	0.0	8.2	10.9	0.0	13.5	9.8	0.0	0.0
LnGrp LOS	A	A		A	A	A	B	A	B	A	A	A
Approach Vol, veh/h		418	A		685			374			32	
Approach Delay, s/veh		6.2			8.2			12.5			9.8	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	12.5	20.7	12.5	20.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.5	31.5	19.5	31.5
Max Q Clear Time (g_c+I1), s	6.8	7.3	2.5	11.8
Green Ext Time (p_c), s	1.3	2.4	0.1	4.3

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	117	533	7	15	316	3	7	22	17	327	41	198
Future Volume (veh/h)	117	533	7	15	316	3	7	22	17	327	41	198
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1633	1633	1841	1841	1841	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	123	561	7	19	410	4	9	29	22	435	0	241
Peak Hour Factor	0.95	0.95	0.95	0.77	0.77	0.77	0.77	0.77	0.77	0.82	0.82	0.82
Percent Heavy Veh, %	18	18	18	4	4	4	2	2	2	2	2	2
Cap, veh/h	147	711	9	27	619	6	34	108	117	635	0	708
Arrive On Green	0.27	0.27	0.27	0.18	0.18	0.18	0.07	0.07	0.07	0.18	0.00	0.18
Sat Flow, veh/h	549	2649	34	154	3478	36	455	1467	1585	3563	0	1585
Grp Volume(v), veh/h	360	0	331	227	0	206	38	0	22	435	0	241
Grp Sat Flow(s),veh/h/ln	1606	0	1627	1833	0	1834	1922	0	1585	1781	0	1585
Q Serve(g_s), s	12.6	0.0	11.2	6.9	0.0	6.2	1.1	0.0	0.8	6.8	0.0	5.9
Cycle Q Clear(g_c), s	12.6	0.0	11.2	6.9	0.0	6.2	1.1	0.0	0.8	6.8	0.0	5.9
Prop In Lane	0.34		0.02	0.08		0.02	0.24		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	431	0	436	326	0	326	142	0	117	635	0	708
V/C Ratio(X)	0.84	0.00	0.76	0.70	0.00	0.63	0.27	0.00	0.19	0.69	0.00	0.34
Avail Cap(c_a), veh/h	485	0	491	553	0	554	580	0	478	1075	0	904
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.6	0.0	20.1	23.0	0.0	22.7	26.1	0.0	25.9	22.9	0.0	10.8
Incr Delay (d2), s/veh	11.0	0.0	6.0	2.7	0.0	2.0	1.0	0.0	0.8	1.3	0.0	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	5.6	0.0	4.6	3.0	0.0	2.7	0.5	0.0	0.3	2.8	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	0.0	26.1	25.7	0.0	24.7	27.1	0.0	26.7	24.3	0.0	11.1
LnGrp LOS	C	A	C	C	A	C	C	A	C	C	A	B
Approach Vol, veh/h		691			433			60			676	
Approach Delay, s/veh		28.9			25.2			26.9			19.6	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	8.9	20.5	15.1	15.1
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	3.1	14.6	8.8	8.9
Green Ext Time (p_c), s	0.1	1.4	1.8	1.7

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	204	702	470	109	171	23
Future Volume (veh/h)	204	702	470	109	171	23
Initial Q (Qb), veh	0	0	0	0	0	0
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	1776	1791	1841	1899	1791	1791
Adj Flow Rate, veh/h	232	0	345	431	225	0
Peak Hour Factor	0.88	0.88	0.84	0.84	0.76	0.76
Percent Heavy Veh, %	13	12	4	5	12	12
Cap, veh/h	301		556	603	313	
Arrive On Green	0.18	0.00	0.32	0.32	0.17	0.00
Sat Flow, veh/h	1691	1518	1753	1899	1791	1518
Grp Volume(v), veh/h	232	0	345	431	225	0
Grp Sat Flow(s),veh/h/ln	1691	1518	1753	1899	1791	1518
Q Serve(g_s), s	5.3	0.0	6.8	8.2	4.9	0.0
Cycle Q Clear(g_c), s	5.3	0.0	6.8	8.2	4.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	301		556	603	313	
V/C Ratio(X)	0.77		0.62	0.72	0.72	
Avail Cap(c_a), veh/h	764		857	928	788	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	16.0	0.0	11.9	12.3	15.9	0.0
Incr Delay (d2), s/veh	4.2	0.0	1.1	1.6	3.1	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	2.1	0.0	2.3	3.0	1.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.2	0.0	13.0	13.9	19.0	0.0
LnGrp LOS	C		B	B	B	
Approach Vol, veh/h	232	A		776	225	A
Approach Delay, s/veh	20.2			13.5	19.0	
Approach LOS	C			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	17.5		11.8		11.6
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	20.0		18.5		18.0
Max Q Clear Time (g_c+I1), s	10.2		7.3		6.9
Green Ext Time (p_c), s	2.8		0.5		0.9

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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)	144	836	29	26	586	379	29	56	56	522	29	321
Future Volume (veh/h)	144	836	29	26	586	379	29	56	56	522	29	321
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	166	961	33	30	666	431	44	85	85	629	35	387
Peak Hour Factor	0.87	0.87	0.87	0.88	0.88	0.88	0.66	0.66	0.66	0.83	0.83	0.83
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	201	1128	492	70	826	817	306	109	109	621	639	711
Arrive On Green	0.11	0.32	0.32	0.04	0.25	0.25	0.05	0.12	0.12	0.31	0.38	0.38
Sat Flow, veh/h	1753	3497	1526	1654	3300	1431	1781	886	886	1598	1678	1434
Grp Volume(v), veh/h	166	961	33	30	666	431	44	0	170	629	35	387
Grp Sat Flow(s),veh/h/ln	1753	1749	1526	1654	1650	1431	1781	0	1771	1598	1678	1434
Q Serve(g_s), s	7.4	20.6	1.2	1.4	15.2	15.1	1.7	0.0	7.5	25.0	1.1	14.9
Cycle Q Clear(g_c), s	7.4	20.6	1.2	1.4	15.2	15.1	1.7	0.0	7.5	25.0	1.1	14.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	201	1128	492	70	826	817	306	0	219	621	639	711
V/C Ratio(X)	0.82	0.85	0.07	0.43	0.81	0.53	0.14	0.00	0.78	1.01	0.05	0.54
Avail Cap(c_a), veh/h	219	1134	495	144	947	869	365	0	353	621	711	773
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	1.00	1.00
Uniform Delay (d), s/veh	34.7	25.4	18.8	37.4	28.2	11.0	27.8	0.0	34.1	20.5	15.7	14.0
Incr Delay (d2), s/veh	20.7	6.4	0.1	4.0	4.6	0.5	0.2	0.0	5.8	39.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.6	0.4	0.6	6.0	4.3	0.7	0.0	3.5	16.0	0.4	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.4	31.7	18.9	41.5	32.9	11.5	28.0	0.0	39.9	59.7	15.7	14.6
LnGrp LOS	E	C	B	D	C	B	C	A	D	F	B	B
Approach Vol, veh/h		1160			1127			214			1051	
Approach Delay, s/veh		34.8			24.9			37.5			41.6	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	29.9	8.4	34.5	13.2	24.1	29.0	13.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	26.0	7.0	34.0	10.0	23.0	25.0	16.0
Max Q Clear Time (g_c+I1), s	3.4	22.6	3.7	16.9	9.4	17.2	27.0	9.5
Green Ext Time (p_c), s	0.0	1.9	0.0	1.5	0.0	2.9	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	33.8
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	145	1	281	2	548	137	240	747	6
Future Volume (veh/h)	0	0	0	145	1	281	2	548	137	240	747	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1663	1663	1322	1760	1796	1796	1205	1796	1796
Adj Flow Rate, veh/h	0	0	0	167	1	323	3	761	190	267	830	7
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.72	0.72	0.72	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	16	16	39	14	7	7	50	7	7
Cap, veh/h	0	490	0	418	2	552	9	855	214	270	1893	16
Arrive On Green	0.00	0.00	0.00	0.26	0.26	0.26	0.01	0.32	0.32	0.24	0.55	0.55
Sat Flow, veh/h	0	1900	0	1254	9	1120	1676	2704	675	1148	3468	29
Grp Volume(v), veh/h	0	0	0	168	0	323	3	480	471	267	408	429
Grp Sat Flow(s),veh/h/ln	0	1900	0	1262	0	1120	1676	1706	1673	1148	1706	1791
Q Serve(g_s), s	0.0	0.0	0.0	8.7	0.0	15.6	0.1	20.4	20.4	17.6	10.9	10.9
Cycle Q Clear(g_c), s	0.0	0.0	0.0	8.7	0.0	15.6	0.1	20.4	20.4	17.6	10.9	10.9
Prop In Lane	0.00		0.00	0.99		1.00	1.00		0.40	1.00		0.02
Lane Grp Cap(c), veh/h	0	490	0	420	0	552	9	540	529	270	932	978
V/C Ratio(X)	0.00	0.00	0.00	0.40	0.00	0.58	0.32	0.89	0.89	0.99	0.44	0.44
Avail Cap(c_a), veh/h	0	799	0	625	0	735	154	574	563	270	932	978
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)	0.00	0.00	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	0.0	0.0	0.0	24.2	0.0	13.7	37.7	24.7	24.7	29.0	10.3	10.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	1.0	18.0	15.3	15.5	51.5	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	0.0	0.0	0.0	2.6	0.0	3.8	0.1	9.4	9.3	8.2	3.2	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	24.8	0.0	14.7	55.7	40.0	40.3	80.5	10.6	10.6
LnGrp LOS	A	A	A	C	A	B	E	D	D	F	B	B
Approach Vol, veh/h		0			491			954			1104	
Approach Delay, s/veh		0.0			18.2			40.2			27.5	
Approach LOS					B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	29.6		24.1	4.9	47.0		24.1
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	7.9	25.6		32.0	7.0	36.5		32.0
Max Q Clear Time (g_c+I1), s	10.6	22.4		0.0	2.1	12.9		17.6
Green Ext Time (p_c), s	0.0	1.7		0.0	0.0	4.7		2.0

Intersection Summary		
HCM 6th Ctrl Delay		30.5
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	2	24	29	0	30	66	813	54	41	738	31
Future Volume (veh/h)	5	2	24	29	0	30	66	813	54	41	738	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
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	1678	1678	1678	1530	1530	1530	1781	1826	1899	1693	1781	1853
Adj Flow Rate, veh/h	6	3	30	39	0	40	71	874	58	48	868	36
Peak Hour Factor	0.79	0.79	0.79	0.75	0.75	0.75	0.93	0.93	0.93	0.85	0.85	0.85
Percent Heavy Veh, %	15	15	15	25	25	25	8	5	5	14	8	8
Cap, veh/h	19	9	94	166	0	145	208	1331	88	105	1144	47
Arrive On Green	0.08	0.08	0.08	0.11	0.00	0.11	0.12	0.40	0.40	0.07	0.35	0.35
Sat Flow, veh/h	222	111	1111	1457	0	1274	1697	3302	219	1612	3308	137
Grp Volume(v), veh/h	39	0	0	39	0	40	71	459	473	48	444	460
Grp Sat Flow(s),veh/h/ln	1444	0	0	1457	0	1274	1697	1735	1786	1612	1692	1753
Q Serve(g_s), s	1.4	0.0	0.0	1.4	0.0	1.6	2.2	12.2	12.2	1.6	13.3	13.3
Cycle Q Clear(g_c), s	1.4	0.0	0.0	1.4	0.0	1.6	2.2	12.2	12.2	1.6	13.3	13.3
Prop In Lane	0.15		0.77	1.00		1.00	1.00		0.12	1.00		0.08
Lane Grp Cap(c), veh/h	122	0	0	166	0	145	208	699	720	105	585	606
V/C Ratio(X)	0.32	0.00	0.00	0.24	0.00	0.28	0.34	0.66	0.66	0.46	0.76	0.76
Avail Cap(c_a), veh/h	811	0	0	818	0	715	208	913	940	198	891	923
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	0.0	0.0	23.0	0.0	23.1	22.9	13.8	13.8	25.7	16.5	16.5
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.7	0.0	1.0	1.0	1.1	1.0	3.0	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	0.5	0.0	0.0	0.5	0.0	0.5	0.8	3.8	3.9	0.6	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.1	0.0	0.0	23.7	0.0	24.1	23.8	14.9	14.8	28.7	18.6	18.5
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		39			79			1003			952	
Approach Delay, s/veh		26.1			23.9			15.5			19.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	28.5		9.3	11.5	25.2		11.0
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	7.0	30.0		32.0	7.0	30.0		32.0
Max Q Clear Time (g_c+I1), s	3.6	14.2		3.4	4.2	15.3		3.6
Green Ext Time (p_c), s	0.0	4.7		0.2	0.0	4.4		0.3

Intersection Summary		
HCM 6th Ctrl Delay	17.7	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	75	57	14	52	18	19	646	89	37	749	81
Future Volume (veh/h)	78	75	57	14	52	18	19	646	89	37	749	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		0.98
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	1870	1945	1870	1870	1870	1870	1930	1856	1856	1796	1796	1796
Adj Flow Rate, veh/h	98	94	71	17	63	22	24	808	111	43	871	94
Peak Hour Factor	0.80	0.80	0.80	0.82	0.82	0.82	0.80	0.80	0.80	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	7	7	7
Cap, veh/h	392	203	153	328	263	92	76	1206	166	114	1280	138
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.04	0.39	0.39	0.07	0.41	0.41
Sat Flow, veh/h	1303	1018	769	1214	1316	460	1838	3112	427	1711	3098	334
Grp Volume(v), veh/h	98	0	165	17	0	85	24	458	461	43	480	485
Grp Sat Flow(s),veh/h/ln	1303	0	1786	1214	0	1775	1838	1763	1777	1711	1706	1726
Q Serve(g_s), s	2.7	0.0	3.2	0.5	0.0	1.6	0.5	8.4	8.4	0.9	9.0	9.0
Cycle Q Clear(g_c), s	4.2	0.0	3.2	3.7	0.0	1.6	0.5	8.4	8.4	0.9	9.0	9.0
Prop In Lane	1.00		0.43	1.00		0.26	1.00		0.24	1.00		0.19
Lane Grp Cap(c), veh/h	392	0	357	328	0	354	76	683	688	114	705	713
V/C Ratio(X)	0.25	0.00	0.46	0.05	0.00	0.24	0.32	0.67	0.67	0.38	0.68	0.68
Avail Cap(c_a), veh/h	737	0	829	649	0	824	335	963	970	311	932	943
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	13.8	15.4	0.0	13.1	18.2	9.9	9.9	17.4	9.3	9.3
Incr Delay (d2), s/veh	0.3	0.0	0.9	0.1	0.0	0.3	2.4	1.1	1.1	2.0	1.3	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	0.7	0.0	1.2	0.1	0.0	0.6	0.2	2.7	2.7	0.4	2.1	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	0.0	14.7	15.4	0.0	13.5	20.5	11.0	11.0	19.5	10.6	10.6
LnGrp LOS	B	A	B	B	A	B	C	B	B	B	B	B
Approach Vol, veh/h		263			102			943			1008	
Approach Delay, s/veh		14.9			13.8			11.3			11.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	19.6		12.3	6.1	20.6		12.3
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.3		18.1	7.1	21.3		18.1
Max Q Clear Time (g_c+I1), s	2.9	10.4		6.2	2.5	11.0		5.7
Green Ext Time (p_c), s	0.0	4.6		1.0	0.0	4.1		0.3

Intersection Summary		
HCM 6th Ctrl Delay	11.7	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	56	104	487	195	454	0	0	818	139
Future Volume (veh/h)	0	0	0	56	104	487	195	454	0	0	818	139
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1841	1841	0	0	1811	1811
Adj Flow Rate, veh/h				59	368	340	224	522	0	0	986	167
Peak Hour Factor				0.95	0.95	0.95	0.87	0.87	0.87	0.83	0.83	0.83
Percent Heavy Veh, %				2	2	2	4	4	0	0	6	6
Cap, veh/h				68	423	436	267	2162	0	0	1197	203
Arrive On Green				0.26	0.26	0.26	0.15	0.62	0.00	0.00	0.41	0.41
Sat Flow, veh/h				257	1601	1648	1753	3589	0	0	3033	498
Grp Volume(v), veh/h				427	0	340	224	522	0	0	576	577
Grp Sat Flow(s),veh/h/ln				1858	0	1648	1753	1749	0	0	1721	1719
Q Serve(g_s), s				16.8	0.0	14.6	9.5	5.1	0.0	0.0	22.9	22.9
Cycle Q Clear(g_c), s				16.8	0.0	14.6	9.5	5.1	0.0	0.0	22.9	22.9
Prop In Lane				0.14		1.00	1.00		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				491	0	436	267	2162	0	0	700	700
V/C Ratio(X)				0.87	0.00	0.78	0.84	0.24	0.00	0.00	0.82	0.82
Avail Cap(c_a), veh/h				545	0	484	377	2670	0	0	842	841
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.9	0.0	26.1	31.5	6.6	0.0	0.0	20.3	20.3
Incr Delay (d2), s/veh				13.2	0.0	7.3	10.9	0.1	0.0	0.0	5.6	5.7
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				8.9	0.0	6.4	4.7	1.6	0.0	0.0	9.5	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				40.1	0.0	33.4	42.5	6.6	0.0	0.0	25.9	26.0
LnGrp LOS				D	A	C	D	A	A	A	C	C
Approach Vol, veh/h					767			746			1153	
Approach Delay, s/veh					37.1			17.4			25.9	
Approach LOS					D			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	51.9		16.2	35.7		24.8
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	58.5		16.5	37.5		22.5
Max Q Clear Time (g_c+I1), s	7.1		11.5	24.9		18.8
Green Ext Time (p_c), s	4.1		0.3	6.2		1.4

Intersection Summary		
HCM 6th Ctrl Delay		26.8
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	219	2	81	247	15	6	3	192	8	3	3
Future Vol, veh/h	7	219	2	81	247	15	6	3	192	8	3	3
Peak Hour Factor	0.74	0.74	0.74	0.84	0.84	0.84	0.71	0.71	0.71	0.50	0.50	0.50
Heavy Vehicles, %	18	41	18	10	29	10	10	10	10	23	23	23
Mvmt Flow	9	296	3	96	294	18	8	4	270	16	6	6
Number of Lanes	0	2	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	11.8	15.2	12.6	10.3
HCM LOS	B	C	B	B

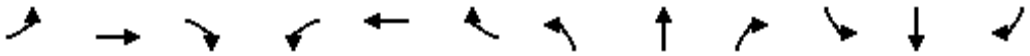
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	3%	6%	0%	100%	0%	57%
Vol Thru, %	1%	94%	98%	0%	94%	21%
Vol Right, %	96%	0%	2%	0%	6%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	201	117	112	81	262	14
LT Vol	6	7	0	81	0	8
Through Vol	3	110	110	0	247	3
RT Vol	192	0	2	0	15	3
Lane Flow Rate	283	157	151	96	312	28
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.43	0.279	0.282	0.176	0.55	0.053
Departure Headway (Hd)	5.473	6.372	6.726	6.57	6.349	6.853
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	657	564	533	546	568	520
Service Time	3.522	4.118	4.472	4.312	4.091	4.927
HCM Lane V/C Ratio	0.431	0.278	0.283	0.176	0.549	0.054
HCM Control Delay	12.6	11.6	12.1	10.7	16.6	10.3
HCM Lane LOS	B	B	B	B	C	B
HCM 95th-tile Q	2.2	1.1	1.2	0.6	3.3	0.2



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	138	163	653	176	211	855
Future Volume (veh/h)	138	163	653	176	211	855
Initial Q (Qb), veh	0	0	0	0	0	0
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	1767	1767	1693	1693	1767	1707
Adj Flow Rate, veh/h	150	177	907	244	234	950
Peak Hour Factor	0.92	0.92	0.72	0.72	0.90	0.90
Percent Heavy Veh, %	9	9	14	14	9	13
Cap, veh/h	271	242	1082	291	281	2184
Arrive On Green	0.16	0.16	0.43	0.43	0.17	0.67
Sat Flow, veh/h	1682	1497	2591	673	1682	3329
Grp Volume(v), veh/h	150	177	581	570	234	950
Grp Sat Flow(s),veh/h/ln	1682	1497	1608	1571	1682	1622
Q Serve(g_s), s	5.0	6.8	19.5	19.5	8.1	8.2
Cycle Q Clear(g_c), s	5.0	6.8	19.5	19.5	8.1	8.2
Prop In Lane	1.00	1.00		0.43	1.00	
Lane Grp Cap(c), veh/h	271	242	694	679	281	2184
V/C Ratio(X)	0.55	0.73	0.84	0.84	0.83	0.43
Avail Cap(c_a), veh/h	891	792	819	801	353	2576
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	23.3	24.1	15.3	15.3	24.4	4.6
Incr Delay (d2), s/veh	1.8	4.3	6.7	6.9	12.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.5	6.5	6.4	3.8	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.1	28.4	21.9	22.2	37.2	4.7
LnGrp LOS	C	C	C	C	D	A
Approach Vol, veh/h	327		1151			1184
Approach Delay, s/veh	26.9		22.1			11.1
Approach LOS	C		C			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.6	31.6			46.2	14.3
Change Period (Y+Rc), s	4.5	5.5			5.5	4.5
Max Green Setting (Gmax), s	12.7	30.8			48.0	32.0
Max Q Clear Time (g_c+I1), s	10.1	21.5			10.2	8.8
Green Ext Time (p_c), s	0.2	4.6			7.1	1.0

Intersection Summary	
HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	354	241	301	186	11	110	5	110	9	5	3
Future Volume (veh/h)	1	354	241	301	186	11	110	5	110	9	5	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.97
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	1841	1796	1683	1826	1899	1826	1796	1868	1796	1870	1945	1870
Adj Flow Rate, veh/h	1	393	268	320	198	12	131	6	131	14	8	5
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.84	0.84	0.84	0.65	0.65	0.65
Percent Heavy Veh, %	4	7	19	5	5	5	7	7	7	2	2	2
Cap, veh/h	3	535	419	395	909	55	258	32	177	271	149	71
Arrive On Green	0.00	0.30	0.30	0.23	0.51	0.51	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1753	1796	1407	1739	1771	107	640	132	738	684	620	296
Grp Volume(v), veh/h	1	393	268	320	0	210	268	0	0	27	0	0
Grp Sat Flow(s),veh/h/ln	1753	1796	1407	1739	0	1879	1510	0	0	1601	0	0
Q Serve(g_s), s	0.0	10.0	8.4	8.9	0.0	3.1	6.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.0	8.4	8.9	0.0	3.1	8.3	0.0	0.0	0.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.06	0.49		0.49	0.52		0.19
Lane Grp Cap(c), veh/h	3	535	419	395	0	964	467	0	0	491	0	0
V/C Ratio(X)	0.29	0.74	0.64	0.81	0.00	0.22	0.57	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	241	1057	828	750	0	1640	868	0	0	896	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)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.4	16.1	15.5	18.6	0.0	6.8	17.8	0.0	0.0	15.0	0.0	0.0
Incr Delay (d2), s/veh	41.1	2.0	1.6	4.0	0.0	0.1	1.1	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	0.1	3.6	2.4	3.4	0.0	0.9	2.8	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.5	18.1	17.2	22.6	0.0	6.9	18.9	0.0	0.0	15.0	0.0	0.0
LnGrp LOS	E	B	B	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		662			530			268			27	
Approach Delay, s/veh		17.8			16.4			18.9			15.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.6	19.2		16.2	4.6	30.2		16.2				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	22.0	30.0		26.0	7.0	44.5		26.0				
Max Q Clear Time (g_c+I1), s	10.9	12.0		2.6	2.0	5.1		10.3				
Green Ext Time (p_c), s	0.7	3.0		0.1	0.0	1.2		1.5				

Intersection Summary												
HCM 6th Ctrl Delay			17.4									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	357	103	57	120	9	53	289	9	140	458	0
Future Volume (veh/h)	1	357	103	57	120	9	53	289	9	140	458	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1699	1811	1841	1914	1841	1870	1945	1945	1870	1945	1870
Adj Flow Rate, veh/h	1	401	116	61	129	10	58	318	0	152	498	0
Peak Hour Factor	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %	18	18	6	4	4	4	2	2	2	2	2	2
Cap, veh/h	1	464	420	80	168	205	118	473		189	551	0
Arrive On Green	0.27	0.27	0.27	0.13	0.13	0.13	0.07	0.24	0.00	0.11	0.28	0.00
Sat Flow, veh/h	4	1694	1535	605	1279	1560	1781	1945	0	1781	1945	0
Grp Volume(v), veh/h	402	0	116	190	0	10	58	318	0	152	498	0
Grp Sat Flow(s),veh/h/ln	1698	0	1535	1884	0	1560	1781	1945	0	1781	1945	0
Q Serve(g_s), s	16.5	0.0	4.4	7.1	0.0	0.4	2.3	10.9	0.0	6.1	18.1	0.0
Cycle Q Clear(g_c), s	16.5	0.0	4.4	7.1	0.0	0.4	2.3	10.9	0.0	6.1	18.1	0.0
Prop In Lane	0.00		1.00	0.32		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	465	0	420	248	0	205	118	473		189	551	0
V/C Ratio(X)	0.86	0.00	0.28	0.77	0.00	0.05	0.49	0.67		0.80	0.90	0.00
Avail Cap(c_a), veh/h	567	0	512	462	0	383	170	541		221	596	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.4	0.0	20.9	30.8	0.0	27.9	33.1	25.1	0.0	32.1	25.3	0.0
Incr Delay (d2), s/veh	11.3	0.0	0.4	4.9	0.0	0.1	3.2	2.7	0.0	16.8	16.5	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	7.9	0.0	1.6	3.5	0.0	0.2	1.0	4.9	0.0	3.3	9.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.7	0.0	21.3	35.7	0.0	27.9	36.2	27.8	0.0	48.8	41.8	0.0
LnGrp LOS	D	A	C	D	A	C	D	C		D	D	A
Approach Vol, veh/h		518			200			376	A		650	
Approach Delay, s/veh		33.2			35.3			29.1			43.5	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.3	22.4		24.6	9.4	25.3		14.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	9.1	20.4		24.5	7.0	22.5		18.0
Max Q Clear Time (g_c+I1), s	8.1	12.9		18.5	4.3	20.1		9.1
Green Ext Time (p_c), s	0.0	1.0		1.6	0.0	0.7		0.7

Intersection Summary	
HCM 6th Ctrl Delay	36.4
HCM 6th LOS	D

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)	3	437	34	13	410	4	125	0	323	8	0	42
Future Volume (veh/h)	3	437	34	13	410	4	125	0	323	8	0	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.98	0.99		0.99	1.00		0.97
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	1841	1811	1811	1856	1781	1781	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	3	491	0	14	441	4	139	0	359	9	0	46
Peak Hour Factor	0.89	0.89	0.89	0.93	0.93	0.93	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	4	6	6	3	8	8	5	5	5	9	9	9
Cap, veh/h	398	715		372	696	6	666	0	507	158	47	396
Arrive On Green	0.39	0.39	0.00	0.39	0.39	0.39	0.33	0.00	0.33	0.33	0.00	0.33
Sat Flow, veh/h	924	1811	0	893	1762	16	1350	0	1536	91	144	1199
Grp Volume(v), veh/h	3	491	0	14	0	445	139	0	359	55	0	0
Grp Sat Flow(s),veh/h/ln	924	1811	0	893	0	1778	1350	0	1536	1433	0	0
Q Serve(g_s), s	0.1	7.4	0.0	0.4	0.0	6.6	1.5	0.0	6.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.7	7.4	0.0	7.8	0.0	6.6	2.3	0.0	6.7	0.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.01	1.00		1.00	0.16		0.84
Lane Grp Cap(c), veh/h	398	715		372	0	702	666	0	507	601	0	0
V/C Ratio(X)	0.01	0.69		0.04	0.00	0.63	0.21	0.00	0.71	0.09	0.00	0.00
Avail Cap(c_a), veh/h	838	1578		797	0	1549	1137	0	1056	1081	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)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.7	8.2	0.0	11.5	0.0	8.0	8.1	0.0	9.6	7.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	1.0	0.2	0.0	1.8	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	1.7	0.0	0.1	0.0	1.5	0.5	0.0	1.8	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.7	9.4	0.0	11.5	0.0	8.9	8.2	0.0	11.4	7.7	0.0	0.0
LnGrp LOS	B	A		B	A	A	A	A	B	A	A	A
Approach Vol, veh/h		494	A		459			498			55	
Approach Delay, s/veh		9.4			9.0			10.5			7.7	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.3	17.4	15.3	17.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	22.5	28.5	22.5	28.5
Max Q Clear Time (g_c+I1), s	8.7	9.4	2.8	9.8
Green Ext Time (p_c), s	1.8	2.8	0.2	2.5

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	149	773	9	26	223	8	3	212	12	323	79	225
Future Volume (veh/h)	149	773	9	26	223	8	3	212	12	323	79	225
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1811	1811	1811	1856	1856	1856	1811	1884	1811	1870	1945	1870
Adj Flow Rate, veh/h	169	878	10	31	265	10	3	236	13	234	291	262
Peak Hour Factor	0.88	0.88	0.88	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86
Percent Heavy Veh, %	6	6	6	3	3	3	6	6	6	2	2	2
Cap, veh/h	175	962	11	43	388	15	4	289	239	329	360	801
Arrive On Green	0.32	0.32	0.32	0.12	0.12	0.12	0.16	0.16	0.16	0.18	0.18	0.18
Sat Flow, veh/h	548	3004	36	355	3189	126	24	1859	1535	1781	1945	1585
Grp Volume(v), veh/h	550	0	507	160	0	146	239	0	13	234	291	262
Grp Sat Flow(s),veh/h/ln	1784	0	1804	1838	0	1833	1882	0	1535	1781	1945	1585
Q Serve(g_s), s	25.1	0.0	22.0	6.9	0.0	6.3	10.2	0.0	0.6	10.2	11.9	8.1
Cycle Q Clear(g_c), s	25.1	0.0	22.0	6.9	0.0	6.3	10.2	0.0	0.6	10.2	11.9	8.1
Prop In Lane	0.31		0.02	0.19		0.07	0.01		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	571	0	578	223	0	223	293	0	239	329	360	801
V/C Ratio(X)	0.96	0.00	0.88	0.72	0.00	0.65	0.82	0.00	0.05	0.71	0.81	0.33
Avail Cap(c_a), veh/h	571	0	578	400	0	399	444	0	362	388	423	853
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	0.0	26.6	35.0	0.0	34.7	33.8	0.0	29.7	31.6	32.3	12.1
Incr Delay (d2), s/veh	28.6	0.0	14.2	4.3	0.0	3.2	6.9	0.0	0.1	4.9	9.7	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	14.7	0.0	11.3	3.3	0.0	2.9	5.1	0.0	0.2	4.7	6.4	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.2	0.0	40.8	39.3	0.0	37.9	40.7	0.0	29.8	36.5	42.1	12.4
LnGrp LOS	E	A	D	D	A	D	D	A	C	D	D	B
Approach Vol, veh/h		1057			306			252			787	
Approach Delay, s/veh		48.8			38.6			40.1			30.5	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.4	31.0	19.8	14.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.5	26.5	18.0	18.0
Max Q Clear Time (g_c+I1), s	12.2	27.1	13.9	8.9
Green Ext Time (p_c), s	0.8	0.0	1.4	1.1

Intersection Summary	
HCM 6th Ctrl Delay	40.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	76	300	742	154	301	68
Future Volume (veh/h)	76	300	742	154	301	68
Initial Q (Qb), veh	0	0	0	0	0	0
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	1637	1668	1870	1945	1945	1945
Adj Flow Rate, veh/h	85	0	887	0	358	0
Peak Hour Factor	0.89	0.89	0.96	0.96	0.84	0.84
Percent Heavy Veh, %	22	20	2	2	2	2
Cap, veh/h	162		1206	658	477	
Arrive On Green	0.10	0.00	0.34	0.00	0.25	0.00
Sat Flow, veh/h	1559	1413	3563	1945	1945	1648
Grp Volume(v), veh/h	85	0	887	0	358	0
Grp Sat Flow(s),veh/h/ln	1559	1413	1781	1945	1945	1648
Q Serve(g_s), s	2.2	0.0	9.5	0.0	7.3	0.0
Cycle Q Clear(g_c), s	2.2	0.0	9.5	0.0	7.3	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	162		1206	658	477	
V/C Ratio(X)	0.53		0.74	0.00	0.75	
Avail Cap(c_a), veh/h	650		2106	1150	812	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	18.3	0.0	12.6	0.0	15.1	0.0
Incr Delay (d2), s/veh	2.6	0.0	0.9	0.0	2.4	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	0.8	0.0	3.1	0.0	3.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.0	0.0	13.5	0.0	17.5	0.0
LnGrp LOS	C		B	A	B	
Approach Vol, veh/h	85	A		887	358	A
Approach Delay, s/veh	21.0			13.5	17.5	
Approach LOS	C			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	19.1		9.0		15.1
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	25.5		18.0		18.0
Max Q Clear Time (g_c+I1), s	11.5		4.2		9.3
Green Ext Time (p_c), s	3.1		0.1		1.4

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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)	222	918	53	45	1042	564	35	111	28	226	82	293
Future Volume (veh/h)	222	918	53	45	1042	564	35	111	28	226	82	293
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	0.99		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	241	998	58	55	1271	688	47	148	37	257	93	333
Peak Hour Factor	0.92	0.92	0.92	0.82	0.82	0.82	0.75	0.75	0.75	0.88	0.88	0.88
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	266	1693	747	105	1397	803	313	206	52	346	369	544
Arrive On Green	0.15	0.49	0.49	0.06	0.40	0.40	0.05	0.14	0.14	0.13	0.21	0.21
Sat Flow, veh/h	1753	3469	1530	1767	3526	1518	1781	1498	374	1668	1752	1497
Grp Volume(v), veh/h	241	998	58	55	1271	688	47	0	185	257	93	333
Grp Sat Flow(s),veh/h/ln	1753	1735	1530	1767	1763	1518	1781	0	1872	1668	1752	1497
Q Serve(g_s), s	11.6	17.7	1.7	2.6	29.2	33.8	1.9	0.0	8.1	11.0	3.8	15.7
Cycle Q Clear(g_c), s	11.6	17.7	1.7	2.6	29.2	33.8	1.9	0.0	8.1	11.0	3.8	15.7
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	266	1693	747	105	1397	803	313	0	258	346	369	544
V/C Ratio(X)	0.91	0.59	0.08	0.52	0.91	0.86	0.15	0.00	0.72	0.74	0.25	0.61
Avail Cap(c_a), veh/h	266	1693	747	144	1397	803	361	0	349	346	408	578
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	1.00	1.00
Uniform Delay (d), s/veh	35.8	15.8	11.7	39.2	24.5	17.8	28.7	0.0	35.4	26.5	28.2	22.4
Incr Delay (d2), s/veh	32.1	0.5	0.0	4.0	9.1	9.1	0.2	0.0	4.5	8.4	0.4	1.7
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	7.0	6.2	0.6	1.2	12.5	12.7	0.8	0.0	3.9	5.1	1.6	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	16.3	11.7	43.1	33.6	26.9	28.9	0.0	39.9	34.9	28.6	24.2
LnGrp LOS	E	B	B	D	C	C	C	A	D	C	C	C
Approach Vol, veh/h		1297			2014			232			683	
Approach Delay, s/veh		25.7			31.5			37.7			28.8	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	45.9	8.7	22.1	17.0	38.0	15.0	15.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	40.0	7.0	20.0	13.0	34.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	4.6	19.7	3.9	17.7	13.6	35.8	13.0	10.1
Green Ext Time (p_c), s	0.0	6.8	0.0	0.4	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	1	140	1	303	2	798	204	340	942	0
Future Volume (veh/h)	0	1	1	140	1	303	2	798	204	340	942	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	0.90	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	1870	1870	1870	1752	1752	1248	1822	1826	1826	1282	1856	1856
Adj Flow Rate, veh/h	0	1	1	161	1	348	2	858	219	391	1083	0
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.93	0.93	0.93	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	10	10	44	10	5	5	45	3	3
Cap, veh/h	0	229	229	410	2	535	7	867	221	361	2146	0
Arrive On Green	0.00	0.27	0.27	0.27	0.27	0.27	0.00	0.32	0.32	0.30	0.61	0.00
Sat Flow, veh/h	0	858	858	1315	8	952	1735	2737	698	1221	3618	0
Grp Volume(v), veh/h	0	0	2	162	0	348	2	544	533	391	1083	0
Grp Sat Flow(s),veh/h/ln	0	0	1716	1323	0	952	1735	1735	1700	1221	1763	0
Q Serve(g_s), s	0.0	0.0	0.1	12.2	0.0	30.3	0.1	37.4	37.5	35.5	20.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	12.4	0.0	30.3	0.1	37.4	37.5	35.5	20.8	0.0
Prop In Lane	0.00		0.50	0.99		1.00	1.00		0.41	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	458	413	0	535	7	549	538	361	2146	0
V/C Ratio(X)	0.00	0.00	0.00	0.39	0.00	0.65	0.31	0.99	0.99	1.08	0.50	0.00
Avail Cap(c_a), veh/h	0	0	458	413	0	535	101	549	538	361	2146	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)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	32.3	36.8	0.0	18.1	59.6	40.8	40.8	42.2	13.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	2.8	24.4	35.7	36.3	71.1	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	0.0	0.0	0.0	4.1	0.0	6.9	0.1	20.5	20.2	17.2	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	32.3	37.4	0.0	20.9	84.0	76.5	77.1	113.3	13.4	0.0
LnGrp LOS	A	A	C	D	A	C	F	E	E	F	B	A
Approach Vol, veh/h		2			510			1079			1474	
Approach Delay, s/veh		32.3			26.1			76.8			39.9	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	43.5		36.5	5.0	78.5		36.5
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	5.5	38.0		32.0	7.0	66.5		32.0
Max Q Clear Time (g_c+I1), s	37.5	39.5		2.1	2.1	22.8		32.3
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	8.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.6
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	0	63	14	0	7	6	830	21	23	968	8
Future Volume (veh/h)	31	0	63	14	0	7	6	830	21	23	968	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1856	1856	1856	1500	1500	1500	1767	1826	1899	1811	1856	1930
Adj Flow Rate, veh/h	39	0	79	21	0	10	7	922	23	25	1052	9
Peak Hour Factor	0.80	0.80	0.80	0.67	0.67	0.67	0.90	0.90	0.90	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	27	27	27	9	5	5	6	3	3
Cap, veh/h	63	0	128	71	0	63	22	1319	33	72	1468	13
Arrive On Green	0.12	0.00	0.12	0.05	0.00	0.05	0.01	0.38	0.38	0.04	0.41	0.41
Sat Flow, veh/h	534	0	1082	1428	0	1271	1682	3459	86	1725	3582	31
Grp Volume(v), veh/h	118	0	0	21	0	10	7	462	483	25	518	543
Grp Sat Flow(s),veh/h/ln	1617	0	0	1428	0	1271	1682	1735	1810	1725	1763	1850
Q Serve(g_s), s	3.2	0.0	0.0	0.7	0.0	0.3	0.2	10.4	10.4	0.7	11.4	11.4
Cycle Q Clear(g_c), s	3.2	0.0	0.0	0.7	0.0	0.3	0.2	10.4	10.4	0.7	11.4	11.4
Prop In Lane	0.33		0.67	1.00		1.00	1.00		0.05	1.00		0.02
Lane Grp Cap(c), veh/h	191	0	0	71	0	63	22	661	690	72	722	758
V/C Ratio(X)	0.62	0.00	0.00	0.30	0.00	0.16	0.32	0.70	0.70	0.35	0.72	0.72
Avail Cap(c_a), veh/h	1115	0	0	985	0	877	254	1122	1171	260	1140	1196
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	0.0	0.0	21.3	0.0	21.1	22.7	12.1	12.1	21.6	11.4	11.4
Incr Delay (d2), s/veh	3.3	0.0	0.0	2.3	0.0	1.2	8.1	1.4	1.3	2.9	1.3	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	1.3	0.0	0.0	0.2	0.0	0.1	0.1	2.9	3.0	0.3	3.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.7	0.0	0.0	23.5	0.0	22.3	30.8	13.5	13.4	24.5	12.8	12.7
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		118			31			952			1086	
Approach Delay, s/veh		22.7			23.1			13.6			13.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	23.2		10.0	5.1	24.5		6.8
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	7.6	30.0		32.0	7.0	30.0		32.0
Max Q Clear Time (g_c+I1), s	2.7	12.4		5.2	2.2	13.4		2.7
Green Ext Time (p_c), s	0.0	5.0		0.7	0.0	5.6		0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	199	52	33	56	37	38	913	107	52	838	56
Future Volume (veh/h)	97	199	52	33	56	37	38	913	107	52	838	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.99		0.97	1.00		0.98	1.00		0.95
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	1870	1945	1870	1870	1870	1870	1914	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	101	207	54	42	72	47	40	961	113	58	931	62
Peak Hour Factor	0.96	0.96	0.96	0.78	0.78	0.78	0.95	0.95	0.95	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	4	4	4	2	2	2
Cap, veh/h	397	374	98	295	265	173	110	1216	143	140	1366	91
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.06	0.39	0.39	0.08	0.41	0.41
Sat Flow, veh/h	1246	1471	384	1102	1043	681	1823	3143	369	1781	3370	224
Grp Volume(v), veh/h	101	0	261	42	0	119	40	535	539	58	491	502
Grp Sat Flow(s),veh/h/ln	1246	0	1855	1102	0	1724	1823	1749	1763	1781	1777	1817
Q Serve(g_s), s	3.4	0.0	5.9	1.7	0.0	2.7	1.0	13.0	13.0	1.5	10.9	10.9
Cycle Q Clear(g_c), s	6.1	0.0	5.9	7.5	0.0	2.7	1.0	13.0	13.0	1.5	10.9	10.9
Prop In Lane	1.00		0.21	1.00		0.39	1.00		0.21	1.00		0.12
Lane Grp Cap(c), veh/h	397	0	471	295	0	438	110	677	682	140	720	736
V/C Ratio(X)	0.25	0.00	0.55	0.14	0.00	0.27	0.36	0.79	0.79	0.42	0.68	0.68
Avail Cap(c_a), veh/h	549	0	697	429	0	648	269	774	780	263	786	804
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.8	0.0	15.6	18.9	0.0	14.4	21.7	13.0	13.0	21.1	11.8	11.8
Incr Delay (d2), s/veh	0.3	0.0	1.0	0.2	0.0	0.3	2.0	4.9	4.9	2.0	2.2	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	0.9	0.0	2.4	0.4	0.0	1.0	0.5	5.2	5.2	0.6	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	0.0	16.6	19.1	0.0	14.7	23.8	17.9	17.9	23.1	13.9	13.9
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		362			161			1114			1051	
Approach Delay, s/veh		16.8			15.9			18.1			14.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	23.1		16.7	7.4	24.0		16.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.1	21.3		18.1	7.1	21.3		18.1				
Max Q Clear Time (g_c+I1), s	3.5	15.0		8.1	3.0	12.9		9.5				
Green Ext Time (p_c), s	0.0	3.6		1.4	0.0	3.7		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		16.4
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	71	159	383	370	825	0	0	759	189
Future Volume (veh/h)	0	0	0	71	159	383	370	825	0	0	759	189
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1841	1826	1914	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				76	290	326	407	907	0	0	825	205
Peak Hour Factor				0.94	0.94	0.94	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %				4	5	4	3	3	0	0	3	3
Cap, veh/h				87	333	372	450	2314	0	0	966	240
Arrive On Green				0.23	0.23	0.23	0.25	0.66	0.00	0.00	0.35	0.35
Sat Flow, veh/h				375	1432	1601	1767	3618	0	0	2882	693
Grp Volume(v), veh/h				366	0	326	407	907	0	0	521	509
Grp Sat Flow(s),veh/h/ln				1807	0	1601	1767	1763	0	0	1763	1720
Q Serve(g_s), s				15.8	0.0	15.9	18.1	9.6	0.0	0.0	22.3	22.3
Cycle Q Clear(g_c), s				15.8	0.0	15.9	18.1	9.6	0.0	0.0	22.3	22.3
Prop In Lane				0.21		1.00	1.00		0.00	0.00		0.40
Lane Grp Cap(c), veh/h				420	0	372	450	2314	0	0	610	595
V/C Ratio(X)				0.87	0.00	0.88	0.90	0.39	0.00	0.00	0.85	0.85
Avail Cap(c_a), veh/h				457	0	405	534	2631	0	0	685	668
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				29.9	0.0	30.0	29.2	6.4	0.0	0.0	24.6	24.6
Incr Delay (d2), s/veh				15.6	0.0	17.9	16.9	0.1	0.0	0.0	9.5	9.7
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				8.4	0.0	7.7	9.5	3.0	0.0	0.0	10.4	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.6	0.0	47.8	46.2	6.6	0.0	0.0	34.1	34.3
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					692			1314			1030	
Approach Delay, s/veh					46.6			18.8			34.2	
Approach LOS					D			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	57.7		25.2	32.6		23.4
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	60.5		24.5	31.5		20.5
Max Q Clear Time (g_c+I1), s	11.6		20.1	24.3		17.9
Green Ext Time (p_c), s	8.2		0.6	3.8		1.0

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	14.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	397	15	166	219	3	11	3	217	18	4	1
Future Vol, veh/h	1	397	15	166	219	3	11	3	217	18	4	1
Peak Hour Factor	0.86	0.86	0.86	0.83	0.83	0.83	0.92	0.92	0.92	0.36	0.36	0.36
Heavy Vehicles, %	3	34	3	5	38	10	4	4	4	33	33	33
Mvmt Flow	1	462	17	200	264	4	12	3	236	50	11	3
Number of Lanes	0	2	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	14.6	15.6	13.2	12
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	5%	1%	0%	100%	0%	78%
Vol Thru, %	1%	99%	93%	0%	99%	17%
Vol Right, %	94%	0%	7%	0%	1%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	231	200	214	166	222	23
LT Vol	11	1	0	166	0	18
Through Vol	3	199	199	0	219	4
RT Vol	217	0	15	0	3	1
Lane Flow Rate	251	232	248	200	267	64
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.415	0.408	0.47	0.381	0.514	0.138
Departure Headway (Hd)	5.947	6.337	6.821	6.863	6.915	7.764
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	603	564	526	522	519	464
Service Time	4.024	4.113	4.597	4.639	4.692	5.764
HCM Lane V/C Ratio	0.416	0.411	0.471	0.383	0.514	0.138
HCM Control Delay	13.2	13.5	15.6	13.8	16.9	12
HCM Lane LOS	B	B	C	B	C	B
HCM 95th-tile Q	2	2	2.5	1.8	2.9	0.5

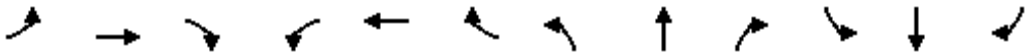


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	158	191	940	161	226	1124
Future Volume (veh/h)	158	191	940	161	226	1124
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1767	1767	1752	1752	1767	1752
Adj Flow Rate, veh/h	172	208	1011	173	260	1292
Peak Hour Factor	0.92	0.92	0.93	0.93	0.87	0.87
Percent Heavy Veh, %	9	9	10	10	9	10
Cap, veh/h	300	267	1220	209	306	2251
Arrive On Green	0.18	0.18	0.43	0.43	0.18	0.68
Sat Flow, veh/h	1682	1497	2930	486	1682	3416
Grp Volume(v), veh/h	172	208	591	593	260	1292
Grp Sat Flow(s),veh/h/ln	1682	1497	1664	1664	1682	1664
Q Serve(g_s), s	6.4	9.1	21.6	21.7	10.3	14.1
Cycle Q Clear(g_c), s	6.4	9.1	21.6	21.7	10.3	14.1
Prop In Lane	1.00	1.00		0.29	1.00	
Lane Grp Cap(c), veh/h	300	267	714	714	306	2251
V/C Ratio(X)	0.57	0.78	0.83	0.83	0.85	0.57
Avail Cap(c_a), veh/h	783	696	890	890	408	2806
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	25.9	27.0	17.4	17.4	27.2	5.9
Incr Delay (d2), s/veh	1.7	4.9	5.4	5.5	12.2	0.2
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	3.4	7.6	7.7	4.7	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.6	31.9	22.7	22.9	39.5	6.1
LnGrp LOS	C	C	C	C	D	A
Approach Vol, veh/h	380		1184			1552
Approach Delay, s/veh	29.9		22.8			11.7
Approach LOS	C		C			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	17.0	35.0			52.0	16.8
Change Period (Y+Rc), s	4.5	5.5			5.5	4.5
Max Green Setting (Gmax), s	16.5	36.8			58.0	32.0
Max Q Clear Time (g_c+I1), s	12.3	23.7			16.1	11.1
Green Ext Time (p_c), s	0.3	5.8			11.3	1.2

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

EXISTING + PROJECT SPECIFIC PLAN SCENARIO TWO WITH RECOMMENDED MITIGATION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	201	146	379	192	13	79	3	104	19	16	4
Future Volume (veh/h)	0	201	146	379	192	13	79	3	104	19	16	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1722	1648	1298	1796	1868	1796	1856	1930	1856	1870	1945	1870
Adj Flow Rate, veh/h	0	245	178	436	221	15	89	3	117	33	28	7
Peak Hour Factor	0.82	0.82	0.82	0.87	0.87	0.87	0.89	0.89	0.89	0.57	0.57	0.57
Percent Heavy Veh, %	12	17	44	7	7	7	3	3	3	2	2	2
Cap, veh/h	4	388	257	527	1092	74	218	28	169	242	181	35
Arrive On Green	0.00	0.24	0.24	0.31	0.63	0.63	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1640	1648	1091	1711	1729	117	544	147	879	649	945	183
Grp Volume(v), veh/h	0	245	178	436	0	236	209	0	0	68	0	0
Grp Sat Flow(s),veh/h/ln	1640	1648	1091	1711	0	1847	1570	0	0	1777	0	0
Q Serve(g_s), s	0.0	6.1	6.8	10.7	0.0	2.4	4.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.1	6.8	10.7	0.0	2.4	5.5	0.0	0.0	1.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.06	0.43		0.56	0.49		0.10
Lane Grp Cap(c), veh/h	4	388	257	527	0	1167	414	0	0	459	0	0
V/C Ratio(X)	0.00	0.63	0.69	0.83	0.00	0.20	0.50	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	253	799	529	1132	0	1812	1000	0	0	1053	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)	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	15.6	15.8	14.6	0.0	3.5	17.0	0.0	0.0	15.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	3.3	3.4	0.0	0.1	1.0	0.0	0.0	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	2.0	1.6	3.6	0.0	0.4	1.9	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.3	19.2	17.9	0.0	3.6	17.9	0.0	0.0	15.5	0.0	0.0
LnGrp LOS	A	B	B	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		423			672			209			68	
Approach Delay, s/veh		18.1			12.9			17.9			15.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.0	14.7		12.7	0.0	32.7		12.7				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	30.0	22.0		26.0	7.0	44.5		26.0				
Max Q Clear Time (g_c+I1), s	12.7	8.8		3.4	0.0	4.4		7.5				
Green Ext Time (p_c), s	1.2	1.6		0.3	0.0	1.4		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		15.4	
HCM 6th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	434	72	56	113	5	37	77	25	124	324	0
Future Volume (veh/h)	1	434	72	56	113	5	37	77	25	124	324	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1699	1781	1826	1899	1870	1826	1899	1899	1870	1899	1826
Adj Flow Rate, veh/h	1	499	83	67	136	6	45	93	0	149	390	0
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	18	18	8	5	5	2	5	5	5	2	5	5
Cap, veh/h	1	552	492	86	174	221	99	357		185	446	0
Arrive On Green	0.33	0.33	0.33	0.14	0.14	0.14	0.06	0.19	0.00	0.10	0.23	0.00
Sat Flow, veh/h	3	1695	1510	617	1252	1585	1739	1899	0	1781	1899	0
Grp Volume(v), veh/h	500	0	83	203	0	6	45	93	0	149	390	0
Grp Sat Flow(s),veh/h/ln	1698	0	1510	1868	0	1585	1739	1899	0	1781	1899	0
Q Serve(g_s), s	20.8	0.0	2.9	7.8	0.0	0.2	1.9	3.1	0.0	6.1	14.6	0.0
Cycle Q Clear(g_c), s	20.8	0.0	2.9	7.8	0.0	0.2	1.9	3.1	0.0	6.1	14.6	0.0
Prop In Lane	0.00		1.00	0.33		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	553	0	492	260	0	221	99	357		185	446	0
V/C Ratio(X)	0.90	0.00	0.17	0.78	0.00	0.03	0.45	0.26		0.80	0.87	0.00
Avail Cap(c_a), veh/h	608	0	540	454	0	385	164	485		207	526	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.9	0.0	17.8	30.8	0.0	27.5	33.8	25.7	0.0	32.4	27.3	0.0
Incr Delay (d2), s/veh	16.1	0.0	0.2	5.0	0.0	0.0	3.2	0.4	0.0	18.6	13.5	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	10.4	0.0	1.0	3.8	0.0	0.1	0.8	1.3	0.0	3.4	7.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	0.0	18.0	35.8	0.0	27.6	37.0	26.1	0.0	51.0	40.8	0.0
LnGrp LOS	D	A	B	D	A	C	D	C		D	D	A
Approach Vol, veh/h		583			209			138	A		539	
Approach Delay, s/veh		36.9			35.6			29.6			43.6	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	18.4		28.6	8.7	21.9		14.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.6	18.9		26.5	7.0	20.5		18.0
Max Q Clear Time (g_c+I1), s	9.1	5.1		22.8	3.9	16.6		9.8
Green Ext Time (p_c), s	0.0	0.3		1.3	0.0	0.8		0.7

Intersection Summary		
HCM 6th Ctrl Delay		38.5
HCM 6th LOS		D

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	311	13	18	517	5	114	1	189	4	0	24
Future Volume (veh/h)	0	311	13	18	517	5	114	1	189	4	0	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.98
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	1841	1707	1707	1811	1767	1767	1737	1737	1737	1841	1841	1841
Adj Flow Rate, veh/h	0	379	0	21	594	6	128	1	212	4	0	26
Peak Hour Factor	0.82	0.82	0.82	0.87	0.87	0.87	0.89	0.89	0.89	0.92	0.92	0.92
Percent Heavy Veh, %	4	13	13	6	9	9	11	11	11	4	4	4
Cap, veh/h	239	807		551	825	8	534	3	336	152	29	302
Arrive On Green	0.00	0.47	0.00	0.47	0.47	0.47	0.23	0.23	0.23	0.23	0.00	0.23
Sat Flow, veh/h	806	1707	0	970	1746	18	1296	14	1469	75	128	1318
Grp Volume(v), veh/h	0	379	0	21	0	600	129	0	212	30	0	0
Grp Sat Flow(s),veh/h/ln	806	1707	0	970	0	1763	1310	0	1469	1520	0	0
Q Serve(g_s), s	0.0	4.5	0.0	0.5	0.0	8.2	2.0	0.0	3.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.5	0.0	5.0	0.0	8.2	2.4	0.0	3.9	0.5	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.01	0.99		1.00	0.13		0.87
Lane Grp Cap(c), veh/h	239	807		551	0	834	538	0	336	483	0	0
V/C Ratio(X)	0.00	0.47		0.04	0.00	0.72	0.24	0.00	0.63	0.06	0.00	0.00
Avail Cap(c_a), veh/h	710	1806		1118	0	1865	1058	0	930	1073	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)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.4	0.0	7.1	0.0	6.4	9.9	0.0	10.5	9.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	1.2	0.2	0.0	2.0	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	0.6	0.0	0.1	0.0	1.3	0.5	0.0	1.1	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.8	0.0	7.1	0.0	7.5	10.1	0.0	12.4	9.2	0.0	0.0
LnGrp LOS	A	A		A	A	A	B	A	B	A	A	A
Approach Vol, veh/h		379	A		621			341			30	
Approach Delay, s/veh		5.8			7.5			11.5			9.2	
Approach LOS		A			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	11.4	18.8	11.4	18.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.1	31.9	19.1	31.9
Max Q Clear Time (g_c+I1), s	5.9	6.5	2.5	10.2
Green Ext Time (p_c), s	1.2	2.2	0.1	3.9

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	106	479	6	13	283	3	6	22	16	295	37	179
Future Volume (veh/h)	106	479	6	13	283	3	6	22	16	295	37	179
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1633	1633	1841	1841	1841	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	112	504	6	17	368	4	8	29	21	392	0	218
Peak Hour Factor	0.95	0.95	0.95	0.77	0.77	0.77	0.77	0.77	0.77	0.82	0.82	0.82
Percent Heavy Veh, %	18	18	18	4	4	4	2	2	2	2	2	2
Cap, veh/h	143	683	8	26	588	7	31	113	119	606	0	679
Arrive On Green	0.26	0.26	0.26	0.17	0.17	0.17	0.07	0.07	0.07	0.17	0.00	0.17
Sat Flow, veh/h	555	2645	33	153	3474	40	416	1508	1585	3563	0	1585
Grp Volume(v), veh/h	324	0	298	204	0	185	37	0	21	392	0	218
Grp Sat Flow(s),veh/h/ln	1605	0	1627	1833	0	1834	1924	0	1585	1781	0	1585
Q Serve(g_s), s	10.3	0.0	9.1	5.7	0.0	5.1	1.0	0.0	0.7	5.6	0.0	5.0
Cycle Q Clear(g_c), s	10.3	0.0	9.1	5.7	0.0	5.1	1.0	0.0	0.7	5.6	0.0	5.0
Prop In Lane	0.35		0.02	0.08		0.02	0.22		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	415	0	420	310	0	310	144	0	119	606	0	679
V/C Ratio(X)	0.78	0.00	0.71	0.66	0.00	0.60	0.26	0.00	0.18	0.65	0.00	0.32
Avail Cap(c_a), veh/h	526	0	533	601	0	601	630	0	519	1167	0	929
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.9	0.0	18.5	21.3	0.0	21.1	24.0	0.0	23.8	21.3	0.0	10.4
Incr Delay (d2), s/veh	5.8	0.0	3.2	2.4	0.0	1.8	0.9	0.0	0.7	1.2	0.0	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	4.1	0.0	3.4	2.4	0.0	2.2	0.5	0.0	0.3	2.2	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	0.0	21.7	23.7	0.0	22.9	24.9	0.0	24.5	22.4	0.0	10.7
LnGrp LOS	C	A	C	C	A	C	C	A	C	C	A	B
Approach Vol, veh/h		622			389			58			610	
Approach Delay, s/veh		23.3			23.3			24.8			18.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	8.6	18.7	13.8	13.8
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	3.0	12.3	7.6	7.7
Green Ext Time (p_c), s	0.1	1.9	1.7	1.6

Intersection Summary	
HCM 6th Ctrl Delay	21.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	184	632	422	99	154	20
Future Volume (veh/h)	184	632	422	99	154	20
Initial Q (Qb), veh	0	0	0	0	0	0
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	1776	1791	1841	1899	1791	1791
Adj Flow Rate, veh/h	209	0	310	387	203	0
Peak Hour Factor	0.88	0.88	0.84	0.84	0.76	0.76
Percent Heavy Veh, %	13	12	4	5	12	12
Cap, veh/h	283		529	573	297	
Arrive On Green	0.17	0.00	0.30	0.30	0.17	0.00
Sat Flow, veh/h	1691	1518	1753	1899	1791	1518
Grp Volume(v), veh/h	209	0	310	387	203	0
Grp Sat Flow(s),veh/h/ln	1691	1518	1753	1899	1791	1518
Q Serve(g_s), s	4.3	0.0	5.5	6.6	3.9	0.0
Cycle Q Clear(g_c), s	4.3	0.0	5.5	6.6	3.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	283		529	573	297	
V/C Ratio(X)	0.74		0.59	0.68	0.68	
Avail Cap(c_a), veh/h	892		901	976	873	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	14.6	0.0	11.0	11.3	14.5	0.0
Incr Delay (d2), s/veh	3.8	0.0	1.0	1.4	2.8	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	1.6	0.0	1.8	2.3	1.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.4	0.0	12.0	12.7	17.3	0.0
LnGrp LOS	B		B	B	B	
Approach Vol, veh/h	209	A		697	203	A
Approach Delay, s/veh	18.4			12.4	17.3	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	15.6		10.7		10.6
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	19.0		19.5		18.0
Max Q Clear Time (g_c+I1), s	8.6		6.3		5.9
Green Ext Time (p_c), s	2.5		0.5		0.8

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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)	128	754	27	24	529	342	27	51	51	470	27	288
Future Volume (veh/h)	128	754	27	24	529	342	27	51	51	470	27	288
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	147	867	31	27	601	389	41	77	77	566	33	347
Peak Hour Factor	0.87	0.87	0.87	0.88	0.88	0.88	0.66	0.66	0.66	0.83	0.83	0.83
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	184	1060	462	67	787	817	311	104	104	651	649	705
Arrive On Green	0.10	0.30	0.30	0.04	0.24	0.24	0.05	0.12	0.12	0.32	0.39	0.39
Sat Flow, veh/h	1753	3497	1524	1654	3300	1429	1781	886	886	1598	1678	1434
Grp Volume(v), veh/h	147	867	31	27	601	389	41	0	154	566	33	347
Grp Sat Flow(s),veh/h/ln	1753	1749	1524	1654	1650	1429	1781	0	1771	1598	1678	1434
Q Serve(g_s), s	6.1	17.0	1.1	1.2	12.6	12.1	1.4	0.0	6.2	21.6	0.9	12.0
Cycle Q Clear(g_c), s	6.1	17.0	1.1	1.2	12.6	12.1	1.4	0.0	6.2	21.6	0.9	12.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	184	1060	462	67	787	817	311	0	207	651	649	705
V/C Ratio(X)	0.80	0.82	0.07	0.41	0.76	0.48	0.13	0.00	0.74	0.87	0.05	0.49
Avail Cap(c_a), veh/h	260	1228	535	156	980	901	383	0	383	673	770	809
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	1.00	1.00
Uniform Delay (d), s/veh	32.4	23.9	18.4	34.7	26.3	9.8	26.1	0.0	31.6	16.9	14.2	12.6
Incr Delay (d2), s/veh	11.1	3.9	0.1	3.9	2.8	0.4	0.2	0.0	5.2	11.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	6.8	0.4	0.5	4.8	3.4	0.6	0.0	2.9	9.1	0.3	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	27.9	18.4	38.6	29.1	10.2	26.2	0.0	36.8	28.5	14.2	13.2
LnGrp LOS	D	C	B	D	C	B	C	A	D	C	B	B
Approach Vol, veh/h		1045			1017			195			946	
Approach Delay, s/veh		29.8			22.1			34.6			22.4	
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	26.4	8.0	32.7	11.8	21.7	28.0	12.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	26.0	7.0	34.0	11.0	22.0	25.0	16.0
Max Q Clear Time (g_c+I1), s	3.2	19.0	3.4	14.0	8.1	14.6	23.6	8.2
Green Ext Time (p_c), s	0.0	3.1	0.0	1.4	0.1	3.1	0.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	147	1	291	2	558	138	231	749	6
Future Volume (veh/h)	0	0	0	147	1	291	2	558	138	231	749	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1663	1663	1307	1760	1796	1796	1128	1796	1796
Adj Flow Rate, veh/h	0	0	0	169	1	334	3	775	192	257	832	7
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.72	0.72	0.72	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	16	16	40	14	7	7	55	7	7
Cap, veh/h	0	509	0	428	2	552	9	856	212	247	1873	16
Arrive On Green	0.00	0.00	0.00	0.27	0.27	0.27	0.01	0.32	0.32	0.23	0.54	0.54
Sat Flow, veh/h	0	1900	0	1254	8	1108	1676	2709	671	1075	3468	29
Grp Volume(v), veh/h	0	0	0	170	0	334	3	488	479	257	409	430
Grp Sat Flow(s),veh/h/ln	0	1900	0	1262	0	1108	1676	1706	1674	1075	1706	1791
Q Serve(g_s), s	0.0	0.0	0.0	8.9	0.0	16.9	0.1	21.3	21.3	17.9	11.3	11.3
Cycle Q Clear(g_c), s	0.0	0.0	0.0	8.9	0.0	16.9	0.1	21.3	21.3	17.9	11.3	11.3
Prop In Lane	0.00		0.00	0.99		1.00	1.00		0.40	1.00		0.02
Lane Grp Cap(c), veh/h	0	509	0	430	0	552	9	539	529	247	922	967
V/C Ratio(X)	0.00	0.00	0.00	0.39	0.00	0.61	0.32	0.91	0.91	1.04	0.44	0.44
Avail Cap(c_a), veh/h	0	781	0	611	0	710	151	561	551	247	922	967
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)	0.00	0.00	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	0.0	0.0	0.0	24.1	0.0	14.0	38.6	25.5	25.5	30.0	10.8	10.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	1.1	18.0	17.9	18.2	68.1	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	0.0	0.0	0.0	2.7	0.0	4.1	0.1	10.2	10.1	8.8	3.4	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	24.7	0.0	15.1	56.5	43.5	43.7	98.1	11.2	11.1
LnGrp LOS	A	A	A	C	A	B	E	D	D	F	B	B
Approach Vol, veh/h		0			504			970			1096	
Approach Delay, s/veh		0.0			18.4			43.6			31.5	
Approach LOS					B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	30.1		25.4	4.9	47.5		25.4
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	7.9	25.6		32.0	7.0	36.5		32.0
Max Q Clear Time (g_c+I1), s	10.9	23.3		0.0	2.1	13.3		18.9
Green Ext Time (p_c), s	0.0	1.2		0.0	0.0	4.7		2.0

Intersection Summary		
HCM 6th Ctrl Delay		33.5
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	2	21	8	0	18	60	807	27	33	700	31
Future Volume (veh/h)	5	2	21	8	0	18	60	807	27	33	700	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.98
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	1678	1678	1678	1530	1530	1530	1781	1826	1899	1693	1781	1853
Adj Flow Rate, veh/h	6	3	27	11	0	24	65	868	29	39	824	36
Peak Hour Factor	0.79	0.79	0.79	0.75	0.75	0.75	0.93	0.93	0.93	0.85	0.85	0.85
Percent Heavy Veh, %	15	15	15	25	25	25	8	5	5	14	8	8
Cap, veh/h	20	10	91	121	0	106	144	1291	43	95	1159	51
Arrive On Green	0.08	0.08	0.08	0.08	0.00	0.08	0.08	0.38	0.38	0.06	0.35	0.35
Sat Flow, veh/h	242	121	1088	1457	0	1278	1697	3425	114	1612	3300	144
Grp Volume(v), veh/h	36	0	0	11	0	24	65	440	457	39	423	437
Grp Sat Flow(s),veh/h/ln	1451	0	0	1457	0	1278	1697	1735	1805	1612	1692	1752
Q Serve(g_s), s	1.1	0.0	0.0	0.3	0.0	0.8	1.7	10.1	10.1	1.1	10.3	10.3
Cycle Q Clear(g_c), s	1.1	0.0	0.0	0.3	0.0	0.8	1.7	10.1	10.1	1.1	10.3	10.3
Prop In Lane	0.17		0.75	1.00		1.00	1.00		0.06	1.00		0.08
Lane Grp Cap(c), veh/h	122	0	0	121	0	106	144	654	680	95	595	616
V/C Ratio(X)	0.30	0.00	0.00	0.09	0.00	0.23	0.45	0.67	0.67	0.41	0.71	0.71
Avail Cap(c_a), veh/h	970	0	0	974	0	854	259	1084	1128	239	1050	1087
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	0.0	0.0	20.3	0.0	20.5	20.8	12.4	12.4	21.7	13.4	13.4
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.3	0.0	1.1	2.2	1.2	1.2	2.8	1.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.1	0.0	0.3	0.7	2.9	3.0	0.4	3.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	0.0	20.6	0.0	21.6	23.1	13.7	13.6	24.5	15.0	15.0
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		36			35			962			899	
Approach Delay, s/veh		21.9			21.3			14.3			15.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	23.5		8.5	8.5	22.3		8.5
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	7.1	29.9		32.0	7.3	29.7		32.0
Max Q Clear Time (g_c+I1), s	3.1	12.1		3.1	3.7	12.3		2.8
Green Ext Time (p_c), s	0.0	4.7		0.2	0.0	4.5		0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.1
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	71	57	15	52	18	20	642	79	32	697	75
Future Volume (veh/h)	78	71	57	15	52	18	20	642	79	32	697	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		0.98
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	1870	1945	1870	1870	1870	1870	1930	1856	1856	1796	1796	1796
Adj Flow Rate, veh/h	98	89	71	18	63	22	25	802	99	37	810	87
Peak Hour Factor	0.80	0.80	0.80	0.82	0.82	0.82	0.80	0.80	0.80	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	7	7	7
Cap, veh/h	398	199	158	337	264	92	78	1219	150	102	1249	134
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.04	0.39	0.39	0.06	0.40	0.40
Sat Flow, veh/h	1303	991	791	1219	1316	460	1838	3157	390	1711	3100	333
Grp Volume(v), veh/h	98	0	160	18	0	85	25	448	453	37	446	451
Grp Sat Flow(s),veh/h/ln	1303	0	1782	1219	0	1776	1838	1763	1784	1711	1706	1726
Q Serve(g_s), s	2.6	0.0	3.0	0.5	0.0	1.5	0.5	8.0	8.0	0.8	8.1	8.1
Cycle Q Clear(g_c), s	4.1	0.0	3.0	3.5	0.0	1.5	0.5	8.0	8.0	0.8	8.1	8.1
Prop In Lane	1.00		0.44	1.00		0.26	1.00		0.22	1.00		0.19
Lane Grp Cap(c), veh/h	398	0	357	337	0	356	78	680	689	102	687	695
V/C Ratio(X)	0.25	0.00	0.45	0.05	0.00	0.24	0.32	0.66	0.66	0.36	0.65	0.65
Avail Cap(c_a), veh/h	755	0	846	671	0	843	342	985	996	319	953	964
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	13.4	14.9	0.0	12.8	17.7	9.6	9.6	17.2	9.2	9.2
Incr Delay (d2), s/veh	0.3	0.0	0.9	0.1	0.0	0.3	2.3	1.1	1.1	2.2	1.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.1	0.1	0.0	0.6	0.2	2.5	2.5	0.3	1.9	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	0.0	14.3	15.0	0.0	13.1	20.0	10.7	10.7	19.4	10.2	10.2
LnGrp LOS	B	A	B	B	A	B	C	B	B	B	B	B
Approach Vol, veh/h		258			103			926			934	
Approach Delay, s/veh		14.5			13.5			11.0			10.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	19.2		12.1	6.1	19.9		12.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.3		18.1	7.1	21.3		18.1
Max Q Clear Time (g_c+I1), s	2.8	10.0		6.1	2.5	10.1		5.5
Green Ext Time (p_c), s	0.0	4.6		1.0	0.0	4.0		0.3

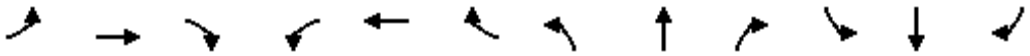
Intersection Summary		
HCM 6th Ctrl Delay		11.3
HCM 6th LOS		B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	124	113	647	201	261	861
Future Volume (veh/h)	124	113	647	201	261	861
Initial Q (Qb), veh	0	0	0	0	0	0
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	1441	1441	1693	1693	1441	1707
Adj Flow Rate, veh/h	135	123	899	279	290	957
Peak Hour Factor	0.92	0.92	0.72	0.72	0.90	0.90
Percent Heavy Veh, %	31	31	14	14	31	13
Cap, veh/h	181	161	1080	334	324	2402
Arrive On Green	0.13	0.13	0.45	0.45	0.24	0.74
Sat Flow, veh/h	1372	1221	2502	748	1372	3329
Grp Volume(v), veh/h	135	123	597	581	290	957
Grp Sat Flow(s),veh/h/ln	1372	1221	1608	1558	1372	1622
Q Serve(g_s), s	7.4	7.6	25.7	25.8	16.1	8.5
Cycle Q Clear(g_c), s	7.4	7.6	25.7	25.8	16.1	8.5
Prop In Lane	1.00	1.00		0.48	1.00	
Lane Grp Cap(c), veh/h	181	161	718	696	324	2402
V/C Ratio(X)	0.74	0.76	0.83	0.83	0.89	0.40
Avail Cap(c_a), veh/h	559	498	975	945	453	3224
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	32.8	32.9	19.1	19.2	29.0	3.8
Incr Delay (d2), s/veh	5.9	7.2	4.6	4.9	15.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	2.5	8.8	8.6	6.1	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.7	40.1	23.7	24.0	44.4	3.9
LnGrp LOS	D	D	C	C	D	A
Approach Vol, veh/h	258		1178			1247
Approach Delay, s/veh	39.4		23.9			13.3
Approach LOS	D		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	23.1	40.6				63.6	14.9
Change Period (Y+Rc), s	4.5	5.5				5.5	4.5
Max Green Setting (Gmax), s	25.9	47.6				78.0	32.0
Max Q Clear Time (g_c+I1), s	18.1	27.8				10.5	9.6
Green Ext Time (p_c), s	0.5	7.2				7.4	0.8

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	325	224	276	170	10	100	5	100	8	5	3
Future Volume (veh/h)	1	325	224	276	170	10	100	5	100	8	5	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.97
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	1841	1767	1652	1826	1899	1826	1796	1868	1796	1870	1945	1870
Adj Flow Rate, veh/h	1	361	249	294	181	11	119	6	119	12	8	5
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.84	0.84	0.84	0.65	0.65	0.65
Percent Heavy Veh, %	4	9	21	5	5	5	7	7	7	2	2	2
Cap, veh/h	4	518	405	378	882	54	259	34	168	262	165	78
Arrive On Green	0.00	0.29	0.29	0.22	0.50	0.50	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1753	1767	1381	1739	1771	108	626	150	739	640	727	342
Grp Volume(v), veh/h	1	361	249	294	0	192	244	0	0	25	0	0
Grp Sat Flow(s),veh/h/ln	1753	1767	1381	1739	0	1879	1514	0	0	1709	0	0
Q Serve(g_s), s	0.0	8.3	7.1	7.3	0.0	2.6	5.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.3	7.1	7.3	0.0	2.6	6.7	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.06	0.49		0.49	0.48		0.20
Lane Grp Cap(c), veh/h	4	518	405	378	0	936	461	0	0	505	0	0
V/C Ratio(X)	0.26	0.70	0.61	0.78	0.00	0.21	0.53	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	268	1157	905	835	0	1826	966	0	0	1024	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)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.8	14.4	13.9	16.9	0.0	6.4	16.2	0.0	0.0	13.9	0.0	0.0
Incr Delay (d2), s/veh	32.7	1.7	1.5	3.5	0.0	0.1	0.9	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	2.8	1.9	2.7	0.0	0.7	2.2	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	16.1	15.5	20.3	0.0	6.5	17.1	0.0	0.0	13.9	0.0	0.0
LnGrp LOS	E	B	B	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		611			486			244			25	
Approach Delay, s/veh		15.9			14.9			17.1			13.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.0	17.4		14.4	4.6	26.8		14.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.5	4.0		4.0				
Max Green Setting (Gmax), s	22.0	30.0		26.0	7.0	44.5		26.0				
Max Q Clear Time (g_c+I1), s	9.3	10.3		2.5	2.0	4.6		8.7				
Green Ext Time (p_c), s	0.7	2.8		0.1	0.0	1.1		1.4				

Intersection Summary												
HCM 6th Ctrl Delay			15.7									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	331	95	52	110	8	48	265	8	128	419	0
Future Volume (veh/h)	1	331	95	52	110	8	48	265	8	128	419	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1663	1729	1663	1841	1914	1841	1870	1945	1945	1870	1945	1870
Adj Flow Rate, veh/h	1	372	107	56	118	9	53	291	0	139	455	0
Peak Hour Factor	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	16	4	4	4	2	2	2	2	2	2
Cap, veh/h	1	403	116	74	155	190	111	443		174	512	0
Arrive On Green	0.31	0.31	0.31	0.12	0.12	0.12	0.06	0.23	0.00	0.10	0.26	0.00
Sat Flow, veh/h	3	1288	371	606	1278	1560	1781	1945	0	1781	1945	0
Grp Volume(v), veh/h	480	0	0	174	0	9	53	291	0	139	455	0
Grp Sat Flow(s),veh/h/ln	1663	0	0	1884	0	1560	1781	1945	0	1781	1945	0
Q Serve(g_s), s	20.9	0.0	0.0	6.7	0.0	0.4	2.2	10.2	0.0	5.7	16.9	0.0
Cycle Q Clear(g_c), s	20.9	0.0	0.0	6.7	0.0	0.4	2.2	10.2	0.0	5.7	16.9	0.0
Prop In Lane	0.00		0.22	0.32		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	520	0	0	229	0	190	111	443		174	512	0
V/C Ratio(X)	0.92	0.00	0.00	0.76	0.00	0.05	0.48	0.66		0.80	0.89	0.00
Avail Cap(c_a), veh/h	543	0	0	452	0	374	166	529		216	584	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	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.9	0.0	0.0	31.9	0.0	29.1	34.0	26.3	0.0	33.1	26.6	0.0
Incr Delay (d2), s/veh	21.1	0.0	0.0	5.1	0.0	0.1	3.1	2.3	0.0	15.3	14.3	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	10.9	0.0	0.0	3.3	0.0	0.1	1.0	4.6	0.0	3.0	9.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	0.0	0.0	37.0	0.0	29.2	37.1	28.5	0.0	48.4	40.8	0.0
LnGrp LOS	D	A	A	D	A	C	D	C		D	D	A
Approach Vol, veh/h		480			183			344	A		594	
Approach Delay, s/veh		46.0			36.6			29.9			42.6	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.8	21.6		27.9	9.2	24.2		13.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	9.1	20.4		24.5	7.0	22.5		18.0
Max Q Clear Time (g_c+I1), s	7.7	12.2		22.9	4.2	18.9		8.7
Green Ext Time (p_c), s	0.0	0.9		0.5	0.0	0.9		0.6

Intersection Summary		
HCM 6th Ctrl Delay	40.2	
HCM 6th LOS	D	

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)	3	401	31	12	377	4	119	0	296	7	0	38
Future Volume (veh/h)	3	401	31	12	377	4	119	0	296	7	0	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.98	0.99		0.99	1.00		0.97
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	1841	1781	1781	1856	1767	1767	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	3	451	0	13	405	4	132	0	329	8	0	42
Peak Hour Factor	0.89	0.89	0.89	0.93	0.93	0.93	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	4	8	8	3	9	9	5	5	5	9	9	9
Cap, veh/h	429	687		402	673	7	667	0	487	164	47	384
Arrive On Green	0.39	0.39	0.00	0.39	0.39	0.39	0.32	0.00	0.32	0.32	0.00	0.32
Sat Flow, veh/h	955	1781	0	926	1746	17	1353	0	1535	82	148	1211
Grp Volume(v), veh/h	3	451	0	13	0	409	132	0	329	50	0	0
Grp Sat Flow(s),veh/h/ln	955	1781	0	926	0	1763	1353	0	1535	1441	0	0
Q Serve(g_s), s	0.1	6.3	0.0	0.4	0.0	5.6	1.3	0.0	5.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.7	6.3	0.0	6.7	0.0	5.6	2.0	0.0	5.6	0.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.01	1.00		1.00	0.16		0.84
Lane Grp Cap(c), veh/h	429	687		402	0	679	667	0	487	595	0	0
V/C Ratio(X)	0.01	0.66		0.03	0.00	0.60	0.20	0.00	0.68	0.08	0.00	0.00
Avail Cap(c_a), veh/h	960	1677		917	0	1660	1231	0	1141	1171	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)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.7	7.7	0.0	10.4	0.0	7.4	7.7	0.0	9.0	7.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	0.0	0.9	0.1	0.0	1.6	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	1.3	0.0	0.1	0.0	1.1	0.4	0.0	1.4	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.7	8.7	0.0	10.4	0.0	8.3	7.8	0.0	10.6	7.4	0.0	0.0
LnGrp LOS	A	A		B	A	A	A	A	B	A	A	A
Approach Vol, veh/h		454	A		422			461			50	
Approach Delay, s/veh		8.7			8.4			9.8			7.4	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	14.1	16.2	14.1	16.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	22.5	28.5	22.5	28.5
Max Q Clear Time (g_c+I1), s	7.6	8.3	2.7	8.7
Green Ext Time (p_c), s	1.7	2.6	0.2	2.3

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	136	706	8	23	203	7	3	194	11	296	72	206
Future Volume (veh/h)	136	706	8	23	203	7	3	194	11	296	72	206
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1811	1811	1811	1856	1856	1856	1811	1884	1811	1870	1945	1870
Adj Flow Rate, veh/h	155	802	9	27	242	8	3	216	12	214	266	240
Peak Hour Factor	0.88	0.88	0.88	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86
Percent Heavy Veh, %	6	6	6	3	3	3	6	6	6	2	2	2
Cap, veh/h	169	923	11	32	284	268	4	265	219	305	333	758
Arrive On Green	0.31	0.31	0.31	0.17	0.17	0.17	0.14	0.14	0.14	0.17	0.17	0.17
Sat Flow, veh/h	550	3003	35	185	1661	1572	26	1856	1535	1781	1945	1585
Grp Volume(v), veh/h	503	0	463	269	0	8	219	0	12	214	266	240
Grp Sat Flow(s),veh/h/ln	1784	0	1804	1846	0	1572	1882	0	1535	1781	1945	1585
Q Serve(g_s), s	23.5	0.0	20.7	12.2	0.0	0.4	9.8	0.0	0.6	9.8	11.4	8.0
Cycle Q Clear(g_c), s	23.5	0.0	20.7	12.2	0.0	0.4	9.8	0.0	0.6	9.8	11.4	8.0
Prop In Lane	0.31		0.02	0.10		1.00	0.01		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	0	555	315	0	268	269	0	219	305	333	758
V/C Ratio(X)	0.92	0.00	0.83	0.85	0.00	0.03	0.82	0.00	0.05	0.70	0.80	0.32
Avail Cap(c_a), veh/h	563	0	569	391	0	333	398	0	325	373	407	819
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	0.0	27.9	34.8	0.0	29.9	36.0	0.0	32.0	33.8	34.4	13.9
Incr Delay (d2), s/veh	19.8	0.0	10.2	14.0	0.0	0.0	8.0	0.0	0.1	4.5	9.0	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	12.7	0.0	10.1	6.6	0.0	0.1	5.0	0.0	0.2	4.5	6.1	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.7	0.0	38.1	48.8	0.0	29.9	43.9	0.0	32.1	38.3	43.4	14.1
LnGrp LOS	D	A	D	D	A	C	D	A	C	D	D	B
Approach Vol, veh/h		966			277			231			720	
Approach Delay, s/veh		43.6			48.3			43.3			32.1	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.8	31.1	19.3	19.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.3	27.3	18.1	18.3
Max Q Clear Time (g_c+I1), s	11.8	25.5	13.4	14.2
Green Ext Time (p_c), s	0.6	1.1	1.4	0.6

Intersection Summary	
HCM 6th Ctrl Delay	40.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	274	678	141	276	63
Future Volume (veh/h)	70	274	678	141	276	63
Initial Q (Qb), veh	0	0	0	0	0	0
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	1637	1668	1870	1945	1945	1945
Adj Flow Rate, veh/h	79	0	811	0	329	0
Peak Hour Factor	0.89	0.89	0.96	0.96	0.84	0.84
Percent Heavy Veh, %	22	20	2	2	2	2
Cap, veh/h	161		1129	616	456	
Arrive On Green	0.10	0.00	0.32	0.00	0.23	0.00
Sat Flow, veh/h	1559	1413	3563	1945	1945	1648
Grp Volume(v), veh/h	79	0	811	0	329	0
Grp Sat Flow(s),veh/h/ln	1559	1413	1781	1945	1945	1648
Q Serve(g_s), s	1.9	0.0	7.9	0.0	6.1	0.0
Cycle Q Clear(g_c), s	1.9	0.0	7.9	0.0	6.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	161		1129	616	456	
V/C Ratio(X)	0.49		0.72	0.00	0.72	
Avail Cap(c_a), veh/h	718		1869	1021	896	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	16.6	0.0	11.8	0.0	13.8	0.0
Incr Delay (d2), s/veh	2.3	0.0	0.9	0.0	2.2	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	0.7	0.0	2.5	0.0	2.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.9	0.0	12.7	0.0	15.9	0.0
LnGrp LOS	B		B	A	B	
Approach Vol, veh/h	79	A		811	329	A
Approach Delay, s/veh	18.9			12.7	15.9	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	16.9		8.5		13.7
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	20.5		18.0		18.0
Max Q Clear Time (g_c+I1), s	9.9		3.9		8.1
Green Ext Time (p_c), s	2.5		0.1		1.3

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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)	201	840	48	41	954	516	32	102	26	207	75	267
Future Volume (veh/h)	201	840	48	41	954	516	32	102	26	207	75	267
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	0.99		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	218	913	52	50	1163	629	43	136	35	235	85	303
Peak Hour Factor	0.92	0.92	0.92	0.82	0.82	0.82	0.75	0.75	0.75	0.88	0.88	0.88
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	255	1688	744	102	1407	816	308	190	49	355	364	531
Arrive On Green	0.15	0.49	0.49	0.06	0.40	0.40	0.05	0.13	0.13	0.13	0.21	0.21
Sat Flow, veh/h	1753	3469	1530	1767	3526	1518	1781	1487	383	1668	1752	1497
Grp Volume(v), veh/h	218	913	52	50	1163	629	43	0	171	235	85	303
Grp Sat Flow(s),veh/h/ln	1753	1735	1530	1767	1763	1518	1781	0	1870	1668	1752	1497
Q Serve(g_s), s	10.0	15.1	1.5	2.3	24.4	27.2	1.7	0.0	7.2	9.6	3.3	13.5
Cycle Q Clear(g_c), s	10.0	15.1	1.5	2.3	24.4	27.2	1.7	0.0	7.2	9.6	3.3	13.5
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	255	1688	744	102	1407	816	308	0	239	355	364	531
V/C Ratio(X)	0.86	0.54	0.07	0.49	0.83	0.77	0.14	0.00	0.72	0.66	0.23	0.57
Avail Cap(c_a), veh/h	277	1688	744	150	1456	837	365	0	363	355	426	583
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	1.00	1.00
Uniform Delay (d), s/veh	34.3	14.7	11.2	37.6	22.2	15.3	28.3	0.0	34.5	25.1	27.1	21.6
Incr Delay (d2), s/veh	21.0	0.4	0.0	3.6	4.0	4.3	0.2	0.0	4.0	4.5	0.3	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	5.1	0.5	1.0	9.6	9.3	0.7	0.0	3.5	4.1	1.4	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	15.1	11.3	41.2	26.2	19.7	28.5	0.0	38.5	29.6	27.5	22.7
LnGrp LOS	E	B	B	D	C	B	C	A	D	C	C	C
Approach Vol, veh/h		1183			1842			214			623	
Approach Delay, s/veh		22.3			24.4			36.5			25.9	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	44.0	8.4	21.1	16.0	36.8	15.0	14.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	40.0	7.0	20.0	13.0	34.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	4.3	17.1	3.7	15.5	12.0	29.2	11.6	9.2
Green Ext Time (p_c), s	0.0	6.3	0.0	0.7	0.1	3.6	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	1	138	1	281	2	792	196	343	1018	0
Future Volume (veh/h)	0	1	1	138	1	281	2	792	196	343	1018	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1870	1870	1870	1752	1752	1248	1822	1826	1826	1282	1856	1856
Adj Flow Rate, veh/h	0	1	1	159	1	323	2	852	211	394	1170	0
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.93	0.93	0.93	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	10	10	44	10	5	5	45	3	3
Cap, veh/h	0	197	197	365	2	576	7	903	223	384	2251	0
Arrive On Green	0.00	0.23	0.23	0.23	0.23	0.23	0.00	0.33	0.33	0.31	0.64	0.00
Sat Flow, veh/h	0	858	858	1314	8	1058	1735	2756	682	1221	3618	0
Grp Volume(v), veh/h	0	0	2	160	0	323	2	536	527	394	1170	0
Grp Sat Flow(s),veh/h/ln	0	0	1716	1322	0	1058	1735	1735	1703	1221	1763	0
Q Serve(g_s), s	0.0	0.0	0.1	12.0	0.0	22.7	0.1	34.1	34.2	35.7	20.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	12.1	0.0	22.7	0.1	34.1	34.2	35.7	20.4	0.0
Prop In Lane	0.00		0.50	0.99		1.00	1.00		0.40	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	395	367	0	576	7	568	558	384	2251	0
V/C Ratio(X)	0.00	0.00	0.01	0.44	0.00	0.56	0.31	0.94	0.94	1.03	0.52	0.00
Avail Cap(c_a), veh/h	0	0	484	437	0	631	107	578	568	384	2251	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)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	33.7	38.3	0.0	16.9	56.4	37.1	37.1	38.9	11.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.8	0.0	0.9	24.3	24.1	24.5	52.4	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	0.0	0.0	0.0	4.0	0.0	5.6	0.1	17.3	17.1	15.6	6.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	33.7	39.1	0.0	17.9	80.7	61.3	61.7	91.3	11.3	0.0
LnGrp LOS	A	A	C	D	A	B	F	E	E	F	B	A
Approach Vol, veh/h		2			483			1065			1564	
Approach Delay, s/veh		33.7			24.9			61.5			31.5	
Approach LOS		C			C			E			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.2	42.7		30.6	4.9	77.9		30.6
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	5.7	37.8		32.0	7.0	66.5		32.0
Max Q Clear Time (g_c+I1), s	37.7	36.2		2.1	2.1	22.4		24.7
Green Ext Time (p_c), s	0.0	1.0		0.0	0.0	9.6		1.4

Intersection Summary	
HCM 6th Ctrl Delay	40.7
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	0	60	8	0	5	7	815	6	5	964	8
Future Volume (veh/h)	31	0	60	8	0	5	7	815	6	5	964	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1856	1856	1856	1500	1500	1500	1767	1826	1899	1811	1856	1930
Adj Flow Rate, veh/h	39	0	75	12	0	7	8	906	7	5	1048	9
Peak Hour Factor	0.80	0.80	0.80	0.67	0.67	0.67	0.90	0.90	0.90	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	27	27	27	9	5	5	6	3	3
Cap, veh/h	65	0	124	47	0	42	25	1517	12	16	1521	13
Arrive On Green	0.12	0.00	0.12	0.03	0.00	0.03	0.01	0.43	0.43	0.01	0.42	0.42
Sat Flow, veh/h	554	0	1065	1428	0	1271	1682	3528	27	1725	3582	31
Grp Volume(v), veh/h	114	0	0	12	0	7	8	445	468	5	516	541
Grp Sat Flow(s),veh/h/ln	1619	0	0	1428	0	1271	1682	1735	1821	1725	1763	1850
Q Serve(g_s), s	3.1	0.0	0.0	0.4	0.0	0.2	0.2	9.1	9.1	0.1	11.0	11.0
Cycle Q Clear(g_c), s	3.1	0.0	0.0	0.4	0.0	0.2	0.2	9.1	9.1	0.1	11.0	11.0
Prop In Lane	0.34		0.66	1.00		1.00	1.00		0.01	1.00		0.02
Lane Grp Cap(c), veh/h	189	0	0	47	0	42	25	746	783	16	748	785
V/C Ratio(X)	0.60	0.00	0.00	0.26	0.00	0.17	0.32	0.60	0.60	0.31	0.69	0.69
Avail Cap(c_a), veh/h	1125	0	0	990	0	881	259	1495	1570	265	1519	1595
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	0.0	21.8	0.0	21.7	22.5	10.1	10.1	22.7	10.8	10.8
Incr Delay (d2), s/veh	3.1	0.0	0.0	2.8	0.0	1.9	7.2	0.8	0.7	10.3	1.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	0.2	0.0	0.1	0.1	2.3	2.4	0.1	2.8	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	0.0	0.0	24.6	0.0	23.6	29.8	10.9	10.8	33.0	12.0	11.9
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		114			19			921			1062	
Approach Delay, s/veh		22.5			24.2			11.0			12.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	25.4		9.9	5.2	25.1		6.0
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	7.1	39.8		32.1	7.1	39.8		32.0
Max Q Clear Time (g_c+I1), s	2.1	11.1		5.1	2.2	13.0		2.4
Green Ext Time (p_c), s	0.0	5.5		0.7	0.0	6.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	191	52	33	55	37	37	876	103	50	833	56
Future Volume (veh/h)	102	191	52	33	55	37	37	876	103	50	833	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.97	1.00		0.98	1.00		0.95
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	1870	1945	1870	1870	1870	1870	1914	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	106	199	54	42	71	47	39	922	108	56	926	62
Peak Hour Factor	0.96	0.96	0.96	0.78	0.78	0.78	0.95	0.95	0.95	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	4	4	4	2	2	2
Cap, veh/h	401	369	100	303	263	174	108	1201	141	138	1347	90
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.06	0.38	0.38	0.08	0.40	0.40
Sat Flow, veh/h	1247	1457	395	1109	1037	686	1823	3144	368	1781	3368	226
Grp Volume(v), veh/h	106	0	253	42	0	118	39	513	517	56	488	500
Grp Sat Flow(s),veh/h/ln	1247	0	1852	1109	0	1723	1823	1749	1763	1781	1777	1817
Q Serve(g_s), s	3.5	0.0	5.6	1.6	0.0	2.6	1.0	12.1	12.1	1.4	10.7	10.7
Cycle Q Clear(g_c), s	6.1	0.0	5.6	7.2	0.0	2.6	1.0	12.1	12.1	1.4	10.7	10.7
Prop In Lane	1.00		0.21	1.00		0.40	1.00		0.21	1.00		0.12
Lane Grp Cap(c), veh/h	401	0	469	303	0	437	108	668	674	138	711	727
V/C Ratio(X)	0.26	0.00	0.54	0.14	0.00	0.27	0.36	0.77	0.77	0.41	0.69	0.69
Avail Cap(c_a), veh/h	565	0	713	449	0	663	275	792	799	269	805	823
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	15.2	18.3	0.0	14.1	21.2	12.7	12.7	20.7	11.7	11.7
Incr Delay (d2), s/veh	0.3	0.0	1.0	0.2	0.0	0.3	2.0	3.8	3.8	1.9	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	0.9	0.0	2.2	0.4	0.0	0.9	0.4	4.6	4.7	0.6	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.8	0.0	16.1	18.5	0.0	14.4	23.3	16.5	16.5	22.6	13.8	13.7
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		359			160			1069			1044	
Approach Delay, s/veh		16.3			15.5			16.8			14.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	22.5		16.4	7.3	23.3		16.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.3		18.1	7.1	21.3		18.1
Max Q Clear Time (g_c+I1), s	3.4	14.1		8.1	3.0	12.7		9.2
Green Ext Time (p_c), s	0.0	3.9		1.4	0.0	3.7		0.5

Intersection Summary		
HCM 6th Ctrl Delay		15.6
HCM 6th LOS		B

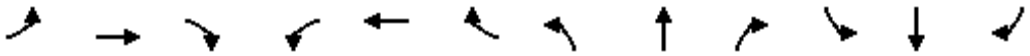


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	204	159	887	186	276	1156
Future Volume (veh/h)	204	159	887	186	276	1156
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1574	1574	1752	1752	1574	1752
Adj Flow Rate, veh/h	222	173	954	200	317	1329
Peak Hour Factor	0.92	0.92	0.93	0.93	0.87	0.87
Percent Heavy Veh, %	22	22	10	10	22	10
Cap, veh/h	272	242	1113	233	352	2318
Arrive On Green	0.18	0.18	0.41	0.41	0.24	0.70
Sat Flow, veh/h	1499	1334	2827	574	1499	3416
Grp Volume(v), veh/h	222	173	579	575	317	1329
Grp Sat Flow(s),veh/h/ln	1499	1334	1664	1649	1499	1664
Q Serve(g_s), s	11.6	10.0	25.9	26.0	16.8	16.5
Cycle Q Clear(g_c), s	11.6	10.0	25.9	26.0	16.8	16.5
Prop In Lane	1.00	1.00		0.35	1.00	
Lane Grp Cap(c), veh/h	272	242	676	670	352	2318
V/C Ratio(X)	0.82	0.72	0.86	0.86	0.90	0.57
Avail Cap(c_a), veh/h	587	522	802	795	442	2770
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	32.1	31.5	22.1	22.1	30.3	6.3
Incr Delay (d2), s/veh	6.0	3.9	8.0	8.2	18.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	3.3	10.1	10.1	7.2	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.1	35.4	30.1	30.3	48.5	6.5
LnGrp LOS	D	D	C	C	D	A
Approach Vol, veh/h	395		1154			1646
Approach Delay, s/veh	36.9		30.2			14.6
Approach LOS	D		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	23.7	38.7				62.4	19.3
Change Period (Y+Rc), s	4.5	5.5				5.5	4.5
Max Green Setting (Gmax), s	24.1	39.4				68.0	32.0
Max Q Clear Time (g_c+I1), s	19.8	28.0				18.5	13.6
Green Ext Time (p_c), s	0.5	5.2				12.2	1.2

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE
WITHOUT ORANGE STREET EXTENSION
WITH RECOMMENDED MITIGATION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	534	91	71	143	6	47	99	32	157	413	0
Future Volume (veh/h)	2	534	91	71	143	6	47	99	32	157	413	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1678	1745	1781	1870	1945	1870	1856	1930	1930	1870	1945	1870
Adj Flow Rate, veh/h	2	580	99	77	155	7	51	108	0	171	449	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	15	15	8	2	2	2	3	3	3	2	2	2
Cap, veh/h	2	639	555	91	183	227	93	380		204	503	0
Arrive On Green	0.37	0.37	0.37	0.14	0.14	0.14	0.05	0.20	0.00	0.11	0.26	0.00
Sat Flow, veh/h	6	1739	1510	635	1278	1585	1767	1930	0	1781	1945	0
Grp Volume(v), veh/h	582	0	99	232	0	7	51	108	0	171	449	0
Grp Sat Flow(s),veh/h/ln	1745	0	1510	1913	0	1585	1767	1930	0	1781	1945	0
Q Serve(g_s), s	32.0	0.0	4.5	11.9	0.0	0.4	2.8	4.8	0.0	9.5	22.5	0.0
Cycle Q Clear(g_c), s	32.0	0.0	4.5	11.9	0.0	0.4	2.8	4.8	0.0	9.5	22.5	0.0
Prop In Lane	0.00		1.00	0.33		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	641	0	555	274	0	227	93	380		204	503	0
V/C Ratio(X)	0.91	0.00	0.18	0.85	0.00	0.03	0.55	0.28		0.84	0.89	0.00
Avail Cap(c_a), veh/h	752	0	651	351	0	291	123	463		279	636	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.3	0.0	21.6	42.1	0.0	37.2	46.6	34.5	0.0	43.8	36.1	0.0
Incr Delay (d2), s/veh	13.5	0.0	0.2	14.2	0.0	0.1	4.9	0.4	0.0	14.9	12.8	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.6	0.0	1.6	6.7	0.0	0.2	1.3	2.2	0.0	4.9	11.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	0.0	21.8	56.3	0.0	37.3	51.5	34.9	0.0	58.7	48.8	0.0
LnGrp LOS	D	A	C	E	A	D	D	C		E	D	A
Approach Vol, veh/h		681			239			159	A		620	
Approach Delay, s/veh		40.6			55.8			40.2			51.6	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	24.3		41.6	9.8	30.6		18.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	15.8	24.2		43.5	7.0	33.0		18.5				
Max Q Clear Time (g_c+I1), s	11.5	6.8		34.0	4.8	24.5		13.9				
Green Ext Time (p_c), s	0.2	0.4		3.1	0.0	1.6		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		46.7	
HCM 6th LOS		D	

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	391	17	23	654	6	131	2	240	5	0	30
Future Volume (veh/h)	0	391	17	23	654	6	131	2	240	5	0	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
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	1841	1752	1841	1811	1811	1811	1737	1737	1737	1841	1841	1841
Adj Flow Rate, veh/h	0	425	0	25	711	7	142	2	261	5	0	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	10	4	6	6	6	11	11	11	4	4	4
Cap, veh/h	263	1294		541	1357	13	623	7	416	168	37	376
Arrive On Green	0.00	0.39	0.00	0.39	0.39	0.39	0.28	0.28	0.28	0.28	0.00	0.28
Sat Flow, veh/h	722	3328	1560	929	3491	34	1281	24	1470	70	132	1330
Grp Volume(v), veh/h	0	425	0	25	350	368	144	0	261	38	0	0
Grp Sat Flow(s),veh/h/ln	722	1664	1560	929	1721	1805	1305	0	1470	1532	0	0
Q Serve(g_s), s	0.0	2.5	0.0	0.5	4.3	4.3	1.8	0.0	4.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.5	0.0	3.0	4.3	4.3	2.3	0.0	4.2	0.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	0.99		1.00	0.13		0.87
Lane Grp Cap(c), veh/h	263	1294		541	669	701	630	0	416	582	0	0
V/C Ratio(X)	0.00	0.33		0.05	0.52	0.52	0.23	0.00	0.63	0.07	0.00	0.00
Avail Cap(c_a), veh/h	628	2978		1011	1539	1614	1508	0	1423	1583	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)	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.9	0.0	6.9	6.4	6.4	7.8	0.0	8.6	7.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.6	0.6	0.2	0.0	1.6	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	0.4	0.0	0.1	0.7	0.7	0.4	0.0	1.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.0	0.0	6.9	7.1	7.0	8.0	0.0	10.1	7.3	0.0	0.0
LnGrp LOS	A	A		A	A	A	A	A	B	A	A	A
Approach Vol, veh/h		425	A		743			405			38	
Approach Delay, s/veh		6.0			7.0			9.4			7.3	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	12.2	15.1	12.2	15.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.5	24.5	26.5	24.5
Max Q Clear Time (g_c+I1), s	6.2	4.5	2.5	6.3
Green Ext Time (p_c), s	1.7	2.5	0.1	4.1

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	134	612	8	17	384	3	8	3	20	374	47	226
Future Volume (veh/h)	134	612	8	17	384	3	8	3	20	374	47	226
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1633	1633	1841	1841	1841	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	146	665	9	18	417	3	9	3	22	443	0	246
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	18	18	18	4	4	4	2	2	2	2	2	2
Cap, veh/h	189	909	13	25	602	5	68	23	77	628	0	824
Arrive On Green	0.34	0.34	0.34	0.17	0.17	0.17	0.05	0.05	0.05	0.18	0.00	0.18
Sat Flow, veh/h	549	2646	37	144	3499	26	1406	469	1585	3563	0	1585
Grp Volume(v), veh/h	427	0	393	229	0	209	12	0	22	443	0	246
Grp Sat Flow(s),veh/h/ln	1606	0	1627	1834	0	1836	1875	0	1585	1781	0	1585
Q Serve(g_s), s	16.5	0.0	14.5	8.2	0.0	7.4	0.4	0.0	0.9	8.1	0.0	6.1
Cycle Q Clear(g_c), s	16.5	0.0	14.5	8.2	0.0	7.4	0.4	0.0	0.9	8.1	0.0	6.1
Prop In Lane	0.34		0.02	0.08		0.01	0.75		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	552	0	559	316	0	316	91	0	77	628	0	824
V/C Ratio(X)	0.77	0.00	0.70	0.73	0.00	0.66	0.13	0.00	0.29	0.71	0.00	0.30
Avail Cap(c_a), veh/h	891	0	902	515	0	516	581	0	491	1155	0	1059
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.4	0.0	19.7	27.2	0.0	26.8	31.6	0.0	31.9	26.9	0.0	9.5
Incr Delay (d2), s/veh	2.4	0.0	1.6	3.2	0.0	2.4	0.6	0.0	2.0	1.5	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	6.0	0.0	5.3	3.7	0.0	3.3	0.2	0.0	0.4	3.4	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.7	0.0	21.3	30.4	0.0	29.2	32.3	0.0	33.9	28.3	0.0	9.7
LnGrp LOS	C	A	C	C	A	C	C	A	C	C	A	A
Approach Vol, veh/h		820			438			34			689	
Approach Delay, s/veh		22.1			29.8			33.3			21.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	7.9	28.3	16.7	16.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	21.5	38.5	22.5	19.5
Max Q Clear Time (g_c+I1), s	2.9	18.5	10.1	10.2
Green Ext Time (p_c), s	0.1	5.4	2.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	23.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	233	805	548	125	195	26
Future Volume (veh/h)	233	805	548	125	195	26
Initial Q (Qb), veh	0	0	0	0	0	0
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	1776	1791	1841	1899	1791	1791
Adj Flow Rate, veh/h	253	0	693	0	212	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	13	12	4	5	12	12
Cap, veh/h	334		1022	553	298	
Arrive On Green	0.20	0.00	0.29	0.00	0.17	0.00
Sat Flow, veh/h	1691	1518	3506	1899	1791	1518
Grp Volume(v), veh/h	253	0	693	0	212	0
Grp Sat Flow(s),veh/h/ln	1691	1518	1753	1899	1791	1518
Q Serve(g_s), s	5.5	0.0	6.8	0.0	4.4	0.0
Cycle Q Clear(g_c), s	5.5	0.0	6.8	0.0	4.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	334		1022	553	298	
V/C Ratio(X)	0.76		0.68	0.00	0.71	
Avail Cap(c_a), veh/h	1317		2507	1358	823	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	14.8	0.0	12.3	0.0	15.4	0.0
Incr Delay (d2), s/veh	3.5	0.0	0.8	0.0	3.1	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	2.1	0.0	2.2	0.0	1.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.3	0.0	13.1	0.0	18.6	0.0
LnGrp LOS	B		B	A	B	
Approach Vol, veh/h	253	A		693	212	A
Approach Delay, s/veh	18.3			13.1	18.6	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	15.9		12.2		11.0
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	28.0		30.5		18.0
Max Q Clear Time (g_c+I1), s	8.8		7.5		6.4
Green Ext Time (p_c), s	2.6		0.7		0.9

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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)	176	955	33	30	670	433	33	64	64	596	33	370
Future Volume (veh/h)	176	955	33	30	670	433	33	64	64	596	33	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	191	1038	36	33	728	471	36	70	70	648	36	402
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	224	1228	537	72	881	859	261	91	91	626	638	729
Arrive On Green	0.13	0.35	0.35	0.04	0.27	0.27	0.05	0.10	0.10	0.32	0.38	0.38
Sat Flow, veh/h	1753	3497	1529	1654	3300	1433	1781	885	885	1598	1678	1434
Grp Volume(v), veh/h	191	1038	36	33	728	471	36	0	140	648	36	402
Grp Sat Flow(s),veh/h/ln	1753	1749	1529	1654	1650	1433	1781	0	1771	1598	1678	1434
Q Serve(g_s), s	9.6	24.6	1.4	1.7	18.6	18.0	1.6	0.0	6.9	29.0	1.2	17.2
Cycle Q Clear(g_c), s	9.6	24.6	1.4	1.7	18.6	18.0	1.6	0.0	6.9	29.0	1.2	17.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	224	1228	537	72	881	859	261	0	183	626	638	729
V/C Ratio(X)	0.85	0.84	0.07	0.46	0.83	0.55	0.14	0.00	0.77	1.03	0.06	0.55
Avail Cap(c_a), veh/h	235	1248	545	129	993	907	318	0	316	626	711	791
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	1.00	1.00
Uniform Delay (d), s/veh	38.3	26.8	19.3	41.8	30.9	11.2	33.1	0.0	39.2	23.5	17.6	15.1
Incr Delay (d2), s/veh	23.9	5.5	0.1	4.4	5.3	0.6	0.2	0.0	6.5	45.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	10.2	0.5	0.8	7.5	5.3	0.7	0.0	3.3	19.0	0.5	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.2	32.3	19.4	46.3	36.2	11.8	33.3	0.0	45.7	68.7	17.6	15.7
LnGrp LOS	E	C	B	D	D	B	C	A	D	F	B	B
Approach Vol, veh/h		1265			1232			176			1086	
Approach Delay, s/veh		36.4			27.2			43.2			47.4	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	35.5	8.1	38.1	15.5	27.9	33.0	13.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	32.0	7.0	38.0	12.0	27.0	29.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	26.6	3.6	19.2	11.6	20.6	31.0	8.9
Green Ext Time (p_c), s	0.0	3.0	0.0	1.6	0.0	3.3	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	185	1	315	2	620	177	254	840	6
Future Volume (veh/h)	0	0	0	185	1	315	2	620	177	254	840	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1663	1663	1322	1760	1796	1796	1205	1796	1796
Adj Flow Rate, veh/h	0	0	0	201	1	342	2	674	192	276	913	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	16	16	39	14	7	7	50	7	7
Cap, veh/h	0	513	0	433	2	574	6	779	222	279	1861	14
Arrive On Green	0.00	0.00	0.00	0.27	0.27	0.27	0.00	0.30	0.30	0.24	0.54	0.54
Sat Flow, veh/h	0	1900	0	1256	6	1120	1676	2621	746	1148	3471	27
Grp Volume(v), veh/h	0	0	0	202	0	342	2	439	427	276	449	471
Grp Sat Flow(s),veh/h/ln	0	1900	0	1262	0	1120	1676	1706	1660	1148	1706	1791
Q Serve(g_s), s	0.0	0.0	0.0	10.6	0.0	16.3	0.1	18.5	18.6	18.3	12.6	12.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	10.6	0.0	16.3	0.1	18.5	18.6	18.3	12.6	12.6
Prop In Lane	0.00		0.00	1.00		1.00	1.00		0.45	1.00		0.01
Lane Grp Cap(c), veh/h	0	513	0	435	0	574	6	507	493	279	915	960
V/C Ratio(X)	0.00	0.00	0.00	0.46	0.00	0.60	0.31	0.87	0.87	0.99	0.49	0.49
Avail Cap(c_a), veh/h	0	798	0	624	0	743	154	560	545	279	915	960
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)	0.00	0.00	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	0.0	0.0	0.0	24.2	0.0	13.0	37.9	25.3	25.3	28.8	11.1	11.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.8	0.0	1.0	25.7	12.5	12.9	51.1	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	0.0	0.0	0.0	3.2	0.0	3.9	0.1	8.3	8.1	8.4	3.8	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	25.0	0.0	14.0	63.5	37.8	38.2	79.8	11.5	11.5
LnGrp LOS	A	A	A	C	A	B	E	D	D	E	B	B
Approach Vol, veh/h		0			544			868			1196	
Approach Delay, s/veh		0.0			18.1			38.1			27.3	
Approach LOS					B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.0	28.1		25.1	4.8	46.3		25.1
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	18.5	25.0		32.0	7.0	36.5		32.0
Max Q Clear Time (g_c+I1), s	20.3	20.6		0.0	2.1	14.6		18.3
Green Ext Time (p_c), s	0.0	2.0		0.0	0.0	5.2		2.2

Intersection Summary		
HCM 6th Ctrl Delay		29.0
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	2	28	45	0	42	82	948	76	49	897	38
Future Volume (veh/h)	6	2	28	45	0	42	82	948	76	49	897	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
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	1678	1678	1678	1530	1530	1530	1781	1826	1899	1693	1781	1853
Adj Flow Rate, veh/h	7	2	30	49	0	46	89	1030	83	53	975	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	15	15	15	25	25	25	8	5	5	14	8	8
Cap, veh/h	22	6	93	174	0	152	155	1366	110	111	1315	55
Arrive On Green	0.08	0.08	0.08	0.12	0.00	0.12	0.09	0.42	0.42	0.07	0.40	0.40
Sat Flow, veh/h	259	74	1109	1457	0	1273	1697	3251	262	1612	3306	139
Grp Volume(v), veh/h	39	0	0	49	0	46	89	549	564	53	499	517
Grp Sat Flow(s),veh/h/ln	1442	0	0	1457	0	1273	1697	1735	1779	1612	1692	1753
Q Serve(g_s), s	1.5	0.0	0.0	1.8	0.0	1.9	2.9	15.7	15.8	1.9	14.7	14.7
Cycle Q Clear(g_c), s	1.5	0.0	0.0	1.8	0.0	1.9	2.9	15.7	15.8	1.9	14.7	14.7
Prop In Lane	0.18		0.77	1.00		1.00	1.00		0.15	1.00		0.08
Lane Grp Cap(c), veh/h	121	0	0	174	0	152	155	729	747	111	673	697
V/C Ratio(X)	0.32	0.00	0.00	0.28	0.00	0.30	0.57	0.75	0.75	0.48	0.74	0.74
Avail Cap(c_a), veh/h	788	0	0	798	0	698	229	1203	1233	201	1156	1197
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	0.0	0.0	23.5	0.0	23.5	25.5	14.4	14.4	26.2	15.1	15.1
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.9	0.0	1.1	3.3	1.6	1.6	3.1	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	0.5	0.0	0.0	0.6	0.0	0.6	1.2	4.9	5.0	0.7	4.5	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.8	0.0	0.0	24.4	0.0	24.7	28.8	16.0	16.0	29.4	16.7	16.6
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		39			95			1202			1069	
Approach Delay, s/veh		26.8			24.5			16.9			17.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	29.1		9.4	9.9	27.8		11.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.3	40.6		32.0	7.9	40.0		32.1				
Max Q Clear Time (g_c+I1), s	3.9	17.8		3.5	4.9	16.7		3.9				
Green Ext Time (p_c), s	0.0	6.9		0.2	0.0	6.1		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	60	141	550	243	489	0	0	954	193
Future Volume (veh/h)	0	0	0	60	141	550	243	489	0	0	954	193
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1841	1841	0	0	1811	1811
Adj Flow Rate, veh/h				65	438	408	264	532	0	0	1037	210
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	4	4	0	0	6	6
Cap, veh/h				69	462	471	295	2194	0	0	1183	239
Arrive On Green				0.29	0.29	0.29	0.17	0.63	0.00	0.00	0.42	0.42
Sat Flow, veh/h				240	1618	1648	1753	3589	0	0	2941	576
Grp Volume(v), veh/h				503	0	408	264	532	0	0	625	622
Grp Sat Flow(s),veh/h/ln				1858	0	1648	1753	1749	0	0	1721	1705
Q Serve(g_s), s				27.3	0.0	24.2	15.2	6.9	0.0	0.0	34.4	34.6
Cycle Q Clear(g_c), s				27.3	0.0	24.2	15.2	6.9	0.0	0.0	34.4	34.6
Prop In Lane				0.13		1.00	1.00		0.00	0.00		0.34
Lane Grp Cap(c), veh/h				530	0	471	295	2194	0	0	714	708
V/C Ratio(X)				0.95	0.00	0.87	0.89	0.24	0.00	0.00	0.87	0.88
Avail Cap(c_a), veh/h				532	0	472	332	2426	0	0	793	786
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.1	0.0	35.0	42.0	8.4	0.0	0.0	27.7	27.8
Incr Delay (d2), s/veh				26.6	0.0	15.6	23.4	0.1	0.0	0.0	10.0	10.5
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				16.0	0.0	11.6	8.4	2.5	0.0	0.0	15.6	15.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				62.7	0.0	50.6	65.3	8.5	0.0	0.0	37.7	38.2
LnGrp LOS				E	A	D	E	A	A	A	D	D
Approach Vol, veh/h					911			796			1247	
Approach Delay, s/veh					57.2			27.4			38.0	
Approach LOS					E			C			D	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	69.2		21.9	47.3		33.9
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	71.5		19.5	47.5		29.5
Max Q Clear Time (g_c+I1), s	8.9		17.2	36.6		29.3
Green Ext Time (p_c), s	4.2		0.2	6.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

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)	24	83	25	90	60	170	5	398	13	178	512	12
Future Volume (veh/h)	24	83	25	90	60	170	5	398	13	178	512	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	26	90	27	98	65	185	5	433	14	193	557	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	277	330	99	398	101	288	340	572	479	507	794	19
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.01	0.31	0.31	0.14	0.44	0.44
Sat Flow, veh/h	1117	1373	412	1253	422	1200	1767	1856	1555	1753	1791	42
Grp Volume(v), veh/h	26	0	117	98	0	250	5	433	14	193	0	570
Grp Sat Flow(s),veh/h/ln	1117	0	1785	1253	0	1621	1767	1856	1555	1753	0	1833
Q Serve(g_s), s	0.9	0.0	2.3	3.0	0.0	6.1	0.1	9.2	0.3	2.7	0.0	11.0
Cycle Q Clear(g_c), s	7.0	0.0	2.3	5.4	0.0	6.1	0.1	9.2	0.3	2.7	0.0	11.0
Prop In Lane	1.00		0.23	1.00		0.74	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	277	0	429	398	0	389	340	572	479	507	0	812
V/C Ratio(X)	0.09	0.00	0.27	0.25	0.00	0.64	0.01	0.76	0.03	0.38	0.00	0.70
Avail Cap(c_a), veh/h	467	0	732	611	0	665	605	904	758	538	0	897
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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	13.6	15.8	0.0	15.0	10.6	13.7	10.6	8.0	0.0	9.9
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.3	0.0	1.8	0.0	2.1	0.0	0.5	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	0.2	0.0	0.8	0.8	0.0	2.1	0.0	3.3	0.1	0.7	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.3	0.0	13.9	16.1	0.0	16.8	10.6	15.8	10.6	8.5	0.0	12.1
LnGrp LOS	B	A	B	B	A	B	B	B	B	A	A	B
Approach Vol, veh/h		143			348			452			763	
Approach Delay, s/veh		14.7			16.6			15.6			11.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	18.0		15.0	4.9	24.0		15.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.1	21.4		18.0	7.0	21.5		18.0				
Max Q Clear Time (g_c+I1), s	14.7	11.2		9.0	2.1	13.0		8.1				
Green Ext Time (p_c), s	0.1	1.9		0.4	0.0	2.3		1.4				

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	783	24	96	404	50	32	96	185	266	126	51
Future Volume (veh/h)	37	783	24	96	404	50	32	96	185	266	126	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	0.99		0.99	0.99		0.97
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	1811	1811	1811	1811	1811	1811	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	40	851	26	104	439	54	35	104	201	289	137	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	6	6	3	3	3	3	3	3
Cap, veh/h	95	1020	31	156	1028	126	497	226	437	394	504	202
Arrive On Green	0.06	0.30	0.30	0.09	0.34	0.34	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1725	3405	104	1725	3068	375	1172	560	1082	1060	1248	501
Grp Volume(v), veh/h	40	430	447	104	245	248	35	0	305	289	0	192
Grp Sat Flow(s),veh/h/ln	1725	1721	1789	1725	1721	1722	1172	0	1642	1060	0	1749
Q Serve(g_s), s	1.5	15.3	15.3	3.8	7.2	7.3	1.4	0.0	8.9	17.6	0.0	4.8
Cycle Q Clear(g_c), s	1.5	15.3	15.3	3.8	7.2	7.3	6.2	0.0	8.9	26.5	0.0	4.8
Prop In Lane	1.00		0.06	1.00		0.22	1.00		0.66	1.00		0.29
Lane Grp Cap(c), veh/h	95	515	536	156	576	577	497	0	663	394	0	707
V/C Ratio(X)	0.42	0.83	0.83	0.67	0.42	0.43	0.07	0.00	0.46	0.73	0.00	0.27
Avail Cap(c_a), veh/h	187	595	619	192	601	601	497	0	663	394	0	707
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	30.0	21.5	21.5	28.9	16.9	16.9	15.2	0.0	14.3	24.2	0.0	13.1
Incr Delay (d2), s/veh	2.9	8.9	8.6	6.2	0.5	0.5	0.1	0.0	0.5	6.9	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	6.5	6.8	1.7	2.5	2.6	0.3	0.0	3.0	4.8	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	30.3	30.0	35.0	17.4	17.5	15.2	0.0	14.8	31.1	0.0	13.3
LnGrp LOS	C	C	C	D	B	B	B	A	B	C	A	B
Approach Vol, veh/h		917			597			340			481	
Approach Delay, s/veh		30.3			20.5			14.9			24.0	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	24.2		31.0	8.1	26.5		31.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.3	22.7		26.5	7.1	22.9		26.5				
Max Q Clear Time (g_c+I1), s	5.8	17.3		28.5	3.5	9.3		10.9				
Green Ext Time (p_c), s	0.0	2.3		0.0	0.0	2.2		1.8				

Intersection Summary		
HCM 6th Ctrl Delay	24.2	
HCM 6th LOS	C	



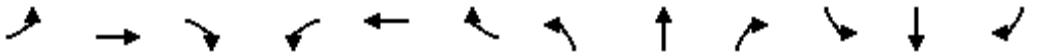
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	195	188	737	198	221	905
Future Volume (veh/h)	195	188	737	198	221	905
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1767	1767	1693	1693	1767	1707
Adj Flow Rate, veh/h	212	204	801	215	240	984
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	14	14	9	13
Cap, veh/h	308	274	973	261	288	2058
Arrive On Green	0.18	0.18	0.39	0.39	0.17	0.63
Sat Flow, veh/h	1682	1497	2591	673	1682	3329
Grp Volume(v), veh/h	212	204	514	502	240	984
Grp Sat Flow(s),veh/h/ln	1682	1497	1608	1571	1682	1622
Q Serve(g_s), s	7.1	7.8	17.3	17.3	8.3	9.6
Cycle Q Clear(g_c), s	7.1	7.8	17.3	17.3	8.3	9.6
Prop In Lane	1.00	1.00		0.43	1.00	
Lane Grp Cap(c), veh/h	308	274	624	610	288	2058
V/C Ratio(X)	0.69	0.74	0.82	0.82	0.83	0.48
Avail Cap(c_a), veh/h	893	795	768	751	383	2584
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	23.0	23.3	16.6	16.6	24.1	5.8
Incr Delay (d2), s/veh	2.7	4.0	6.0	6.1	11.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.8	5.9	5.8	3.7	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.7	27.3	22.6	22.7	35.3	6.0
LnGrp LOS	C	C	C	C	D	A
Approach Vol, veh/h	416		1016			1224
Approach Delay, s/veh	26.5		22.6			11.7
Approach LOS	C		C			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.8	28.9			43.7	16.5
Change Period (Y+Rc), s	4.5	5.5			* 5.5	5.5
Max Green Setting (Gmax), s	13.7	28.8			* 48	32.0
Max Q Clear Time (g_c+I1), s	10.3	19.3			11.6	9.8
Green Ext Time (p_c), s	0.2	4.1			7.4	1.3

Intersection Summary	
HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

Notes

* HCM 6th 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	398	117	64	136	10	60	329	10	158	518	0
Future Volume (veh/h)	1	398	117	64	136	10	60	329	10	158	518	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1699	1811	1841	1914	1841	1870	1945	1945	1870	1945	1870
Adj Flow Rate, veh/h	1	433	127	70	148	11	65	358	0	172	563	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	18	18	6	4	4	4	2	2	2	2	2	2
Cap, veh/h	1	491	445	84	178	217	107	520		207	629	0
Arrive On Green	0.29	0.29	0.29	0.14	0.14	0.14	0.06	0.27	0.00	0.12	0.32	0.00
Sat Flow, veh/h	4	1694	1535	605	1279	1560	1781	1945	0	1781	1945	0
Grp Volume(v), veh/h	434	0	127	218	0	11	65	358	0	172	563	0
Grp Sat Flow(s),veh/h/ln	1698	0	1535	1884	0	1560	1781	1945	0	1781	1945	0
Q Serve(g_s), s	23.4	0.0	6.2	10.8	0.0	0.6	3.4	15.9	0.0	9.1	26.5	0.0
Cycle Q Clear(g_c), s	23.4	0.0	6.2	10.8	0.0	0.6	3.4	15.9	0.0	9.1	26.5	0.0
Prop In Lane	0.00		1.00	0.32		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	492	0	445	262	0	217	107	520		207	629	0
V/C Ratio(X)	0.88	0.00	0.29	0.83	0.00	0.05	0.61	0.69		0.83	0.89	0.00
Avail Cap(c_a), veh/h	628	0	567	363	0	300	139	638		306	820	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.5	0.0	26.4	40.2	0.0	35.8	44.0	31.6	0.0	41.5	30.9	0.0
Incr Delay (d2), s/veh	11.6	0.0	0.3	11.0	0.0	0.1	5.5	2.3	0.0	11.7	10.2	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	11.1	0.0	2.3	5.8	0.0	0.2	1.6	7.3	0.0	4.5	13.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	0.0	26.8	51.3	0.0	35.9	49.5	33.9	0.0	53.2	41.1	0.0
LnGrp LOS	D	A	C	D	A	D	D	C		D	D	A
Approach Vol, veh/h		561			229			423	A		735	
Approach Delay, s/veh		40.2			50.5			36.3			43.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	30.2		32.3	10.3	35.6		17.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	16.5	31.5		35.5	7.5	40.5		18.5				
Max Q Clear Time (g_c+I1), s	11.1	17.9		25.4	5.4	28.5		12.8				
Green Ext Time (p_c), s	0.2	1.6		2.4	0.0	2.6		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		42.0	
HCM 6th LOS		D	

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)	3	496	38	15	462	4	134	0	365	9	0	47
Future Volume (veh/h)	3	496	38	15	462	4	134	0	365	9	0	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.98	1.00		1.00	1.00		0.98
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	1841	1811	1841	1856	1781	1781	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	3	539	0	16	502	4	146	0	397	10	0	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	6	4	3	8	8	5	5	5	9	9	9
Cap, veh/h	425	1112		412	1112	9	745	0	573	176	54	449
Arrive On Green	0.32	0.32	0.00	0.32	0.32	0.32	0.37	0.00	0.37	0.37	0.00	0.37
Sat Flow, veh/h	872	3441	1560	853	3441	27	1346	0	1541	92	144	1206
Grp Volume(v), veh/h	3	539	0	16	247	259	146	0	397	61	0	0
Grp Sat Flow(s),veh/h/ln	872	1721	1560	853	1692	1776	1346	0	1541	1443	0	0
Q Serve(g_s), s	0.1	3.7	0.0	0.5	3.4	3.4	1.3	0.0	6.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.5	3.7	0.0	4.2	3.4	3.4	2.0	0.0	6.4	0.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.16		0.84
Lane Grp Cap(c), veh/h	425	1112		412	547	574	745	0	573	679	0	0
V/C Ratio(X)	0.01	0.48		0.04	0.45	0.45	0.20	0.00	0.69	0.09	0.00	0.00
Avail Cap(c_a), veh/h	749	2389		729	1175	1233	1615	0	1592	1567	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)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.3	8.0	0.0	9.7	7.9	7.9	6.4	0.0	7.8	6.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.6	0.6	0.1	0.0	1.5	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	0.7	0.0	0.1	0.7	0.8	0.4	0.0	1.5	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.3	8.3	0.0	9.7	8.5	8.5	6.5	0.0	9.4	6.1	0.0	0.0
LnGrp LOS	A	A		A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		542	A		522			543			61	
Approach Delay, s/veh		8.4			8.5			8.6			6.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.5	14.0	15.5	14.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	30.5	20.5	30.5	20.5
Max Q Clear Time (g_c+I1), s	8.4	5.7	2.8	6.2
Green Ext Time (p_c), s	2.3	2.9	0.3	2.5

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	168	876	10	29	268	9	3	239	13	365	89	254
Future Volume (veh/h)	168	876	10	29	268	9	3	239	13	365	89	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1811	1811	1811	1856	1856	1856	1811	1884	1811	1870	1945	1870
Adj Flow Rate, veh/h	183	952	11	32	291	10	3	260	14	247	307	276
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	3	3	3	6	6	6	2	2	2
Cap, veh/h	203	1116	13	40	386	14	3	299	246	321	351	874
Arrive On Green	0.37	0.37	0.37	0.12	0.12	0.12	0.16	0.16	0.16	0.18	0.18	0.18
Sat Flow, veh/h	547	3004	36	337	3220	116	21	1861	1535	1781	1945	1585
Grp Volume(v), veh/h	597	0	549	174	0	159	263	0	14	247	307	276
Grp Sat Flow(s),veh/h/ln	1784	0	1804	1839	0	1835	1882	0	1535	1781	1945	1585
Q Serve(g_s), s	33.8	0.0	29.4	9.9	0.0	8.9	14.6	0.0	0.8	14.1	16.4	10.1
Cycle Q Clear(g_c), s	33.8	0.0	29.4	9.9	0.0	8.9	14.6	0.0	0.8	14.1	16.4	10.1
Prop In Lane	0.31		0.02	0.18		0.06	0.01		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	662	0	670	220	0	220	302	0	246	321	351	874
V/C Ratio(X)	0.90	0.00	0.82	0.79	0.00	0.72	0.87	0.00	0.06	0.77	0.88	0.32
Avail Cap(c_a), veh/h	708	0	716	309	0	309	369	0	301	341	373	892
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	0.0	30.4	45.8	0.0	45.4	43.8	0.0	38.1	41.7	42.7	13.0
Incr Delay (d2), s/veh	14.2	0.0	7.1	9.0	0.0	4.8	17.0	0.0	0.1	9.7	19.4	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	16.8	0.0	13.8	5.0	0.0	4.3	8.2	0.0	0.3	7.0	9.7	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	0.0	37.5	54.8	0.0	50.2	60.9	0.0	38.2	51.5	62.1	13.2
LnGrp LOS	D	A	D	D	A	D	E	A	D	D	E	B
Approach Vol, veh/h		1146			333			277			830	
Approach Delay, s/veh		41.9			52.6			59.7			42.7	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	21.7	44.2	23.8	17.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	21.0	42.5	20.5	18.0
Max Q Clear Time (g_c+I1), s	16.6	35.8	18.4	11.9
Green Ext Time (p_c), s	0.6	3.9	0.8	0.9

Intersection Summary	
HCM 6th Ctrl Delay	45.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	86	341	865	174	340	77
Future Volume (veh/h)	86	341	865	174	340	77
Initial Q (Qb), veh	0	0	0	0	0	0
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	1637	1668	1870	1945	1945	1945
Adj Flow Rate, veh/h	93	0	1075	0	370	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	22	20	2	2	2	2
Cap, veh/h	156		1393	761	477	
Arrive On Green	0.10	0.00	0.39	0.00	0.25	0.00
Sat Flow, veh/h	1559	1413	3563	1945	1945	1648
Grp Volume(v), veh/h	93	0	1075	0	370	0
Grp Sat Flow(s),veh/h/ln	1559	1413	1781	1945	1945	1648
Q Serve(g_s), s	2.9	0.0	13.5	0.0	9.1	0.0
Cycle Q Clear(g_c), s	2.9	0.0	13.5	0.0	9.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	156		1393	761	477	
V/C Ratio(X)	0.60		0.77	0.00	0.78	
Avail Cap(c_a), veh/h	547		2606	1423	797	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	22.1	0.0	13.6	0.0	18.0	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.9	0.0	2.7	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	1.1	0.0	4.6	0.0	3.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.7	0.0	14.5	0.0	20.8	0.0
LnGrp LOS	C		B	A	C	
Approach Vol, veh/h	93	A		1075	370	A
Approach Delay, s/veh	25.7			14.5	20.8	
Approach LOS	C			B	C	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	24.5		9.6		17.1
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	37.5		18.0		21.0
Max Q Clear Time (g_c+I1), s	15.5		4.9		11.1
Green Ext Time (p_c), s	4.6		0.2		1.6

Intersection Summary	
HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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)	277	1037	60	51	1177	637	39	126	32	256	93	333
Future Volume (veh/h)	277	1037	60	51	1177	637	39	126	32	256	93	333
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	0.99		0.99	0.99		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	301	1127	65	55	1279	692	42	137	35	278	101	362
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	321	1703	751	104	1293	736	314	227	58	348	377	599
Arrive On Green	0.18	0.49	0.49	0.06	0.37	0.37	0.05	0.15	0.15	0.11	0.22	0.22
Sat Flow, veh/h	1753	3469	1530	1767	3526	1516	1781	1490	381	1668	1752	1497
Grp Volume(v), veh/h	301	1127	65	55	1279	692	42	0	172	278	101	362
Grp Sat Flow(s),veh/h/ln	1753	1735	1530	1767	1763	1516	1781	0	1871	1668	1752	1497
Q Serve(g_s), s	14.8	21.4	2.0	2.6	31.5	32.0	1.7	0.0	7.5	10.0	4.2	16.7
Cycle Q Clear(g_c), s	14.8	21.4	2.0	2.6	31.5	32.0	1.7	0.0	7.5	10.0	4.2	16.7
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	321	1703	751	104	1293	736	314	0	285	348	377	599
V/C Ratio(X)	0.94	0.66	0.09	0.53	0.99	0.94	0.13	0.00	0.60	0.80	0.27	0.60
Avail Cap(c_a), veh/h	321	1703	751	142	1293	736	366	0	343	348	381	603
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	1.00	1.00
Uniform Delay (d), s/veh	35.1	16.7	11.8	39.9	27.5	21.6	28.4	0.0	34.6	28.9	28.5	20.8
Incr Delay (d2), s/veh	34.0	1.0	0.0	4.1	22.4	19.9	0.2	0.0	2.1	12.3	0.4	1.7
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	8.9	7.6	0.7	1.2	15.8	16.4	0.7	0.0	3.5	2.3	1.8	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.1	17.7	11.9	43.9	49.9	41.5	28.6	0.0	36.6	41.2	28.9	22.5
LnGrp LOS	E	B	B	D	D	D	C	A	D	D	C	C
Approach Vol, veh/h		1493			2026			214			741	
Approach Delay, s/veh		27.8			46.9			35.1			30.4	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	46.8	8.5	22.8	20.0	36.0	14.0	17.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	41.0	7.0	19.0	16.0	32.0	10.0	16.0
Max Q Clear Time (g_c+I1), s	4.6	23.4	3.7	18.7	16.8	34.0	12.0	9.5
Green Ext Time (p_c), s	0.0	7.3	0.0	0.1	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	37.2
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	1	184	1	323	2	900	252	370	1066	0
Future Volume (veh/h)	0	1	1	184	1	323	2	900	252	370	1066	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	0.90	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	1870	1870	1870	1752	1752	1248	1822	1826	1826	1282	1856	1856
Adj Flow Rate, veh/h	0	1	1	200	1	351	2	978	274	402	1159	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	10	10	44	10	5	5	45	3	3
Cap, veh/h	0	183	183	329	1	499	6	1014	283	380	2417	0
Arrive On Green	0.00	0.21	0.21	0.21	0.21	0.21	0.00	0.38	0.38	0.31	0.69	0.00
Sat Flow, veh/h	0	858	858	1315	7	952	1735	2678	747	1221	3618	0
Grp Volume(v), veh/h	0	0	2	201	0	351	2	632	620	402	1159	0
Grp Sat Flow(s),veh/h/ln	0	0	1716	1321	0	952	1735	1735	1691	1221	1763	0
Q Serve(g_s), s	0.0	0.0	0.1	21.0	0.0	32.0	0.2	53.3	53.8	46.5	23.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	21.2	0.0	32.0	0.2	53.3	53.8	46.5	23.0	0.0
Prop In Lane	0.00		0.50	1.00		1.00	1.00		0.44	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	367	331	0	499	6	657	640	380	2417	0
V/C Ratio(X)	0.00	0.00	0.01	0.61	0.00	0.70	0.31	0.96	0.97	1.06	0.48	0.00
Avail Cap(c_a), veh/h	0	0	367	331	0	499	81	661	644	380	2417	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)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	46.3	54.6	0.0	26.8	74.4	45.5	45.6	51.6	11.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.2	0.0	4.4	24.9	25.9	27.6	62.7	0.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	7.4	0.0	10.1	0.1	26.6	26.5	20.3	8.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	46.3	57.8	0.0	31.2	99.2	71.3	73.2	114.3	11.2	0.0
LnGrp LOS	A	A	D	E	A	C	F	E	E	F	B	A
Approach Vol, veh/h		2			552			1254			1561	
Approach Delay, s/veh		46.3			40.9			72.3			37.7	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	51.0	62.1		36.5	5.1	108.1		36.5
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	46.5	57.0		32.0	7.0	96.5		32.0
Max Q Clear Time (g_c+I1), s	49.5	55.8		2.1	2.2	25.0		34.0
Green Ext Time (p_c), s	0.0	0.8		0.0	0.0	9.9		0.0

Intersection Summary		
HCM 6th Ctrl Delay		51.1
HCM 6th LOS		D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	0	79	19	0	8	6	982	32	34	1114	8
Future Volume (veh/h)	37	0	79	19	0	8	6	982	32	34	1114	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1856	1856	1856	1500	1500	1500	1767	1826	1899	1811	1856	1930
Adj Flow Rate, veh/h	40	0	86	21	0	9	7	1067	35	37	1211	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	27	27	27	9	5	5	6	3	3
Cap, veh/h	58	0	125	68	0	60	22	1480	49	96	1703	13
Arrive On Green	0.11	0.00	0.11	0.05	0.00	0.05	0.01	0.43	0.43	0.06	0.47	0.47
Sat Flow, veh/h	512	0	1101	1428	0	1271	1682	3428	112	1725	3587	27
Grp Volume(v), veh/h	126	0	0	21	0	9	7	540	562	37	595	625
Grp Sat Flow(s),veh/h/ln	1614	0	0	1428	0	1271	1682	1735	1806	1725	1763	1851
Q Serve(g_s), s	3.8	0.0	0.0	0.7	0.0	0.3	0.2	13.2	13.2	1.1	13.7	13.7
Cycle Q Clear(g_c), s	3.8	0.0	0.0	0.7	0.0	0.3	0.2	13.2	13.2	1.1	13.7	13.7
Prop In Lane	0.32		0.68	1.00		1.00	1.00		0.06	1.00		0.01
Lane Grp Cap(c), veh/h	184	0	0	68	0	60	22	749	780	96	837	879
V/C Ratio(X)	0.69	0.00	0.00	0.31	0.00	0.15	0.32	0.72	0.72	0.38	0.71	0.71
Avail Cap(c_a), veh/h	1007	0	0	891	0	793	230	1383	1440	239	1409	1480
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	0.0	23.6	0.0	23.4	25.1	12.0	12.0	23.4	10.7	10.7
Incr Delay (d2), s/veh	4.5	0.0	0.0	2.6	0.0	1.1	8.2	1.3	1.3	2.5	1.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	0.3	0.0	0.1	0.1	3.7	3.8	0.4	3.6	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	0.0	0.0	26.2	0.0	24.6	33.3	13.3	13.3	25.8	11.8	11.8
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		126			30			1109			1257	
Approach Delay, s/veh		26.3			25.7			13.4			12.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.4	26.6		10.3	5.2	28.8		6.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	40.9		32.0	7.0	41.0		32.0
Max Q Clear Time (g_c+I1), s	3.1	15.2		5.8	2.2	15.7		2.7
Green Ext Time (p_c), s	0.0	7.0		0.8	0.0	8.0		0.1

Intersection Summary		
HCM 6th Ctrl Delay		13.6
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	76	178	435	443	978	0	0	913	244
Future Volume (veh/h)	0	0	0	76	178	435	443	978	0	0	913	244
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1841	1826	1914	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				83	341	374	482	1063	0	0	992	265
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	5	4	3	3	0	0	3	3
Cap, veh/h				81	334	368	494	2451	0	0	1037	276
Arrive On Green				0.23	0.23	0.23	0.28	0.70	0.00	0.00	0.38	0.38
Sat Flow, veh/h				354	1454	1601	1767	3618	0	0	2839	730
Grp Volume(v), veh/h				424	0	374	482	1063	0	0	635	622
Grp Sat Flow(s),veh/h/ln				1808	0	1601	1767	1763	0	0	1763	1714
Q Serve(g_s), s				27.5	0.0	27.5	32.3	15.8	0.0	0.0	42.0	42.4
Cycle Q Clear(g_c), s				27.5	0.0	27.5	32.3	15.8	0.0	0.0	42.0	42.4
Prop In Lane				0.20		1.00	1.00		0.00	0.00		0.43
Lane Grp Cap(c), veh/h				415	0	368	494	2451	0	0	666	647
V/C Ratio(X)				1.02	0.00	1.02	0.97	0.43	0.00	0.00	0.95	0.96
Avail Cap(c_a), veh/h				415	0	368	494	2459	0	0	670	651
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.1	0.0	46.1	42.7	8.0	0.0	0.0	36.2	36.4
Incr Delay (d2), s/veh				49.6	0.0	51.3	33.9	0.1	0.0	0.0	23.9	25.7
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				18.0	0.0	16.1	18.6	5.5	0.0	0.0	22.1	22.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				95.7	0.0	97.4	76.6	8.1	0.0	0.0	60.2	62.0
LnGrp LOS				F	A	F	E	A	A	A	E	E
Approach Vol, veh/h					798			1545			1257	
Approach Delay, s/veh					96.5			29.5			61.1	
Approach LOS					F			C			E	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	87.7		38.0	49.7		32.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	83.5		33.5	45.5		27.5
Max Q Clear Time (g_c+I1), s	17.8		34.3	44.4		29.5
Green Ext Time (p_c), s	10.6		0.0	0.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	55.4
HCM 6th LOS	E

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)	72	181	28	57	35	215	4	767	40	174	490	13
Future Volume (veh/h)	72	181	28	57	35	215	4	767	40	174	490	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	197	30	62	38	234	4	834	43	189	533	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	375	57	240	53	328	455	936	789	312	1054	28
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.01	0.50	0.50	0.09	0.58	0.58
Sat Flow, veh/h	1102	1578	240	1147	224	1380	1781	1870	1577	1781	1814	48
Grp Volume(v), veh/h	78	0	227	62	0	272	4	834	43	189	0	547
Grp Sat Flow(s),veh/h/ln	1102	0	1818	1147	0	1605	1781	1870	1577	1781	0	1862
Q Serve(g_s), s	5.4	0.0	8.5	3.9	0.0	12.1	0.1	31.3	1.1	3.6	0.0	13.6
Cycle Q Clear(g_c), s	17.5	0.0	8.5	12.3	0.0	12.1	0.1	31.3	1.1	3.6	0.0	13.6
Prop In Lane	1.00		0.13	1.00		0.86	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	183	0	432	240	0	381	455	936	789	312	0	1082
V/C Ratio(X)	0.43	0.00	0.53	0.26	0.00	0.71	0.01	0.89	0.05	0.61	0.00	0.51
Avail Cap(c_a), veh/h	183	0	432	240	0	381	602	1190	1003	349	0	1220
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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	25.8	31.2	0.0	27.2	9.8	17.5	10.0	16.0	0.0	9.7
Incr Delay (d2), s/veh	1.6	0.0	1.2	0.6	0.0	6.2	0.0	7.3	0.0	2.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	3.7	1.1	0.0	5.2	0.0	13.5	0.3	1.8	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.8	0.0	27.0	31.8	0.0	33.4	9.8	24.8	10.0	18.4	0.0	10.0
LnGrp LOS	D	A	C	C	A	C	A	C	B	B	A	B
Approach Vol, veh/h		305			334			881			736	
Approach Delay, s/veh		29.5			33.1			24.0			12.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.4	43.4		23.0	5.1	49.7		23.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.5	49.5		18.5	7.0	51.0		18.5
Max Q Clear Time (g_c+I1), s	15.6	33.3		19.5	2.1	15.6		14.3
Green Ext Time (p_c), s	0.1	5.6		0.0	0.0	3.8		0.8

Intersection Summary	
HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	666	26	167	629	240	44	258	178	106	99	29
Future Volume (veh/h)	118	666	26	167	629	240	44	258	178	106	99	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	1.00		0.99
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	1826	1826	1826	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	724	28	182	684	261	48	280	193	115	108	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	2	2	2
Cap, veh/h	184	1020	39	225	794	303	474	347	239	208	468	139
Arrive On Green	0.11	0.30	0.30	0.13	0.32	0.32	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1739	3403	132	1767	2470	942	1238	1026	707	918	1382	409
Grp Volume(v), veh/h	128	369	383	182	488	457	48	0	473	115	0	140
Grp Sat Flow(s),veh/h/ln	1739	1735	1800	1767	1763	1649	1238	0	1733	918	0	1791
Q Serve(g_s), s	4.1	10.9	10.9	5.8	15.0	15.0	1.7	0.0	14.3	5.2	0.0	3.2
Cycle Q Clear(g_c), s	4.1	10.9	10.9	5.8	15.0	15.0	4.9	0.0	14.3	19.5	0.0	3.2
Prop In Lane	1.00		0.07	1.00		0.57	1.00		0.41	1.00		0.23
Lane Grp Cap(c), veh/h	184	520	540	225	567	530	474	0	586	208	0	606
V/C Ratio(X)	0.70	0.71	0.71	0.81	0.86	0.86	0.10	0.00	0.81	0.55	0.00	0.23
Avail Cap(c_a), veh/h	214	587	609	230	609	570	474	0	586	208	0	606
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	24.9	17.9	17.9	24.5	18.3	18.3	15.4	0.0	17.3	26.9	0.0	13.7
Incr Delay (d2), s/veh	7.8	3.4	3.3	18.6	11.5	12.2	0.1	0.0	8.1	3.2	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	1.9	4.1	4.2	3.3	6.7	6.4	0.4	0.0	6.2	1.7	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	21.4	21.3	43.0	29.8	30.5	15.5	0.0	25.5	30.1	0.0	13.9
LnGrp LOS	C	C	C	D	C	C	B	A	C	C	A	B
Approach Vol, veh/h		880			1127			521			255	
Approach Delay, s/veh		23.0			32.2			24.6			21.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	21.8		24.0	10.6	23.0		24.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	19.5		19.5	7.1	19.9		19.5
Max Q Clear Time (g_c+I1), s	7.8	12.9		21.5	6.1	17.0		16.3
Green Ext Time (p_c), s	0.0	2.3		0.0	0.0	1.6		1.0

Intersection Summary	
HCM 6th Ctrl Delay	26.9
HCM 6th LOS	C

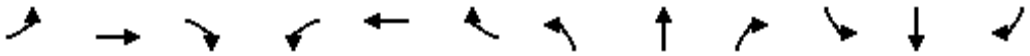


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	199	208	993	230	255	1261
Future Volume (veh/h)	199	208	993	230	255	1261
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1767	1767	1752	1752	1767	1752
Adj Flow Rate, veh/h	216	226	1079	250	277	1371
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	10	10	9	10
Cap, veh/h	310	275	1234	284	314	2326
Arrive On Green	0.18	0.18	0.46	0.46	0.19	0.70
Sat Flow, veh/h	1682	1497	2773	619	1682	3416
Grp Volume(v), veh/h	216	226	666	663	277	1371
Grp Sat Flow(s),veh/h/ln	1682	1497	1664	1640	1682	1664
Q Serve(g_s), s	10.2	12.4	30.8	31.2	13.7	18.0
Cycle Q Clear(g_c), s	10.2	12.4	30.8	31.2	13.7	18.0
Prop In Lane	1.00	1.00		0.38	1.00	
Lane Grp Cap(c), veh/h	310	275	764	753	314	2326
V/C Ratio(X)	0.70	0.82	0.87	0.88	0.88	0.59
Avail Cap(c_a), veh/h	633	564	863	850	379	2650
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	32.6	33.4	20.8	20.9	33.8	6.6
Incr Delay (d2), s/veh	2.8	6.0	8.9	9.7	18.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	4.8	11.9	12.1	6.7	4.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.4	39.4	29.7	30.6	52.2	6.8
LnGrp LOS	D	D	C	C	D	A
Approach Vol, veh/h	442		1329			1648
Approach Delay, s/veh	37.5		30.1			14.5
Approach LOS	D		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	20.4	44.7				65.1	20.2
Change Period (Y+Rc), s	4.5	5.5				5.5	4.5
Max Green Setting (Gmax), s	19.3	44.2				67.9	32.1
Max Q Clear Time (g_c+I1), s	15.7	33.2				20.0	14.4
Green Ext Time (p_c), s	0.3	5.9				12.7	1.3

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE
WITH ORANGE STREET EXTENSION
WITH RECOMMENDED MITIGATION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	685	96	75	150	6	50	104	34	165	435	0
Future Volume (veh/h)	2	685	96	75	150	6	50	104	34	165	435	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1678	1745	1781	1870	1945	1870	1856	1930	1930	1870	1945	1870
Adj Flow Rate, veh/h	2	745	104	82	163	7	54	113	0	179	473	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	15	15	8	2	2	2	3	3	3	2	2	2
Cap, veh/h	2	722	627	92	183	228	87	331		207	464	0
Arrive On Green	0.42	0.42	0.42	0.14	0.14	0.14	0.05	0.17	0.00	0.12	0.24	0.00
Sat Flow, veh/h	5	1740	1510	640	1273	1585	1767	1930	0	1781	1945	0
Grp Volume(v), veh/h	747	0	104	245	0	7	54	113	0	179	473	0
Grp Sat Flow(s),veh/h/ln	1745	0	1510	1913	0	1585	1767	1930	0	1781	1945	0
Q Serve(g_s), s	48.9	0.0	5.1	14.8	0.0	0.4	3.5	6.1	0.0	11.6	28.1	0.0
Cycle Q Clear(g_c), s	48.9	0.0	5.1	14.8	0.0	0.4	3.5	6.1	0.0	11.6	28.1	0.0
Prop In Lane	0.00		1.00	0.33		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	724	0	627	276	0	228	87	331		207	464	0
V/C Ratio(X)	1.03	0.00	0.17	0.89	0.00	0.03	0.62	0.34		0.86	1.02	0.00
Avail Cap(c_a), veh/h	724	0	627	292	0	242	105	331		244	464	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.4	0.0	21.6	49.5	0.0	43.3	54.9	42.9	0.0	51.1	44.8	0.0
Incr Delay (d2), s/veh	41.7	0.0	0.1	25.7	0.0	0.1	7.7	0.6	0.0	23.4	46.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	28.8	0.0	1.9	9.1	0.0	0.2	1.7	2.9	0.0	6.4	19.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.2	0.0	21.8	75.2	0.0	43.4	62.6	43.5	0.0	74.5	91.5	0.0
LnGrp LOS	F	A	C	E	A	D	E	D		E	F	A
Approach Vol, veh/h		851			252			167	A		652	
Approach Delay, s/veh		69.5			74.3			49.7			86.9	
Approach LOS		E			E			D			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.2	24.7		53.4	10.3	32.6		21.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	16.1	19.0		48.9	7.0	28.1		18.0				
Max Q Clear Time (g_c+I1), s	13.6	8.1		50.9	5.5	30.1		16.8				
Green Ext Time (p_c), s	0.1	0.3		0.0	0.0	0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		74.3
HCM 6th LOS		E

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	419	18	24	687	6	187	2	253	5	0	32
Future Volume (veh/h)	0	419	18	24	687	6	187	2	253	5	0	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
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	1841	1752	1841	1811	1811	1811	1737	1737	1737	1841	1841	1841
Adj Flow Rate, veh/h	0	455	0	26	747	7	203	2	275	5	0	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	10	4	6	6	6	11	11	11	4	4	4
Cap, veh/h	249	1286		510	1349	13	636	5	445	158	40	407
Arrive On Green	0.00	0.39	0.00	0.39	0.39	0.39	0.30	0.30	0.30	0.30	0.00	0.30
Sat Flow, veh/h	698	3328	1560	904	3493	33	1284	17	1471	61	130	1342
Grp Volume(v), veh/h	0	455	0	26	368	386	205	0	275	40	0	0
Grp Sat Flow(s),veh/h/ln	698	1664	1560	904	1721	1805	1300	0	1471	1534	0	0
Q Serve(g_s), s	0.0	2.8	0.0	0.6	4.8	4.8	3.1	0.0	4.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.8	0.0	3.4	4.8	4.8	3.7	0.0	4.6	0.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	0.99		1.00	0.12		0.87
Lane Grp Cap(c), veh/h	249	1286		510	665	697	641	0	445	605	0	0
V/C Ratio(X)	0.00	0.35		0.05	0.55	0.55	0.32	0.00	0.62	0.07	0.00	0.00
Avail Cap(c_a), veh/h	521	2586		863	1337	1402	1512	0	1447	1600	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)	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.3	0.0	7.5	6.9	6.9	8.3	0.0	8.7	7.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.7	0.7	0.3	0.0	1.4	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	0.5	0.0	0.1	0.9	0.9	0.7	0.0	1.1	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.5	0.0	7.6	7.7	7.6	8.5	0.0	10.1	7.3	0.0	0.0
LnGrp LOS	A	A		A	A	A	A	A	B	A	A	A
Approach Vol, veh/h		455	A		780			480			40	
Approach Delay, s/veh		6.5			7.6			9.4			7.3	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	13.3	15.7	13.3	15.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	28.5	22.5	28.5	22.5
Max Q Clear Time (g_c+I1), s	6.6	4.8	2.5	6.8
Green Ext Time (p_c), s	2.2	2.6	0.2	4.1

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	141	645	8	18	404	3	8	35	21	394	50	238
Future Volume (veh/h)	141	645	8	18	404	3	8	35	21	394	50	238
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1633	1633	1841	1841	1841	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	153	701	9	20	439	3	9	38	23	467	0	259
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	18	18	18	4	4	4	2	2	2	2	2	2
Cap, veh/h	180	871	12	26	608	4	27	114	116	626	0	799
Arrive On Green	0.33	0.33	0.33	0.17	0.17	0.17	0.07	0.07	0.07	0.18	0.00	0.18
Sat Flow, veh/h	547	2650	35	152	3493	25	369	1558	1585	3563	0	1585
Grp Volume(v), veh/h	449	0	414	242	0	220	47	0	23	467	0	259
Grp Sat Flow(s),veh/h/ln	1606	0	1627	1833	0	1836	1927	0	1585	1781	0	1585
Q Serve(g_s), s	18.9	0.0	16.6	9.1	0.0	8.2	1.7	0.0	1.0	9.0	0.0	7.0
Cycle Q Clear(g_c), s	18.9	0.0	16.6	9.1	0.0	8.2	1.7	0.0	1.0	9.0	0.0	7.0
Prop In Lane	0.34		0.02	0.08		0.01	0.19		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	528	0	535	319	0	320	141	0	116	626	0	799
V/C Ratio(X)	0.85	0.00	0.77	0.76	0.00	0.69	0.33	0.00	0.20	0.75	0.00	0.32
Avail Cap(c_a), veh/h	605	0	613	456	0	456	489	0	403	900	0	921
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.7	0.0	21.9	28.5	0.0	28.1	31.9	0.0	31.6	28.3	0.0	10.6
Incr Delay (d2), s/veh	10.1	0.0	5.4	4.5	0.0	2.6	1.4	0.0	0.8	2.0	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	8.1	0.0	6.7	4.2	0.0	3.7	0.8	0.0	0.4	3.9	0.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	0.0	27.3	32.9	0.0	30.7	33.3	0.0	32.4	30.3	0.0	10.9
LnGrp LOS	C	A	C	C	A	C	C	A	C	C	A	B
Approach Vol, veh/h		863			462			70			726	
Approach Delay, s/veh		30.1			31.9			33.0			23.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	9.8	28.3	17.2	17.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.4	27.3	18.3	18.0
Max Q Clear Time (g_c+I1), s	3.7	20.9	11.0	11.1
Green Ext Time (p_c), s	0.2	2.9	1.7	1.5

Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	245	848	578	131	205	27
Future Volume (veh/h)	245	848	578	131	205	27
Initial Q (Qb), veh	0	0	0	0	0	0
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	1776	1791	1841	1899	1791	1791
Adj Flow Rate, veh/h	266	0	729	0	223	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	13	12	4	5	12	12
Cap, veh/h	347		1043	565	309	
Arrive On Green	0.21	0.00	0.30	0.00	0.17	0.00
Sat Flow, veh/h	1691	1518	3506	1899	1791	1518
Grp Volume(v), veh/h	266	0	729	0	223	0
Grp Sat Flow(s),veh/h/ln	1691	1518	1753	1899	1791	1518
Q Serve(g_s), s	6.2	0.0	7.7	0.0	4.9	0.0
Cycle Q Clear(g_c), s	6.2	0.0	7.7	0.0	4.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	347		1043	565	309	
V/C Ratio(X)	0.77		0.70	0.00	0.72	
Avail Cap(c_a), veh/h	1240		2360	1278	775	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	15.6	0.0	13.0	0.0	16.3	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.9	0.0	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	2.3	0.0	2.5	0.0	2.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.2	0.0	13.8	0.0	19.4	0.0
LnGrp LOS	B		B	A	B	
Approach Vol, veh/h	266	A		729	223	A
Approach Delay, s/veh	19.2			13.8	19.4	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	16.9		13.0		11.7
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	28.0		30.5		18.0
Max Q Clear Time (g_c+I1), s	9.7		8.2		6.9
Green Ext Time (p_c), s	2.7		0.8		0.9

Intersection Summary	
HCM 6th Ctrl Delay	16.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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)	186	1005	35	32	706	456	35	67	67	627	35	391
Future Volume (veh/h)	186	1005	35	32	706	456	35	67	67	627	35	391
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	202	1092	38	35	767	496	38	73	73	682	38	425
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	229	1741	61	68	858	915	266	89	89	674	684	772
Arrive On Green	0.13	0.35	0.35	0.04	0.26	0.26	0.06	0.10	0.10	0.37	0.41	0.41
Sat Flow, veh/h	1753	4982	173	1654	3300	1432	1781	885	885	1598	1678	1434
Grp Volume(v), veh/h	202	734	396	35	767	496	38	0	146	682	38	425
Grp Sat Flow(s),veh/h/ln	1753	1675	1805	1654	1650	1432	1781	0	1771	1598	1678	1434
Q Serve(g_s), s	12.9	20.8	20.8	2.4	25.6	22.5	2.1	0.0	9.2	42.0	1.6	22.2
Cycle Q Clear(g_c), s	12.9	20.8	20.8	2.4	25.6	22.5	2.1	0.0	9.2	42.0	1.6	22.2
Prop In Lane	1.00		0.10	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	229	1171	631	68	858	915	266	0	178	674	684	772
V/C Ratio(X)	0.88	0.63	0.63	0.51	0.89	0.54	0.14	0.00	0.82	1.01	0.06	0.55
Avail Cap(c_a), veh/h	231	1171	631	102	897	931	407	0	248	674	684	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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	30.9	30.9	53.6	40.7	12.0	40.9	0.0	50.3	26.9	20.5	17.3
Incr Delay (d2), s/veh	30.2	1.1	2.0	5.9	11.1	0.6	0.2	0.0	13.7	37.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	8.2	9.0	1.1	11.2	6.9	0.9	0.0	4.8	22.7	0.6	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.0	32.0	32.9	59.5	51.7	12.7	41.1	0.0	64.0	64.6	20.5	18.1
LnGrp LOS	E	C	C	E	D	B	D	A	E	F	C	B
Approach Vol, veh/h		1332			1298			184			1145	
Approach Delay, s/veh		39.4			37.0			59.3			45.9	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	43.9	11.0	50.5	18.9	33.7	46.0	15.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	39.0	16.0	42.0	15.0	31.0	42.0	16.0
Max Q Clear Time (g_c+I1), s	4.4	22.8	4.1	24.2	14.9	27.6	44.0	11.2
Green Ext Time (p_c), s	0.0	6.3	0.0	1.7	0.0	2.1	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	41.4
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	242	1	291	2	566	194	215	825	7
Future Volume (veh/h)	0	0	0	242	1	291	2	566	194	215	825	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1663	1663	1322	1760	1796	1796	1205	1796	1796
Adj Flow Rate, veh/h	0	0	0	263	1	316	2	615	211	234	897	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	16	16	39	14	7	7	50	7	7
Cap, veh/h	0	506	0	437	1	551	6	751	257	259	1814	16
Arrive On Green	0.00	0.00	0.00	0.27	0.27	0.27	0.00	0.30	0.30	0.23	0.52	0.52
Sat Flow, veh/h	0	1900	0	1257	5	1120	1676	2493	854	1148	3466	31
Grp Volume(v), veh/h	0	0	0	264	0	316	2	421	405	234	442	463
Grp Sat Flow(s),veh/h/ln	0	1900	0	1261	0	1120	1676	1706	1641	1148	1706	1791
Q Serve(g_s), s	0.0	0.0	0.0	13.6	0.0	14.0	0.1	16.0	16.1	13.9	11.7	11.7
Cycle Q Clear(g_c), s	0.0	0.0	0.0	13.6	0.0	14.0	0.1	16.0	16.1	13.9	11.7	11.7
Prop In Lane	0.00		0.00	1.00		1.00	1.00		0.52	1.00		0.02
Lane Grp Cap(c), veh/h	0	506	0	438	0	551	6	514	494	259	893	937
V/C Ratio(X)	0.00	0.00	0.00	0.60	0.00	0.57	0.31	0.82	0.82	0.90	0.49	0.49
Avail Cap(c_a), veh/h	0	867	0	678	0	764	167	633	608	286	893	937
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)	0.00	0.00	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	0.0	0.0	0.0	23.9	0.0	12.6	34.8	22.7	22.7	26.4	10.7	10.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.9	25.6	6.9	7.3	27.9	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	0.0	0.0	0.0	4.0	0.0	3.3	0.1	6.5	6.3	5.3	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	25.2	0.0	13.5	60.4	29.6	30.0	54.3	11.2	11.2
LnGrp LOS	A	A	A	C	A	B	E	C	C	D	B	B
Approach Vol, veh/h		0			580			828			1139	
Approach Delay, s/veh		0.0			18.9			29.9			20.0	
Approach LOS					B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.3	26.6		23.2	4.8	42.2		23.2
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	17.5	26.0		32.0	7.0	36.5		32.0
Max Q Clear Time (g_c+I1), s	15.9	18.1		0.0	2.1	13.7		16.0
Green Ext Time (p_c), s	0.1	2.9		0.0	0.0	5.2		2.7

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	2	28	46	0	41	82	948	77	48	905	38
Future Volume (veh/h)	6	2	28	46	0	41	82	948	77	48	905	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
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	1678	1678	1678	1530	1530	1530	1781	1826	1899	1693	1781	1853
Adj Flow Rate, veh/h	7	2	30	50	0	45	89	1030	84	52	984	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	15	15	15	25	25	25	8	5	5	14	8	8
Cap, veh/h	22	6	93	174	0	152	155	1366	111	110	1315	55
Arrive On Green	0.08	0.08	0.08	0.12	0.00	0.12	0.09	0.42	0.42	0.07	0.40	0.40
Sat Flow, veh/h	259	74	1109	1457	0	1273	1697	3248	265	1612	3308	138
Grp Volume(v), veh/h	39	0	0	50	0	45	89	550	564	52	503	522
Grp Sat Flow(s),veh/h/ln	1442	0	0	1457	0	1273	1697	1735	1778	1612	1692	1753
Q Serve(g_s), s	1.5	0.0	0.0	1.8	0.0	1.9	2.9	15.7	15.7	1.8	14.9	14.9
Cycle Q Clear(g_c), s	1.5	0.0	0.0	1.8	0.0	1.9	2.9	15.7	15.7	1.8	14.9	14.9
Prop In Lane	0.18		0.77	1.00		1.00	1.00		0.15	1.00		0.08
Lane Grp Cap(c), veh/h	121	0	0	174	0	152	155	730	748	110	673	697
V/C Ratio(X)	0.32	0.00	0.00	0.29	0.00	0.30	0.57	0.75	0.75	0.47	0.75	0.75
Avail Cap(c_a), veh/h	788	0	0	799	0	699	229	1204	1234	201	1157	1198
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	0.0	0.0	23.5	0.0	23.5	25.5	14.4	14.4	26.2	15.1	15.1
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.9	0.0	1.1	3.3	1.6	1.6	3.1	1.7	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	0.5	0.0	0.0	0.6	0.0	0.6	1.2	4.8	5.0	0.7	4.6	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.8	0.0	0.0	24.4	0.0	24.6	28.8	16.0	16.0	29.4	16.8	16.8
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		39			95			1203			1077	
Approach Delay, s/veh		26.8			24.5			16.9			17.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	29.1		9.4	9.9	27.8		11.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.3	40.6		32.0	7.9	40.0		32.1				
Max Q Clear Time (g_c+I1), s	3.8	17.7		3.5	4.9	16.9		3.9				
Green Ext Time (p_c), s	0.0	6.9		0.2	0.0	6.2		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	64	145	550	248	483	0	0	957	191
Future Volume (veh/h)	0	0	0	64	145	550	248	483	0	0	957	191
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1841	1841	0	0	1811	1811
Adj Flow Rate, veh/h				70	436	413	270	525	0	0	1040	208
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	4	4	0	0	6	6
Cap, veh/h				69	429	442	304	2202	0	0	1156	231
Arrive On Green				0.27	0.27	0.27	0.17	0.63	0.00	0.00	0.40	0.40
Sat Flow, veh/h				257	1601	1648	1753	3589	0	0	2947	570
Grp Volume(v), veh/h				506	0	413	270	525	0	0	625	623
Grp Sat Flow(s),veh/h/ln				1858	0	1648	1753	1749	0	0	1721	1706
Q Serve(g_s), s				23.5	0.0	21.5	13.2	5.7	0.0	0.0	29.8	30.0
Cycle Q Clear(g_c), s				23.5	0.0	21.5	13.2	5.7	0.0	0.0	29.8	30.0
Prop In Lane				0.14		1.00	1.00		0.00	0.00		0.33
Lane Grp Cap(c), veh/h				498	0	442	304	2202	0	0	696	691
V/C Ratio(X)				1.02	0.00	0.94	0.89	0.24	0.00	0.00	0.90	0.90
Avail Cap(c_a), veh/h				498	0	442	314	2292	0	0	731	725
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				32.1	0.0	31.4	35.4	7.1	0.0	0.0	24.4	24.5
Incr Delay (d2), s/veh				44.7	0.0	27.3	24.6	0.1	0.0	0.0	13.5	14.1
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				16.3	0.0	11.6	7.6	1.9	0.0	0.0	14.0	14.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				76.8	0.0	58.7	60.0	7.1	0.0	0.0	38.0	38.6
LnGrp LOS				F	A	E	E	A	A	A	D	D
Approach Vol, veh/h					919			795			1248	
Approach Delay, s/veh					68.7			25.1			38.3	
Approach LOS					E			C			D	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	59.7		19.7	40.0		28.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	57.5		15.7	37.3		23.5
Max Q Clear Time (g_c+I1), s	7.7		15.2	32.0		25.5
Green Ext Time (p_c), s	4.1		0.0	3.5		0.0

Intersection Summary		
HCM 6th Ctrl Delay		44.2
HCM 6th LOS		D

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)	22	85	25	100	60	172	5	398	19	184	522	21
Future Volume (veh/h)	22	85	25	100	60	172	5	398	19	184	522	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	24	92	27	109	65	187	5	433	21	200	567	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	276	333	98	397	101	290	325	572	479	507	779	32
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.01	0.31	0.31	0.14	0.44	0.44
Sat Flow, veh/h	1115	1381	405	1251	418	1203	1767	1856	1555	1753	1756	71
Grp Volume(v), veh/h	24	0	119	109	0	252	5	433	21	200	0	590
Grp Sat Flow(s),veh/h/ln	1115	0	1786	1251	0	1621	1767	1856	1555	1753	0	1827
Q Serve(g_s), s	0.9	0.0	2.4	3.4	0.0	6.2	0.1	9.3	0.4	2.9	0.0	11.7
Cycle Q Clear(g_c), s	7.0	0.0	2.4	5.8	0.0	6.2	0.1	9.3	0.4	2.9	0.0	11.7
Prop In Lane	1.00		0.23	1.00		0.74	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	276	0	431	397	0	391	325	572	479	507	0	810
V/C Ratio(X)	0.09	0.00	0.28	0.27	0.00	0.64	0.02	0.76	0.04	0.39	0.00	0.73
Avail Cap(c_a), veh/h	462	0	728	605	0	661	589	899	753	534	0	890
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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	13.6	16.0	0.0	15.0	10.7	13.8	10.7	8.1	0.0	10.1
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.4	0.0	1.8	0.0	2.1	0.0	0.5	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	0.2	0.0	0.9	0.9	0.0	2.2	0.0	3.4	0.1	0.7	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.3	0.0	14.0	16.3	0.0	16.8	10.7	15.9	10.8	8.6	0.0	12.8
LnGrp LOS	B	A	B	B	A	B	B	B	B	A	A	B
Approach Vol, veh/h		143			361			459			790	
Approach Delay, s/veh		14.7			16.7			15.6			11.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	18.1		15.2	4.9	24.1		15.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.1	21.4		18.0	7.0	21.5		18.0				
Max Q Clear Time (g_c+I1), s	4.9	11.3		9.0	2.1	13.7		8.2				
Green Ext Time (p_c), s	0.1	1.9		0.4	0.0	2.3		1.4				

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	765	24	96	395	61	32	97	174	286	146	59
Future Volume (veh/h)	41	765	24	96	395	61	32	97	174	286	146	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	0.99		0.99	0.99		0.97
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	1811	1811	1811	1811	1811	1811	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	45	832	26	104	429	66	35	105	189	311	159	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	6	6	3	3	3	3	3	3
Cap, veh/h	105	987	31	163	1113	473	468	233	420	401	495	199
Arrive On Green	0.06	0.29	0.29	0.09	0.32	0.32	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1725	3402	106	1725	3441	1463	1140	588	1059	1070	1247	502
Grp Volume(v), veh/h	45	421	437	104	429	66	35	0	294	311	0	223
Grp Sat Flow(s),veh/h/ln	1725	1721	1788	1725	1721	1463	1140	0	1647	1070	0	1749
Q Serve(g_s), s	1.6	14.2	14.2	3.6	5.9	2.0	1.4	0.0	8.1	16.4	0.0	5.4
Cycle Q Clear(g_c), s	1.6	14.2	14.2	3.6	5.9	2.0	6.8	0.0	8.1	24.5	0.0	5.4
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.64	1.00		0.29
Lane Grp Cap(c), veh/h	105	499	519	163	1113	473	468	0	653	401	0	694
V/C Ratio(X)	0.43	0.84	0.84	0.64	0.39	0.14	0.07	0.00	0.45	0.78	0.00	0.32
Avail Cap(c_a), veh/h	196	555	576	198	1115	474	468	0	653	401	0	694
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	28.0	20.6	20.6	26.9	16.1	14.8	15.2	0.0	13.7	23.4	0.0	12.9
Incr Delay (d2), s/veh	2.7	10.4	10.1	4.8	0.2	0.1	0.1	0.0	0.5	9.2	0.0	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	0.7	6.2	6.4	1.5	2.0	0.6	0.3	0.0	2.7	5.2	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	31.0	30.7	31.8	16.4	14.9	15.3	0.0	14.2	32.6	0.0	13.1
LnGrp LOS	C	C	C	C	B	B	B	A	B	C	A	B
Approach Vol, veh/h		903			599			329			534	
Approach Delay, s/veh		30.9			18.9			14.3			24.5	
Approach LOS		C			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.3	22.4		29.0	8.3	24.5		29.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	19.9		24.5	7.0	20.0		24.5
Max Q Clear Time (g_c+I1), s	5.6	16.2		26.5	3.6	7.9		10.1
Green Ext Time (p_c), s	0.0	1.7		0.0	0.0	2.2		1.6

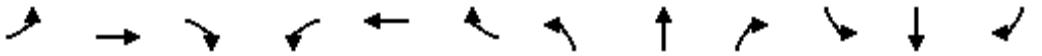
Intersection Summary		
HCM 6th Ctrl Delay	24.1	
HCM 6th LOS	C	



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	138	188	681	176	221	909
Future Volume (veh/h)	138	188	681	176	221	909
Initial Q (Qb), veh	0	0	0	0	0	0
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	1767	1767	1693	1693	1767	1707
Adj Flow Rate, veh/h	150	204	740	191	240	988
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	14	14	9	13
Cap, veh/h	310	276	950	245	294	2052
Arrive On Green	0.18	0.18	0.38	0.38	0.17	0.63
Sat Flow, veh/h	1682	1497	2615	653	1682	3329
Grp Volume(v), veh/h	150	204	470	461	240	988
Grp Sat Flow(s),veh/h/ln	1682	1497	1608	1575	1682	1622
Q Serve(g_s), s	4.4	7.0	14.1	14.1	7.5	8.8
Cycle Q Clear(g_c), s	4.4	7.0	14.1	14.1	7.5	8.8
Prop In Lane	1.00	1.00		0.41	1.00	
Lane Grp Cap(c), veh/h	310	276	604	592	294	2052
V/C Ratio(X)	0.48	0.74	0.78	0.78	0.82	0.48
Avail Cap(c_a), veh/h	985	877	853	836	447	2850
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	20.0	21.0	15.1	15.1	21.7	5.3
Incr Delay (d2), s/veh	1.2	3.9	3.0	3.1	6.9	0.2
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	2.5	4.3	4.2	3.0	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.1	24.9	18.1	18.1	28.7	5.5
LnGrp LOS	C	C	B	B	C	A
Approach Vol, veh/h	354		931			1228
Approach Delay, s/veh	23.3		18.1			10.0
Approach LOS	C		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.0	26.0				40.1	14.6
Change Period (Y+Rc), s	4.5	5.5				5.5	4.5
Max Green Setting (Gmax), s	14.5	29.0				48.0	32.0
Max Q Clear Time (g_c+I1), s	9.5	16.1				10.8	9.0
Green Ext Time (p_c), s	0.3	4.4				7.5	1.1

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	557	124	68	144	11	64	349	11	167	552	0
Future Volume (veh/h)	2	557	124	68	144	11	64	349	11	167	552	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1699	1811	1841	1914	1841	1870	1945	1945	1870	1945	1870
Adj Flow Rate, veh/h	2	605	135	74	157	12	70	379	0	182	600	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	18	18	6	4	4	4	2	2	2	2	2	2
Cap, veh/h	2	588	533	84	178	217	95	473		209	597	0
Arrive On Green	0.35	0.35	0.35	0.14	0.14	0.14	0.05	0.24	0.00	0.12	0.31	0.00
Sat Flow, veh/h	6	1693	1535	604	1281	1560	1781	1945	0	1781	1945	0
Grp Volume(v), veh/h	607	0	135	231	0	12	70	379	0	182	600	0
Grp Sat Flow(s),veh/h/ln	1698	0	1535	1884	0	1560	1781	1945	0	1781	1945	0
Q Serve(g_s), s	40.9	0.0	7.4	14.2	0.0	0.8	4.6	21.6	0.0	11.8	36.1	0.0
Cycle Q Clear(g_c), s	40.9	0.0	7.4	14.2	0.0	0.8	4.6	21.6	0.0	11.8	36.1	0.0
Prop In Lane	0.00		1.00	0.32		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	590	0	533	262	0	217	95	473		209	597	0
V/C Ratio(X)	1.03	0.00	0.25	0.88	0.00	0.06	0.74	0.80		0.87	1.01	0.00
Avail Cap(c_a), veh/h	590	0	533	288	0	239	106	484		209	597	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.4	0.0	27.5	49.7	0.0	43.9	54.9	41.9	0.0	51.1	40.8	0.0
Incr Delay (d2), s/veh	44.5	0.0	0.2	24.0	0.0	0.1	20.9	9.2	0.0	30.6	38.2	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	24.2	0.0	2.8	8.5	0.0	0.3	2.5	11.2	0.0	6.9	22.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.9	0.0	27.7	73.7	0.0	44.0	75.8	51.1	0.0	81.7	79.0	0.0
LnGrp LOS	F	A	C	E	A	D	E	D		F	F	A
Approach Vol, veh/h		742			243			449	A		782	
Approach Delay, s/veh		72.8			72.3			54.9			79.6	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.3	33.1		45.4	10.8	40.6		20.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	13.8	29.3		40.9	7.0	36.1		18.0				
Max Q Clear Time (g_c+I1), s	13.8	23.6		42.9	6.6	38.1		16.2				
Green Ext Time (p_c), s	0.0	1.0		0.0	0.0	0.0		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		71.5	
HCM 6th LOS		E	

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)	3	528	40	16	500	5	234	0	388	9	0	50
Future Volume (veh/h)	3	528	40	16	500	5	234	0	388	9	0	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.98	1.00		1.00	1.00		0.98
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	1841	1811	1841	1856	1781	1781	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	3	574	0	17	543	5	254	0	422	10	0	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	6	4	3	8	8	5	5	5	9	9	9
Cap, veh/h	387	1103		378	1101	10	759	0	613	167	53	482
Arrive On Green	0.32	0.32	0.00	0.32	0.32	0.32	0.40	0.00	0.40	0.40	0.00	0.40
Sat Flow, veh/h	840	3441	1560	827	3436	32	1342	0	1542	92	133	1213
Grp Volume(v), veh/h	3	574	0	17	267	281	254	0	422	64	0	0
Grp Sat Flow(s),veh/h/ln	840	1721	1560	827	1692	1775	1342	0	1542	1438	0	0
Q Serve(g_s), s	0.1	4.3	0.0	0.5	4.1	4.1	3.4	0.0	7.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.2	4.3	0.0	4.9	4.1	4.1	4.3	0.0	7.3	0.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.16		0.84
Lane Grp Cap(c), veh/h	387	1103		378	543	569	759	0	613	702	0	0
V/C Ratio(X)	0.01	0.52		0.04	0.49	0.49	0.33	0.00	0.69	0.09	0.00	0.00
Avail Cap(c_a), veh/h	605	1993		592	980	1028	1573	0	1569	1535	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)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.4	8.8	0.0	10.8	8.8	8.8	7.0	0.0	8.0	6.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.7	0.7	0.3	0.0	1.4	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	1.0	0.0	0.1	1.0	1.0	0.8	0.0	1.7	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.4	9.2	0.0	10.9	9.4	9.4	7.3	0.0	9.4	6.1	0.0	0.0
LnGrp LOS	B	A		B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		577	A		565			676			64	
Approach Delay, s/veh		9.2			9.5			8.6			6.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.2	14.7	17.2	14.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	32.5	18.5	32.5	18.5
Max Q Clear Time (g_c+I1), s	9.3	6.3	2.9	6.9
Green Ext Time (p_c), s	3.2	2.9	0.3	2.5

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	178	931	11	31	284	9	3	254	14	388	95	270
Future Volume (veh/h)	178	931	11	31	284	9	3	254	14	388	95	270
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1811	1811	1811	1856	1856	1856	1811	1884	1811	1870	1945	1870
Adj Flow Rate, veh/h	193	1012	12	34	309	10	3	276	15	262	326	293
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	3	3	3	6	6	6	2	2	2
Cap, veh/h	204	1128	14	42	397	13	3	307	253	320	349	879
Arrive On Green	0.38	0.38	0.38	0.12	0.12	0.12	0.16	0.16	0.16	0.18	0.18	0.18
Sat Flow, veh/h	543	3007	37	338	3227	109	20	1862	1535	1781	1945	1585
Grp Volume(v), veh/h	634	0	583	185	0	168	279	0	15	262	326	293
Grp Sat Flow(s),veh/h/ln	1784	0	1803	1839	0	1836	1883	0	1535	1781	1945	1585
Q Serve(g_s), s	39.4	0.0	34.1	11.2	0.0	10.1	16.6	0.0	0.9	16.2	18.9	11.5
Cycle Q Clear(g_c), s	39.4	0.0	34.1	11.2	0.0	10.1	16.6	0.0	0.9	16.2	18.9	11.5
Prop In Lane	0.30		0.02	0.18		0.06	0.01		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	669	0	677	226	0	226	310	0	253	320	349	879
V/C Ratio(X)	0.95	0.00	0.86	0.82	0.00	0.74	0.90	0.00	0.06	0.82	0.93	0.33
Avail Cap(c_a), veh/h	679	0	687	290	0	289	330	0	269	320	349	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	32.9	48.9	0.0	48.4	46.8	0.0	40.2	45.1	46.2	13.9
Incr Delay (d2), s/veh	22.3	0.0	10.8	13.3	0.0	7.5	25.3	0.0	0.1	15.4	31.7	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	20.8	0.0	16.6	6.0	0.0	5.1	9.9	0.0	0.4	8.5	12.1	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.9	0.0	43.7	62.2	0.0	55.9	72.0	0.0	40.3	60.5	77.9	14.1
LnGrp LOS	E	A	D	E	A	E	E	A	D	E	E	B
Approach Vol, veh/h		1217			353			294			881	
Approach Delay, s/veh		50.6			59.2			70.4			51.5	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	23.3	47.4	25.0	18.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	20.0	43.5	20.5	18.0
Max Q Clear Time (g_c+I1), s	18.6	41.4	20.9	13.2
Green Ext Time (p_c), s	0.2	1.5	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	54.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	91	363	918	184	361	82
Future Volume (veh/h)	91	363	918	184	361	82
Initial Q (Qb), veh	0	0	0	0	0	0
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	1637	1668	1870	1945	1945	1945
Adj Flow Rate, veh/h	99	0	1141	0	392	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	22	20	2	2	2	2
Cap, veh/h	155		1442	787	489	
Arrive On Green	0.10	0.00	0.40	0.00	0.25	0.00
Sat Flow, veh/h	1559	1413	3563	1945	1945	1648
Grp Volume(v), veh/h	99	0	1141	0	392	0
Grp Sat Flow(s),veh/h/ln	1559	1413	1781	1945	1945	1648
Q Serve(g_s), s	3.4	0.0	15.5	0.0	10.4	0.0
Cycle Q Clear(g_c), s	3.4	0.0	15.5	0.0	10.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	155		1442	787	489	
V/C Ratio(X)	0.64		0.79	0.00	0.80	
Avail Cap(c_a), veh/h	509		2456	1341	724	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	23.9	0.0	14.4	0.0	19.3	0.0
Incr Delay (d2), s/veh	4.4	0.0	1.0	0.0	4.0	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	1.3	0.0	5.4	0.0	4.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.3	0.0	15.4	0.0	23.4	0.0
LnGrp LOS	C		B	A	C	
Approach Vol, veh/h	99	A		1141	392	A
Approach Delay, s/veh	28.3			15.4	23.4	
Approach LOS	C			B	C	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	26.8		10.0		18.3
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	38.0		18.0		20.5
Max Q Clear Time (g_c+I1), s	17.5		5.4		12.4
Green Ext Time (p_c), s	4.8		0.2		1.5

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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)	293	1101	64	54	1249	676	42	133	34	271	99	354
Future Volume (veh/h)	293	1101	64	54	1249	676	42	133	34	271	99	354
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.98	0.99		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	318	1197	70	59	1358	735	46	145	37	295	108	385
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	327	2654	155	90	1465	858	273	176	45	327	355	585
Arrive On Green	0.19	0.55	0.55	0.05	0.42	0.42	0.06	0.12	0.12	0.14	0.20	0.20
Sat Flow, veh/h	1753	4814	281	1767	3526	1519	1781	1490	380	1668	1752	1496
Grp Volume(v), veh/h	318	826	441	59	1358	735	46	0	182	295	108	385
Grp Sat Flow(s),veh/h/ln	1753	1662	1772	1767	1763	1519	1781	0	1870	1668	1752	1496
Q Serve(g_s), s	21.3	17.5	17.5	3.9	43.2	48.6	2.6	0.0	11.2	17.0	6.2	23.9
Cycle Q Clear(g_c), s	21.3	17.5	17.5	3.9	43.2	48.6	2.6	0.0	11.2	17.0	6.2	23.9
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	327	1832	977	90	1465	858	273	0	221	327	355	585
V/C Ratio(X)	0.97	0.45	0.45	0.66	0.93	0.86	0.17	0.00	0.83	0.90	0.30	0.66
Avail Cap(c_a), veh/h	327	1832	977	135	1465	858	409	0	254	327	355	585
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	1.00	1.00
Uniform Delay (d), s/veh	47.7	15.8	15.8	55.0	32.8	22.1	41.0	0.0	50.8	38.9	39.9	29.6
Incr Delay (d2), s/veh	42.1	0.2	0.3	7.9	10.5	8.6	0.3	0.0	17.5	26.6	0.5	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	12.8	6.1	6.6	1.9	19.3	18.5	1.2	0.0	6.3	9.8	2.7	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.8	16.0	16.1	62.9	43.2	30.7	41.2	0.0	68.3	65.6	40.4	32.3
LnGrp LOS	F	B	B	E	D	C	D	A	E	E	D	C
Approach Vol, veh/h		1585			2152			228			788	
Approach Delay, s/veh		30.8			39.5			62.9			45.9	
Approach LOS		C			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	69.0	11.0	27.9	26.0	53.0	21.0	17.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	62.0	16.0	17.0	22.0	49.0	17.0	16.0
Max Q Clear Time (g_c+I1), s	15.9	19.5	4.6	25.9	23.3	50.6	19.0	13.2
Green Ext Time (p_c), s	0.0	10.1	0.0	0.0	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	38.8
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	1	220	1	296	2	858	317	360	1059	0
Future Volume (veh/h)	0	1	1	220	1	296	2	858	317	360	1059	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	0.90	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	1870	1870	1870	1752	1752	1248	1822	1826	1826	1282	1856	1856
Adj Flow Rate, veh/h	0	1	1	239	1	322	2	933	345	391	1151	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	10	10	44	10	5	5	45	3	3
Cap, veh/h	0	184	184	329	1	492	6	959	352	370	2417	0
Arrive On Green	0.00	0.21	0.21	0.21	0.21	0.21	0.00	0.39	0.39	0.30	0.69	0.00
Sat Flow, veh/h	0	858	858	1315	6	952	1735	2484	913	1221	3618	0
Grp Volume(v), veh/h	0	0	2	240	0	322	2	650	628	391	1151	0
Grp Sat Flow(s),veh/h/ln	0	0	1716	1321	0	952	1735	1735	1662	1221	1763	0
Q Serve(g_s), s	0.0	0.0	0.1	26.1	0.0	32.1	0.2	55.2	56.0	45.5	22.9	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	26.2	0.0	32.1	0.2	55.2	56.0	45.5	22.9	0.0
Prop In Lane	0.00		0.50	1.00		1.00	1.00		0.55	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	367	331	0	492	6	670	641	370	2417	0
V/C Ratio(X)	0.00	0.00	0.01	0.73	0.00	0.65	0.31	0.97	0.98	1.06	0.48	0.00
Avail Cap(c_a), veh/h	0	0	367	331	0	492	81	670	641	370	2417	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)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	46.4	56.7	0.0	26.4	74.5	45.2	45.5	52.3	11.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.7	0.0	3.1	24.9	27.5	30.2	62.1	0.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	9.5	0.0	8.9	0.1	27.8	27.4	19.8	8.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	46.4	64.4	0.0	29.5	99.4	72.7	75.7	114.3	11.2	0.0
LnGrp LOS	A	A	D	E	A	C	F	E	E	F	B	A
Approach Vol, veh/h		2			562			1280			1542	
Approach Delay, s/veh		46.4			44.4			74.2			37.3	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	63.4		36.6	5.1	108.3		36.6
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	5.5	57.9		32.1	7.0	96.4		32.1
Max Q Clear Time (g_c+I1), s	47.5	58.0		2.1	2.2	24.9		34.1
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.5
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	0	80	20	0	8	6	998	33	33	1118	8
Future Volume (veh/h)	37	0	80	20	0	8	6	998	33	33	1118	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1856	1856	1856	1500	1500	1500	1767	1826	1899	1811	1856	1930
Adj Flow Rate, veh/h	40	0	87	22	0	9	7	1085	36	36	1215	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	27	27	27	9	5	5	6	3	3
Cap, veh/h	58	0	125	69	0	62	22	1496	50	94	1716	13
Arrive On Green	0.11	0.00	0.11	0.05	0.00	0.05	0.01	0.44	0.44	0.05	0.48	0.48
Sat Flow, veh/h	508	0	1105	1428	0	1271	1682	3426	114	1725	3587	27
Grp Volume(v), veh/h	127	0	0	22	0	9	7	549	572	36	597	627
Grp Sat Flow(s),veh/h/ln	1613	0	0	1428	0	1271	1682	1735	1805	1725	1763	1851
Q Serve(g_s), s	3.9	0.0	0.0	0.8	0.0	0.4	0.2	13.5	13.6	1.0	13.9	13.9
Cycle Q Clear(g_c), s	3.9	0.0	0.0	0.8	0.0	0.4	0.2	13.5	13.6	1.0	13.9	13.9
Prop In Lane	0.31		0.69	1.00		1.00	1.00		0.06	1.00		0.01
Lane Grp Cap(c), veh/h	183	0	0	69	0	62	22	757	788	94	843	885
V/C Ratio(X)	0.70	0.00	0.00	0.32	0.00	0.15	0.32	0.73	0.73	0.38	0.71	0.71
Avail Cap(c_a), veh/h	995	0	0	881	0	784	227	1367	1423	236	1393	1462
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	0.0	0.0	23.9	0.0	23.7	25.4	12.0	12.1	23.7	10.7	10.7
Incr Delay (d2), s/veh	4.7	0.0	0.0	2.6	0.0	1.1	8.2	1.3	1.3	2.5	1.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	0.3	0.0	0.1	0.1	3.8	3.9	0.4	3.6	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.8	0.0	0.0	26.4	0.0	24.7	33.6	13.4	13.3	26.2	11.8	11.7
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		127			31			1128			1260	
Approach Delay, s/veh		26.8			25.9			13.5			12.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	27.2		10.4	5.2	29.3		7.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	40.9		32.0	7.0	41.0		32.0
Max Q Clear Time (g_c+I1), s	3.0	15.6		5.9	2.2	15.9		2.8
Green Ext Time (p_c), s	0.0	7.1		0.8	0.0	8.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	76	175	435	441	1000	0	0	916	244
Future Volume (veh/h)	0	0	0	76	175	435	441	1000	0	0	916	244
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1841	1826	1914	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				83	190	473	479	1087	0	0	996	265
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	5	4	3	3	0	0	3	3
Cap, veh/h				127	290	371	434	2435	0	0	1117	296
Arrive On Green				0.23	0.23	0.23	0.25	0.69	0.00	0.00	0.41	0.41
Sat Flow, veh/h				547	1252	1601	1767	3618	0	0	2842	728
Grp Volume(v), veh/h				273	0	473	479	1087	0	0	637	624
Grp Sat Flow(s),veh/h/ln				1799	0	1601	1767	1763	0	0	1763	1715
Q Serve(g_s), s				16.0	0.0	26.9	28.5	16.0	0.0	0.0	39.0	39.4
Cycle Q Clear(g_c), s				16.0	0.0	26.9	28.5	16.0	0.0	0.0	39.0	39.4
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.42
Lane Grp Cap(c), veh/h				417	0	371	434	2435	0	0	716	697
V/C Ratio(X)				0.65	0.00	1.27	1.10	0.45	0.00	0.00	0.89	0.90
Avail Cap(c_a), veh/h				417	0	371	434	2555	0	0	776	755
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				40.4	0.0	44.6	43.8	8.0	0.0	0.0	32.0	32.2
Incr Delay (d2), s/veh				3.7	0.0	142.9	74.3	0.1	0.0	0.0	11.8	12.7
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				7.5	0.0	25.3	21.3	5.6	0.0	0.0	18.6	18.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				44.0	0.0	187.4	118.1	8.2	0.0	0.0	43.8	44.9
LnGrp LOS				D	A	F	F	A	A	A	D	D
Approach Vol, veh/h					746			1566			1261	
Approach Delay, s/veh					134.9			41.8			44.3	
Approach LOS					F			D			D	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	84.6		33.0	51.6		31.4
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	84.1		28.5	51.1		26.9
Max Q Clear Time (g_c+I1), s	18.0		30.5	41.4		28.9
Green Ext Time (p_c), s	10.9		0.0	5.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	62.1
HCM 6th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	168	28	63	43	199	4	781	42	172	490	15
Future Volume (veh/h)	63	168	28	63	43	199	4	781	42	172	490	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	183	30	68	47	216	4	849	46	187	533	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	365	60	245	68	310	460	950	801	308	1061	32
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.01	0.51	0.51	0.09	0.59	0.59
Sat Flow, veh/h	1111	1559	256	1161	289	1326	1781	1870	1577	1781	1806	54
Grp Volume(v), veh/h	68	0	213	68	0	263	4	849	46	187	0	549
Grp Sat Flow(s),veh/h/ln	1111	0	1814	1161	0	1615	1781	1870	1577	1781	0	1860
Q Serve(g_s), s	4.7	0.0	8.0	4.3	0.0	11.8	0.1	32.3	1.2	3.5	0.0	13.6
Cycle Q Clear(g_c), s	16.5	0.0	8.0	12.3	0.0	11.8	0.1	32.3	1.2	3.5	0.0	13.6
Prop In Lane	1.00		0.14	1.00		0.82	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	186	0	425	245	0	378	460	950	801	308	0	1093
V/C Ratio(X)	0.37	0.00	0.50	0.28	0.00	0.70	0.01	0.89	0.06	0.61	0.00	0.50
Avail Cap(c_a), veh/h	186	0	425	245	0	378	605	1196	1009	322	0	1201
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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	26.2	31.6	0.0	27.7	9.6	17.5	9.9	16.3	0.0	9.5
Incr Delay (d2), s/veh	1.2	0.0	0.9	0.6	0.0	5.5	0.0	7.5	0.0	3.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	3.5	1.2	0.0	5.0	0.0	13.9	0.4	1.9	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	0.0	27.2	32.2	0.0	33.1	9.6	25.0	9.9	19.4	0.0	9.9
LnGrp LOS	D	A	C	C	A	C	A	C	A	B	A	A
Approach Vol, veh/h		281			331			899			736	
Approach Delay, s/veh		29.4			32.9			24.2			12.3	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.4	44.6		23.0	5.1	50.9		23.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	50.5		18.5	7.0	51.0		18.5
Max Q Clear Time (g_c+I1), s	15.5	34.3		18.5	2.1	15.6		14.3
Green Ext Time (p_c), s	0.1	5.8		0.0	0.0	3.9		0.7

Intersection Summary		
HCM 6th Ctrl Delay	22.2	
HCM 6th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	644	26	167	627	271	44	292	185	134	107	41
Future Volume (veh/h)	144	644	26	167	627	271	44	292	185	134	107	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	1.00		0.99
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	1826	1826	1826	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	700	28	182	682	295	48	317	201	146	116	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	2	2	2
Cap, veh/h	196	896	36	224	981	423	515	412	261	231	495	192
Arrive On Green	0.11	0.26	0.26	0.13	0.28	0.28	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1739	3398	136	1767	3526	1520	1217	1065	675	882	1279	496
Grp Volume(v), veh/h	157	357	371	182	682	295	48	0	518	146	0	161
Grp Sat Flow(s),veh/h/ln	1739	1735	1799	1767	1763	1520	1217	0	1741	882	0	1775
Q Serve(g_s), s	5.3	11.6	11.6	6.1	10.5	10.6	1.7	0.0	15.8	7.7	0.0	3.7
Cycle Q Clear(g_c), s	5.3	11.6	11.6	6.1	10.5	10.6	5.4	0.0	15.8	23.5	0.0	3.7
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.39	1.00		0.28
Lane Grp Cap(c), veh/h	196	458	475	224	981	423	515	0	674	231	0	687
V/C Ratio(X)	0.80	0.78	0.78	0.81	0.70	0.70	0.09	0.00	0.77	0.63	0.00	0.23
Avail Cap(c_a), veh/h	215	568	590	236	1190	513	515	0	674	231	0	687
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	26.3	20.7	20.7	25.8	19.6	19.6	14.4	0.0	16.2	27.4	0.0	12.6
Incr Delay (d2), s/veh	18.0	5.5	5.4	18.2	1.4	3.2	0.1	0.0	5.4	5.5	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	2.9	4.7	4.8	3.4	3.8	3.5	0.4	0.0	6.3	2.4	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	26.3	26.1	44.0	21.0	22.8	14.4	0.0	21.6	32.9	0.0	12.7
LnGrp LOS	D	C	C	D	C	C	B	A	C	C	A	B
Approach Vol, veh/h		885			1159			566			307	
Approach Delay, s/veh		29.4			25.1			21.0			22.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	20.5		28.0	11.3	21.4		28.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.1	19.9		23.5	7.5	20.5		23.5
Max Q Clear Time (g_c+I1), s	19.1	13.6		25.5	7.3	12.6		17.8
Green Ext Time (p_c), s	0.0	2.2		0.0	0.0	3.3		1.7

Intersection Summary		
HCM 6th Ctrl Delay		25.3
HCM 6th LOS		C

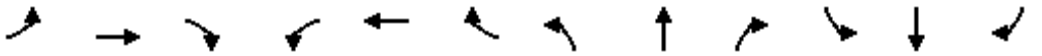


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	158	208	993	161	255	1261
Future Volume (veh/h)	158	208	993	161	255	1261
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1767	1767	1752	1752	1767	1752
Adj Flow Rate, veh/h	172	226	1079	175	277	1371
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	10	10	9	10
Cap, veh/h	314	280	1241	201	317	2266
Arrive On Green	0.19	0.19	0.43	0.43	0.19	0.68
Sat Flow, veh/h	1682	1497	2956	464	1682	3416
Grp Volume(v), veh/h	172	226	625	629	277	1371
Grp Sat Flow(s),veh/h/ln	1682	1497	1664	1668	1682	1664
Q Serve(g_s), s	7.0	10.9	25.8	26.0	12.1	16.9
Cycle Q Clear(g_c), s	7.0	10.9	25.8	26.0	12.1	16.9
Prop In Lane	1.00	1.00		0.28	1.00	
Lane Grp Cap(c), veh/h	314	280	720	722	317	2266
V/C Ratio(X)	0.55	0.81	0.87	0.87	0.87	0.60
Avail Cap(c_a), veh/h	712	634	808	810	374	2554
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	27.8	29.4	19.5	19.5	29.8	6.5
Incr Delay (d2), s/veh	1.5	5.5	9.2	9.4	17.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	4.1	10.0	10.1	6.0	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.3	34.9	28.7	29.0	47.4	6.9
LnGrp LOS	C	C	C	C	D	A
Approach Vol, veh/h	398		1254			1648
Approach Delay, s/veh	32.5		28.8			13.7
Approach LOS	C		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	18.8	38.2				57.0	18.6
Change Period (Y+Rc), s	4.5	5.5				5.5	4.5
Max Green Setting (Gmax), s	16.3	36.7				58.0	32.0
Max Q Clear Time (g_c+I1), s	14.1	28.0				18.9	12.9
Green Ext Time (p_c), s	0.2	4.7				12.2	1.2

Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO
WITHOUT ORANGE STREET EXTENSION
WITH RECOMMENDED MITIGATION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	481	81	63	127	5	42	88	28	139	368	0
Future Volume (veh/h)	1	481	81	63	127	5	42	88	28	139	368	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1699	1781	1826	1899	1870	1826	1899	1899	1870	1899	1826
Adj Flow Rate, veh/h	1	523	88	68	138	5	46	96	0	151	400	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	18	18	8	5	5	2	5	5	5	2	5	5
Cap, veh/h	1	565	503	86	175	222	99	359		187	449	0
Arrive On Green	0.33	0.33	0.33	0.14	0.14	0.14	0.06	0.19	0.00	0.10	0.24	0.00
Sat Flow, veh/h	3	1695	1510	617	1251	1585	1739	1899	0	1781	1899	0
Grp Volume(v), veh/h	524	0	88	206	0	5	46	96	0	151	400	0
Grp Sat Flow(s),veh/h/ln	1698	0	1510	1868	0	1585	1739	1899	0	1781	1899	0
Q Serve(g_s), s	22.9	0.0	3.2	8.2	0.0	0.2	2.0	3.3	0.0	6.4	15.7	0.0
Cycle Q Clear(g_c), s	22.9	0.0	3.2	8.2	0.0	0.2	2.0	3.3	0.0	6.4	15.7	0.0
Prop In Lane	0.00		1.00	0.33		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	566	0	503	261	0	222	99	359		187	449	0
V/C Ratio(X)	0.93	0.00	0.17	0.79	0.00	0.02	0.46	0.27		0.81	0.89	0.00
Avail Cap(c_a), veh/h	591	0	525	436	0	370	158	456		201	498	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.8	0.0	18.2	32.1	0.0	28.6	35.2	26.7	0.0	33.8	28.4	0.0
Incr Delay (d2), s/veh	20.4	0.0	0.2	5.3	0.0	0.0	3.4	0.4	0.0	20.2	16.8	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	0.0	1.1	4.0	0.0	0.1	0.9	1.4	0.0	3.6	8.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.1	0.0	18.4	37.3	0.0	28.6	38.6	27.1	0.0	54.0	45.2	0.0
LnGrp LOS	D	A	B	D	A	C	D	C		D	D	A
Approach Vol, veh/h		612			211			142	A		551	
Approach Delay, s/veh		41.3			37.1			30.8			47.6	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.6	19.1		30.2	8.9	22.7		15.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.7	18.5		26.8	7.0	20.2		18.0				
Max Q Clear Time (g_c+I1), s	8.4	5.3		24.9	4.0	17.7		10.2				
Green Ext Time (p_c), s	0.0	0.3		0.7	0.0	0.5		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			42.0									
HCM 6th LOS			D									

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	350	15	20	584	5	122	1	213	4	0	27
Future Volume (veh/h)	0	350	15	20	584	5	122	1	213	4	0	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
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	1841	1707	1841	1811	1767	1767	1737	1737	1737	1841	1841	1841
Adj Flow Rate, veh/h	0	380	0	22	635	5	133	1	232	4	0	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	13	4	6	9	9	11	11	11	4	4	4
Cap, veh/h	278	1254		573	1319	10	621	4	392	174	32	359
Arrive On Green	0.00	0.39	0.00	0.39	0.39	0.39	0.27	0.27	0.27	0.27	0.00	0.27
Sat Flow, veh/h	776	3244	1560	968	3413	27	1292	14	1470	68	118	1347
Grp Volume(v), veh/h	0	380	0	22	312	328	134	0	232	33	0	0
Grp Sat Flow(s),veh/h/ln	776	1622	1560	968	1678	1762	1306	0	1470	1533	0	0
Q Serve(g_s), s	0.0	2.1	0.0	0.4	3.6	3.6	1.7	0.0	3.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.1	0.0	2.5	3.6	3.6	2.1	0.0	3.6	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	0.99		1.00	0.12		0.88
Lane Grp Cap(c), veh/h	278	1254		573	649	681	624	0	392	564	0	0
V/C Ratio(X)	0.00	0.30		0.04	0.48	0.48	0.21	0.00	0.59	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1161	4945		1674	2558	2685	2338	0	2355	2531	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)	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.5	0.0	6.4	6.0	6.0	7.7	0.0	8.3	7.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.6	0.5	0.2	0.0	1.4	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	0.3	0.0	0.0	0.5	0.5	0.4	0.0	0.8	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.7	0.0	6.4	6.5	6.5	7.9	0.0	9.7	7.2	0.0	0.0
LnGrp LOS	A	A		A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		380	A		662			366			33	
Approach Delay, s/veh		5.7			6.5			9.0			7.2	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	11.4	14.5	11.4	14.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	41.5	39.5	41.5	39.5
Max Q Clear Time (g_c+I1), s	5.6	4.1	2.4	5.6
Green Ext Time (p_c), s	1.7	2.5	0.2	4.1

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	119	541	7	15	341	3	7	30	18	332	42	201
Future Volume (veh/h)	119	541	7	15	341	3	7	30	18	332	42	201
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1633	1633	1841	1841	1841	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	129	588	8	16	371	3	8	33	20	394	0	218
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	18	18	18	4	4	4	2	2	2	2	2	2
Cap, veh/h	154	741	10	24	581	5	28	117	120	596	0	709
Arrive On Green	0.28	0.28	0.28	0.17	0.17	0.17	0.08	0.08	0.08	0.17	0.00	0.17
Sat Flow, veh/h	549	2646	37	144	3496	30	376	1550	1585	3563	0	1585
Grp Volume(v), veh/h	377	0	348	204	0	186	41	0	20	394	0	218
Grp Sat Flow(s),veh/h/ln	1606	0	1627	1834	0	1835	1926	0	1585	1781	0	1585
Q Serve(g_s), s	12.8	0.0	11.3	6.0	0.0	5.4	1.2	0.0	0.7	6.0	0.0	5.1
Cycle Q Clear(g_c), s	12.8	0.0	11.3	6.0	0.0	5.4	1.2	0.0	0.7	6.0	0.0	5.1
Prop In Lane	0.34		0.02	0.08		0.02	0.20		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	449	0	455	305	0	305	146	0	120	596	0	709
V/C Ratio(X)	0.84	0.00	0.76	0.67	0.00	0.61	0.28	0.00	0.17	0.66	0.00	0.31
Avail Cap(c_a), veh/h	500	0	506	570	0	571	599	0	493	1108	0	937
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	19.1	22.6	0.0	22.4	25.3	0.0	25.0	22.6	0.0	10.3
Incr Delay (d2), s/veh	11.2	0.0	6.1	2.6	0.0	2.0	1.0	0.0	0.6	1.3	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	5.7	0.0	4.6	2.6	0.0	2.3	0.5	0.0	0.3	2.4	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.8	0.0	25.2	25.2	0.0	24.4	26.3	0.0	25.7	23.8	0.0	10.5
LnGrp LOS	C	A	C	C	A	C	C	A	C	C	A	B
Approach Vol, veh/h		725			390			61			612	
Approach Delay, s/veh		28.1			24.8			26.1			19.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	8.9	20.7	14.2	14.1
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	3.2	14.8	8.0	8.0
Green Ext Time (p_c), s	0.2	1.4	1.7	1.6

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	207	713	486	111	173	23
Future Volume (veh/h)	207	713	486	111	173	23
Initial Q (Qb), veh	0	0	0	0	0	0
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	1776	1791	1841	1899	1791	1791
Adj Flow Rate, veh/h	225	0	614	0	188	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	13	12	4	5	12	12
Cap, veh/h	302		961	520	298	
Arrive On Green	0.18	0.00	0.27	0.00	0.17	0.00
Sat Flow, veh/h	1691	1518	3506	1899	1791	1518
Grp Volume(v), veh/h	225	0	614	0	188	0
Grp Sat Flow(s),veh/h/ln	1691	1518	1753	1899	1791	1518
Q Serve(g_s), s	4.5	0.0	5.5	0.0	3.5	0.0
Cycle Q Clear(g_c), s	4.5	0.0	5.5	0.0	3.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	302		961	520	298	
V/C Ratio(X)	0.74		0.64	0.00	0.63	
Avail Cap(c_a), veh/h	1455		2769	1500	909	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	13.8	0.0	11.3	0.0	13.8	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.7	0.0	2.2	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	1.7	0.0	1.7	0.0	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.4	0.0	12.0	0.0	16.0	0.0
LnGrp LOS	B		B	A	B	
Approach Vol, veh/h	225	A		614	188	A
Approach Delay, s/veh	17.4			12.0	16.0	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	14.2		10.8		10.4
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	28.0		30.5		18.0
Max Q Clear Time (g_c+I1), s	7.5		6.5		5.5
Green Ext Time (p_c), s	2.3		0.6		0.8

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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	194	1	327	2	630	184	245	857	6
Future Volume (veh/h)	0	0	0	194	1	327	2	630	184	245	857	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1663	1663	1307	1760	1796	1796	1128	1796	1796
Adj Flow Rate, veh/h	0	0	0	211	1	355	2	685	200	266	932	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	16	16	40	14	7	7	55	7	7
Cap, veh/h	0	535	0	445	2	573	6	775	226	254	1839	14
Arrive On Green	0.00	0.00	0.00	0.28	0.28	0.28	0.00	0.30	0.30	0.24	0.53	0.53
Sat Flow, veh/h	0	1900	0	1256	6	1108	1676	2604	760	1075	3472	26
Grp Volume(v), veh/h	0	0	0	212	0	355	2	449	436	266	458	481
Grp Sat Flow(s),veh/h/ln	0	1900	0	1262	0	1108	1676	1706	1658	1075	1706	1792
Q Serve(g_s), s	0.0	0.0	0.0	11.4	0.0	17.8	0.1	19.7	19.7	18.5	13.5	13.5
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.4	0.0	17.8	0.1	19.7	19.7	18.5	13.5	13.5
Prop In Lane	0.00		0.00	1.00		1.00	1.00		0.46	1.00		0.01
Lane Grp Cap(c), veh/h	0	535	0	447	0	573	6	508	493	254	904	949
V/C Ratio(X)	0.00	0.00	0.00	0.47	0.00	0.62	0.31	0.88	0.88	1.05	0.51	0.51
Avail Cap(c_a), veh/h	0	775	0	606	0	713	150	544	528	254	904	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)	0.00	0.00	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	0.0	0.0	0.0	24.3	0.0	13.4	39.0	26.2	26.3	30.0	11.9	11.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.8	0.0	1.1	25.7	15.1	15.6	70.0	0.5	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	0.0	0.0	0.0	3.4	0.0	4.3	0.1	9.1	8.9	9.2	4.1	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	25.1	0.0	14.5	64.7	41.4	41.8	100.0	12.3	12.3
LnGrp LOS	A	A	A	C	A	B	E	D	D	F	B	B
Approach Vol, veh/h		0			567			887			1205	
Approach Delay, s/veh		0.0			18.5			41.7			31.7	
Approach LOS					B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.0	28.8		26.6	4.8	47.0		26.6
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	18.5	25.0		32.0	7.0	36.5		32.0
Max Q Clear Time (g_c+I1), s	20.5	21.7		0.0	2.1	15.5		19.8
Green Ext Time (p_c), s	0.0	1.6		0.0	0.0	5.3		2.2

Intersection Summary		
HCM 6th Ctrl Delay		32.2
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	2	24	14	0	25	74	948	36	39	852	38
Future Volume (veh/h)	6	2	24	14	0	25	74	948	36	39	852	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
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	1678	1678	1678	1530	1530	1530	1781	1826	1899	1693	1781	1853
Adj Flow Rate, veh/h	7	2	26	15	0	27	80	1030	39	42	926	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	15	15	15	25	25	25	8	5	5	14	8	8
Cap, veh/h	24	7	88	130	0	114	157	1435	54	99	1286	57
Arrive On Green	0.08	0.08	0.08	0.09	0.00	0.09	0.09	0.42	0.42	0.06	0.39	0.39
Sat Flow, veh/h	290	83	1077	1457	0	1276	1697	3408	129	1612	3298	146
Grp Volume(v), veh/h	35	0	0	15	0	27	80	524	545	42	475	492
Grp Sat Flow(s),veh/h/ln	1449	0	0	1457	0	1276	1697	1735	1803	1612	1692	1751
Q Serve(g_s), s	1.2	0.0	0.0	0.5	0.0	1.0	2.3	13.0	13.0	1.3	12.4	12.4
Cycle Q Clear(g_c), s	1.2	0.0	0.0	0.5	0.0	1.0	2.3	13.0	13.0	1.3	12.4	12.4
Prop In Lane	0.20		0.74	1.00		1.00	1.00		0.07	1.00		0.08
Lane Grp Cap(c), veh/h	118	0	0	130	0	114	157	731	759	99	660	683
V/C Ratio(X)	0.30	0.00	0.00	0.12	0.00	0.24	0.51	0.72	0.72	0.43	0.72	0.72
Avail Cap(c_a), veh/h	894	0	0	898	0	787	252	1360	1414	227	1314	1360
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	0.0	0.0	21.8	0.0	22.0	22.4	12.5	12.5	23.5	13.4	13.4
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.4	0.0	1.1	2.6	1.3	1.3	2.9	1.5	1.4
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	0.4	0.0	0.0	0.2	0.0	0.3	0.9	3.7	3.8	0.5	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	0.0	0.0	22.1	0.0	23.1	25.0	13.8	13.8	26.4	14.9	14.9
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		35			42			1149			1009	
Approach Delay, s/veh		23.8			22.7			14.6			15.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	26.4		8.7	9.3	24.7		9.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.3	40.7		32.0	7.7	40.3		32.0
Max Q Clear Time (g_c+I1), s	3.3	15.0		3.2	4.3	14.4		3.0
Green Ext Time (p_c), s	0.0	6.7		0.1	0.0	5.9		0.1

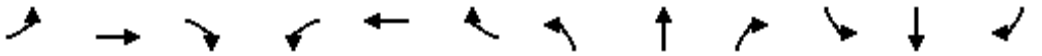
Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	181	138	734	223	271	927
Future Volume (veh/h)	181	138	734	223	271	927
Initial Q (Qb), veh	0	0	0	0	0	0
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	1441	1441	1693	1693	1441	1707
Adj Flow Rate, veh/h	197	150	798	242	295	1008
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	31	31	14	14	31	13
Cap, veh/h	246	219	931	282	328	2219
Arrive On Green	0.18	0.18	0.38	0.38	0.24	0.68
Sat Flow, veh/h	1372	1221	2515	737	1372	3329
Grp Volume(v), veh/h	197	150	528	512	295	1008
Grp Sat Flow(s),veh/h/ln	1372	1221	1608	1560	1372	1622
Q Serve(g_s), s	10.1	8.4	22.0	22.1	15.2	10.4
Cycle Q Clear(g_c), s	10.1	8.4	22.0	22.1	15.2	10.4
Prop In Lane	1.00	1.00		0.47	1.00	
Lane Grp Cap(c), veh/h	246	219	616	598	328	2219
V/C Ratio(X)	0.80	0.69	0.86	0.86	0.90	0.45
Avail Cap(c_a), veh/h	600	534	721	700	388	2573
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	28.8	28.1	20.7	20.7	27.0	5.3
Incr Delay (d2), s/veh	6.0	3.8	8.9	9.2	20.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	2.5	8.4	8.2	6.3	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.7	31.8	29.6	29.9	47.8	5.4
LnGrp LOS	C	C	C	C	D	A
Approach Vol, veh/h	347		1040			1303
Approach Delay, s/veh	33.5		29.7			15.0
Approach LOS	C		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	22.0	33.5				55.5	17.6
Change Period (Y+Rc), s	4.5	5.5				5.5	4.5
Max Green Setting (Gmax), s	20.7	32.8				58.0	32.0
Max Q Clear Time (g_c+I1), s	17.2	24.1				12.4	12.1
Green Ext Time (p_c), s	0.3	4.0				7.9	1.1

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	331	95	52	110	8	48	265	8	128	419	0
Future Volume (veh/h)	1	331	95	52	110	8	48	265	8	128	419	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1663	1729	1811	1841	1914	1841	1870	1945	1945	1870	1945	1870
Adj Flow Rate, veh/h	1	360	103	57	120	9	52	288	0	139	455	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	6	4	4	4	2	2	2	2	2	2
Cap, veh/h	1	437	389	77	162	198	117	472		177	538	0
Arrive On Green	0.25	0.25	0.25	0.13	0.13	0.13	0.07	0.24	0.00	0.10	0.28	0.00
Sat Flow, veh/h	5	1724	1535	607	1277	1560	1781	1945	0	1781	1945	0
Grp Volume(v), veh/h	361	0	103	177	0	9	52	288	0	139	455	0
Grp Sat Flow(s),veh/h/ln	1729	0	1535	1884	0	1560	1781	1945	0	1781	1945	0
Q Serve(g_s), s	12.8	0.0	3.5	5.9	0.0	0.3	1.8	8.5	0.0	4.9	14.3	0.0
Cycle Q Clear(g_c), s	12.8	0.0	3.5	5.9	0.0	0.3	1.8	8.5	0.0	4.9	14.3	0.0
Prop In Lane	0.00		1.00	0.32		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	438	0	389	239	0	198	117	472		177	538	0
V/C Ratio(X)	0.82	0.00	0.27	0.74	0.00	0.05	0.44	0.61		0.78	0.85	0.00
Avail Cap(c_a), veh/h	600	0	533	523	0	433	192	636		283	735	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.8	0.0	19.4	27.3	0.0	24.8	29.1	21.8	0.0	28.5	22.2	0.0
Incr Delay (d2), s/veh	6.7	0.0	0.4	4.4	0.0	0.1	2.6	1.3	0.0	7.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	1.2	2.8	0.0	0.1	0.8	3.6	0.0	2.3	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.5	0.0	19.7	31.7	0.0	24.9	31.8	23.1	0.0	35.9	28.9	0.0
LnGrp LOS	C	A	B	C	A	C	C	C		D	C	A
Approach Vol, veh/h		464			186			340	A		594	
Approach Delay, s/veh		27.4			31.4			24.4			30.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	20.2		20.9	8.8	22.4		12.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.3	21.2		22.5	7.0	24.5		18.0				
Max Q Clear Time (g_c+I1), s	6.9	10.5		14.8	3.8	16.3		7.9				
Green Ext Time (p_c), s	0.1	1.0		1.6	0.0	1.6		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			28.4									
HCM 6th 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)	3	401	31	12	377	4	119	0	296	7	0	38
Future Volume (veh/h)	3	401	31	12	377	4	119	0	296	7	0	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.98	1.00		1.00	1.00		0.98
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	1841	1781	1841	1856	1767	1767	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	3	436	0	13	410	4	129	0	322	8	0	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	8	4	3	9	9	5	5	5	9	9	9
Cap, veh/h	491	1083		482	1089	11	730	0	516	188	52	409
Arrive On Green	0.32	0.32	0.00	0.32	0.32	0.32	0.33	0.00	0.33	0.33	0.00	0.33
Sat Flow, veh/h	948	3385	1560	937	3405	33	1355	0	1540	81	157	1221
Grp Volume(v), veh/h	3	436	0	13	202	212	129	0	322	49	0	0
Grp Sat Flow(s),veh/h/ln	948	1692	1560	937	1678	1760	1355	0	1540	1459	0	0
Q Serve(g_s), s	0.1	2.6	0.0	0.3	2.4	2.4	1.1	0.0	4.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.5	2.6	0.0	2.9	2.4	2.4	1.7	0.0	4.6	0.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	0.16		0.84
Lane Grp Cap(c), veh/h	491	1083		482	537	563	730	0	516	649	0	0
V/C Ratio(X)	0.01	0.40		0.03	0.38	0.38	0.18	0.00	0.62	0.08	0.00	0.00
Avail Cap(c_a), veh/h	1371	4222		1351	2093	2195	2757	0	2867	2733	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)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.8	6.9	0.0	8.1	6.8	6.9	6.3	0.0	7.3	6.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.4	0.4	0.1	0.0	1.2	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	0.0	0.0	0.4	0.4	0.3	0.0	1.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.8	7.2	0.0	8.1	7.3	7.3	6.4	0.0	8.5	6.0	0.0	0.0
LnGrp LOS	A	A		A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		439	A		427			451			49	
Approach Delay, s/veh		7.2			7.3			7.9			6.0	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	13.2	12.8	13.2	12.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	48.5	32.5	48.5	32.5
Max Q Clear Time (g_c+I1), s	6.6	4.6	2.6	4.9
Green Ext Time (p_c), s	2.0	2.8	0.3	2.4

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	136	706	8	23	203	7	3	194	11	296	72	206
Future Volume (veh/h)	136	706	8	23	203	7	3	194	11	296	72	206
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1811	1811	1811	1856	1856	1856	1811	1884	1811	1870	1945	1870
Adj Flow Rate, veh/h	148	767	9	25	221	8	3	211	12	200	249	224
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	3	3	3	6	6	6	2	2	2
Cap, veh/h	176	965	12	38	353	13	4	271	224	310	339	785
Arrive On Green	0.32	0.32	0.32	0.11	0.11	0.11	0.15	0.15	0.15	0.17	0.17	0.17
Sat Flow, veh/h	549	3002	37	345	3205	121	26	1856	1535	1781	1945	1585
Grp Volume(v), veh/h	481	0	443	133	0	121	214	0	12	200	249	224
Grp Sat Flow(s),veh/h/ln	1784	0	1804	1838	0	1834	1882	0	1535	1781	1945	1585
Q Serve(g_s), s	18.2	0.0	16.0	5.0	0.0	4.6	7.9	0.0	0.5	7.6	8.8	6.0
Cycle Q Clear(g_c), s	18.2	0.0	16.0	5.0	0.0	4.6	7.9	0.0	0.5	7.6	8.8	6.0
Prop In Lane	0.31		0.02	0.19		0.07	0.01		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	573	0	580	202	0	202	275	0	224	310	339	785
V/C Ratio(X)	0.84	0.00	0.76	0.66	0.00	0.60	0.78	0.00	0.05	0.65	0.74	0.29
Avail Cap(c_a), veh/h	657	0	664	456	0	455	493	0	402	450	491	910
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	0.0	22.1	30.9	0.0	30.7	29.8	0.0	26.6	27.9	28.4	10.7
Incr Delay (d2), s/veh	8.5	0.0	4.6	3.6	0.0	2.8	4.7	0.0	0.1	2.2	3.3	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	8.5	0.0	7.1	2.4	0.0	2.1	3.8	0.0	0.2	3.3	4.2	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.4	0.0	26.7	34.5	0.0	33.6	34.6	0.0	26.7	30.1	31.6	10.9
LnGrp LOS	C	A	C	C	A	C	C	A	C	C	C	B
Approach Vol, veh/h		924			254			226			673	
Approach Delay, s/veh		29.1			34.1			34.1			24.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.1	27.8	17.1	12.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.0	26.7	18.3	18.0
Max Q Clear Time (g_c+I1), s	9.9	20.2	10.8	7.0
Green Ext Time (p_c), s	0.8	3.1	1.8	1.0

Intersection Summary	
HCM 6th Ctrl Delay	28.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	274	678	141	276	63
Future Volume (veh/h)	70	274	678	141	276	63
Initial Q (Qb), veh	0	0	0	0	0	0
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	1637	1668	1870	1945	1945	1945
Adj Flow Rate, veh/h	76	0	846	0	300	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	22	20	2	2	2	2
Cap, veh/h	156		1218	665	428	
Arrive On Green	0.10	0.00	0.34	0.00	0.22	0.00
Sat Flow, veh/h	1559	1413	3563	1945	1945	1648
Grp Volume(v), veh/h	76	0	846	0	300	0
Grp Sat Flow(s),veh/h/ln	1559	1413	1781	1945	1945	1648
Q Serve(g_s), s	1.8	0.0	8.2	0.0	5.7	0.0
Cycle Q Clear(g_c), s	1.8	0.0	8.2	0.0	5.7	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	156		1218	665	428	
V/C Ratio(X)	0.49		0.69	0.00	0.70	
Avail Cap(c_a), veh/h	703		3302	1803	1048	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	17.0	0.0	11.3	0.0	14.4	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.7	0.0	2.1	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	0.7	0.0	2.6	0.0	2.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.4	0.0	12.1	0.0	16.4	0.0
LnGrp LOS	B		B	A	B	
Approach Vol, veh/h	76	A		846	300	A
Approach Delay, s/veh	19.4			12.1	16.4	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	18.1		8.5		13.3
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	37.0		18.0		21.5
Max Q Clear Time (g_c+I1), s	10.2		3.8		7.7
Green Ext Time (p_c), s	3.5		0.1		1.4

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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	1	1	138	1	281	2	792	196	343	1018	0
Future Volume (veh/h)	0	1	1	138	1	281	2	792	196	343	1018	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1870	1870	1870	1752	1752	1248	1822	1826	1826	1282	1856	1856
Adj Flow Rate, veh/h	0	1	1	150	1	305	2	861	213	373	1107	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	10	10	44	10	5	5	45	3	3
Cap, veh/h	0	189	189	355	2	562	7	930	230	380	2273	0
Arrive On Green	0.00	0.22	0.22	0.22	0.22	0.22	0.00	0.34	0.34	0.31	0.64	0.00
Sat Flow, veh/h	0	858	858	1313	9	1058	1735	2756	682	1221	3618	0
Grp Volume(v), veh/h	0	0	2	151	0	305	2	542	532	373	1107	0
Grp Sat Flow(s),veh/h/ln	0	0	1716	1322	0	1058	1735	1735	1703	1221	1763	0
Q Serve(g_s), s	0.0	0.0	0.1	11.1	0.0	21.0	0.1	33.4	33.4	33.6	18.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	11.2	0.0	21.0	0.1	33.4	33.4	33.6	18.0	0.0
Prop In Lane	0.00		0.50	0.99		1.00	1.00		0.40	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	379	357	0	562	7	585	575	380	2273	0
V/C Ratio(X)	0.00	0.00	0.01	0.42	0.00	0.54	0.31	0.93	0.93	0.98	0.49	0.00
Avail Cap(c_a), veh/h	0	0	495	446	0	634	109	610	599	380	2273	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)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	33.7	38.1	0.0	17.1	55.1	35.4	35.4	37.9	10.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.8	0.0	0.8	24.3	19.8	20.2	41.3	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	0.0	0.0	0.0	3.7	0.0	5.2	0.1	16.3	16.1	13.7	5.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	33.7	38.9	0.0	17.9	79.4	55.2	55.6	79.2	10.4	0.0
LnGrp LOS	A	A	C	D	A	B	E	E	E	E	B	A
Approach Vol, veh/h		2			456			1076			1480	
Approach Delay, s/veh		33.7			24.9			55.4			27.7	
Approach LOS		C			C			E			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	42.9		29.0	4.9	77.0		29.0
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	4.5	39.0		32.0	7.0	66.5		32.0
Max Q Clear Time (g_c+I1), s	5.6	35.4		2.1	2.1	20.0		23.0
Green Ext Time (p_c), s	0.0	2.0		0.0	0.0	8.9		1.4

Intersection Summary	
HCM 6th Ctrl Delay	37.2
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	0	60	8	0	5	7	815	6	5	964	8
Future Volume (veh/h)	31	0	60	8	0	5	7	815	6	5	964	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1856	1856	1856	1500	1500	1500	1767	1826	1899	1811	1856	1930
Adj Flow Rate, veh/h	34	0	65	9	0	5	8	886	7	5	1048	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	27	27	27	9	5	5	6	3	3
Cap, veh/h	63	0	121	36	0	32	25	1514	12	16	1518	13
Arrive On Green	0.11	0.00	0.11	0.03	0.00	0.03	0.01	0.43	0.43	0.01	0.42	0.42
Sat Flow, veh/h	556	0	1063	1428	0	1271	1682	3528	28	1725	3582	31
Grp Volume(v), veh/h	99	0	0	9	0	5	8	436	457	5	516	541
Grp Sat Flow(s),veh/h/ln	1619	0	0	1428	0	1271	1682	1735	1821	1725	1763	1850
Q Serve(g_s), s	2.5	0.0	0.0	0.3	0.0	0.2	0.2	8.2	8.2	0.1	10.1	10.1
Cycle Q Clear(g_c), s	2.5	0.0	0.0	0.3	0.0	0.2	0.2	8.2	8.2	0.1	10.1	10.1
Prop In Lane	0.34		0.66	1.00		1.00	1.00		0.02	1.00		0.02
Lane Grp Cap(c), veh/h	184	0	0	36	0	32	25	745	782	16	747	784
V/C Ratio(X)	0.54	0.00	0.00	0.25	0.00	0.16	0.32	0.59	0.59	0.31	0.69	0.69
Avail Cap(c_a), veh/h	1217	0	0	1074	0	955	277	1263	1326	284	1283	1347
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	0.0	0.0	20.4	0.0	20.3	20.8	9.3	9.3	21.0	10.0	10.0
Incr Delay (d2), s/veh	2.4	0.0	0.0	3.6	0.0	2.3	7.2	0.7	0.7	10.2	1.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.1	0.0	0.1	0.1	1.9	2.0	0.1	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	0.0	0.0	24.0	0.0	22.6	27.9	10.0	10.0	31.2	11.1	11.1
LnGrp LOS	C	A	A	C	A	C	C	A	A	C	B	B
Approach Vol, veh/h		99			14			901			1062	
Approach Delay, s/veh		20.3			23.5			10.1			11.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	22.8		9.3	5.1	22.5		5.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.0	31.0		32.0	7.0	31.0		32.0
Max Q Clear Time (g_c+I1), s	2.1	10.2		4.5	2.2	12.1		2.3
Green Ext Time (p_c), s	0.0	5.0		0.6	0.0	5.9		0.0

Intersection Summary		
HCM 6th Ctrl Delay		11.3
HCM 6th LOS		B

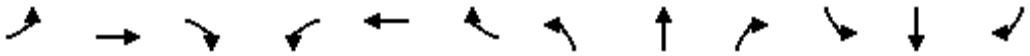


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	204	159	887	186	276	1156
Future Volume (veh/h)	204	159	887	186	276	1156
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1574	1574	1752	1752	1574	1752
Adj Flow Rate, veh/h	222	173	964	202	300	1257
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	22	22	10	10	22	10
Cap, veh/h	273	243	1134	237	336	2309
Arrive On Green	0.18	0.18	0.41	0.41	0.22	0.69
Sat Flow, veh/h	1499	1334	2827	573	1499	3416
Grp Volume(v), veh/h	222	173	585	581	300	1257
Grp Sat Flow(s),veh/h/ln	1499	1334	1664	1649	1499	1664
Q Serve(g_s), s	11.4	9.8	25.6	25.7	15.6	14.9
Cycle Q Clear(g_c), s	11.4	9.8	25.6	25.7	15.6	14.9
Prop In Lane	1.00	1.00		0.35	1.00	
Lane Grp Cap(c), veh/h	273	243	689	682	336	2309
V/C Ratio(X)	0.81	0.71	0.85	0.85	0.89	0.54
Avail Cap(c_a), veh/h	596	530	836	828	430	2813
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	31.6	30.9	21.3	21.3	30.3	6.1
Incr Delay (d2), s/veh	5.9	3.9	7.1	7.3	17.3	0.2
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	3.3	9.8	9.7	6.7	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.5	34.8	28.4	28.6	47.6	6.3
LnGrp LOS	D	C	C	C	D	A
Approach Vol, veh/h	395		1166			1557
Approach Delay, s/veh	36.3		28.5			14.2
Approach LOS	D		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	32.5	38.8				61.3	19.1
Change Period (Y+Rc), s	4.5	5.5				5.5	4.5
Max Green Setting (Gmax), s	23.1	40.4				68.0	32.0
Max Q Clear Time (g_c+I1), s	17.6	27.7				16.9	13.4
Green Ext Time (p_c), s	0.4	5.6				11.1	1.2

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO
WITH ORANGE STREET EXTENSION
WITH RECOMMENDED MITIGATION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	705	91	71	143	6	47	99	32	157	413	0
Future Volume (veh/h)	2	705	91	71	143	6	47	99	32	157	413	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1699	1781	1826	1899	1870	1826	1899	1899	1870	1899	1826
Adj Flow Rate, veh/h	2	766	99	77	155	7	51	108	0	171	449	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	18	18	8	5	5	2	5	5	5	2	5	5
Cap, veh/h	2	735	655	77	155	196	83	340		199	461	0
Arrive On Green	0.43	0.43	0.43	0.12	0.12	0.12	0.05	0.18	0.00	0.11	0.24	0.00
Sat Flow, veh/h	4	1694	1510	620	1248	1585	1739	1899	0	1781	1899	0
Grp Volume(v), veh/h	768	0	99	232	0	7	51	108	0	171	449	0
Grp Sat Flow(s),veh/h/ln	1698	0	1510	1868	0	1585	1739	1899	0	1781	1899	0
Q Serve(g_s), s	51.5	0.0	4.7	14.7	0.0	0.5	3.4	5.9	0.0	11.2	27.8	0.0
Cycle Q Clear(g_c), s	51.5	0.0	4.7	14.7	0.0	0.5	3.4	5.9	0.0	11.2	27.8	0.0
Prop In Lane	0.00		1.00	0.33		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	737	0	655	231	0	196	83	340		199	461	0
V/C Ratio(X)	1.04	0.00	0.15	1.00	0.00	0.04	0.61	0.32		0.86	0.97	0.00
Avail Cap(c_a), veh/h	737	0	655	231	0	196	103	340		237	461	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.6	0.0	20.4	52.0	0.0	45.8	55.4	42.4	0.0	51.8	44.6	0.0
Incr Delay (d2), s/veh	44.7	0.0	0.1	59.9	0.0	0.1	7.0	0.5	0.0	22.9	35.2	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	30.0	0.0	1.7	10.8	0.0	0.2	1.6	2.7	0.0	6.1	17.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.3	0.0	20.5	111.9	0.0	45.8	62.4	43.0	0.0	74.7	79.8	0.0
LnGrp LOS	F	A	C	F	A	D	E	D		E	E	A
Approach Vol, veh/h		867			239			159	A		620	
Approach Delay, s/veh		71.7			110.0			49.2			78.4	
Approach LOS		E			F			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.8	25.7		56.0	10.2	33.3		19.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	15.8	20.0		51.5	7.0	28.8		14.7				
Max Q Clear Time (g_c+I1), s	13.2	7.9		53.5	5.4	29.8		16.7				
Green Ext Time (p_c), s	0.1	0.3		0.0	0.0	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		76.8
HCM 6th LOS		E

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	400	17	23	654	6	177	2	240	5	0	30
Future Volume (veh/h)	0	400	17	23	654	6	177	2	240	5	0	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
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	1841	1707	1841	1811	1767	1767	1737	1737	1737	1841	1841	1841
Adj Flow Rate, veh/h	0	435	0	25	711	7	192	2	261	5	0	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	13	4	6	9	9	11	11	11	4	4	4
Cap, veh/h	248	1283		526	1347	13	625	5	433	160	40	393
Arrive On Green	0.00	0.40	0.00	0.40	0.40	0.40	0.29	0.29	0.29	0.29	0.00	0.29
Sat Flow, veh/h	722	3244	1560	920	3405	34	1285	18	1471	66	136	1333
Grp Volume(v), veh/h	0	435	0	25	350	368	194	0	261	38	0	0
Grp Sat Flow(s),veh/h/ln	722	1622	1560	920	1678	1760	1302	0	1471	1535	0	0
Q Serve(g_s), s	0.0	2.7	0.0	0.6	4.6	4.6	3.0	0.0	4.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.7	0.0	3.3	4.6	4.6	3.5	0.0	4.4	0.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	0.99		1.00	0.13		0.87
Lane Grp Cap(c), veh/h	248	1283		526	664	696	630	0	433	592	0	0
V/C Ratio(X)	0.00	0.34		0.05	0.53	0.53	0.31	0.00	0.60	0.06	0.00	0.00
Avail Cap(c_a), veh/h	820	3852		1255	1993	2090	2302	0	2354	2501	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)	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.1	0.0	7.3	6.7	6.7	8.4	0.0	8.8	7.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.7	0.6	0.3	0.0	1.4	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	0.4	0.0	0.1	0.8	0.8	0.7	0.0	1.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.3	0.0	7.3	7.4	7.3	8.7	0.0	10.1	7.5	0.0	0.0
LnGrp LOS	A	A		A	A	A	A	A	B	A	A	A
Approach Vol, veh/h		435	A		743			455			38	
Approach Delay, s/veh		6.3			7.3			9.5			7.5	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	13.1	16.0	13.1	16.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	46.5	34.5	46.5	34.5
Max Q Clear Time (g_c+I1), s	6.4	4.7	2.5	6.6
Green Ext Time (p_c), s	2.2	2.9	0.2	4.6

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	134	612	8	17	384	3	8	33	20	374	47	226
Future Volume (veh/h)	134	612	8	17	384	3	8	33	20	374	47	226
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1633	1633	1633	1841	1841	1841	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	146	665	9	18	417	3	9	36	22	443	0	246
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	18	18	18	4	4	4	2	2	2	2	2	2
Cap, veh/h	157	755	11	25	615	5	30	118	122	630	0	733
Arrive On Green	0.29	0.29	0.29	0.18	0.18	0.18	0.08	0.08	0.08	0.18	0.00	0.18
Sat Flow, veh/h	549	2646	37	144	3499	26	385	1541	1585	3563	0	1585
Grp Volume(v), veh/h	427	0	393	229	0	209	45	0	22	443	0	246
Grp Sat Flow(s),veh/h/ln	1606	0	1627	1834	0	1836	1926	0	1585	1781	0	1585
Q Serve(g_s), s	16.3	0.0	14.4	7.4	0.0	6.7	1.4	0.0	0.8	7.4	0.0	6.2
Cycle Q Clear(g_c), s	16.3	0.0	14.4	7.4	0.0	6.7	1.4	0.0	0.8	7.4	0.0	6.2
Prop In Lane	0.34		0.02	0.08		0.01	0.20		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	458	0	464	322	0	323	148	0	122	630	0	733
V/C Ratio(X)	0.93	0.00	0.85	0.71	0.00	0.65	0.30	0.00	0.18	0.70	0.00	0.34
Avail Cap(c_a), veh/h	458	0	464	523	0	524	550	0	452	1017	0	905
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	21.2	24.5	0.0	24.2	27.5	0.0	27.3	24.4	0.0	10.8
Incr Delay (d2), s/veh	25.9	0.0	13.7	2.9	0.0	2.2	1.2	0.0	0.7	1.4	0.0	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	8.9	0.0	6.8	3.3	0.0	2.9	0.7	0.0	0.3	3.0	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	0.0	34.9	27.4	0.0	26.4	28.7	0.0	28.0	25.8	0.0	11.1
LnGrp LOS	D	A	C	C	A	C	C	A	C	C	A	B
Approach Vol, veh/h		820			438			67			689	
Approach Delay, s/veh		41.6			26.9			28.5			20.6	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	9.3	22.5	15.7	15.6
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	3.4	18.3	9.4	9.4
Green Ext Time (p_c), s	0.2	0.0	1.8	1.7

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	233	805	548	125	195	26
Future Volume (veh/h)	233	805	548	125	195	26
Initial Q (Qb), veh	0	0	0	0	0	0
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	1776	1791	1841	1899	1791	1791
Adj Flow Rate, veh/h	253	0	693	0	212	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	13	12	4	5	12	12
Cap, veh/h	334		1022	553	298	
Arrive On Green	0.20	0.00	0.29	0.00	0.17	0.00
Sat Flow, veh/h	1691	1518	3506	1899	1791	1518
Grp Volume(v), veh/h	253	0	693	0	212	0
Grp Sat Flow(s),veh/h/ln	1691	1518	1753	1899	1791	1518
Q Serve(g_s), s	5.5	0.0	6.8	0.0	4.4	0.0
Cycle Q Clear(g_c), s	5.5	0.0	6.8	0.0	4.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	334		1022	553	298	
V/C Ratio(X)	0.76		0.68	0.00	0.71	
Avail Cap(c_a), veh/h	1317		2507	1358	823	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	14.8	0.0	12.3	0.0	15.4	0.0
Incr Delay (d2), s/veh	3.5	0.0	0.8	0.0	3.1	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	2.1	0.0	2.2	0.0	1.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.3	0.0	13.1	0.0	18.6	0.0
LnGrp LOS	B		B	A	B	
Approach Vol, veh/h	253	A		693	212	A
Approach Delay, s/veh	18.3			13.1	18.6	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	15.9		12.2		11.0
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	28.0		30.5		18.0
Max Q Clear Time (g_c+I1), s	8.8		7.5		6.4
Green Ext Time (p_c), s	2.6		0.7		0.9

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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)	176	955	33	30	670	433	33	64	64	596	33	370
Future Volume (veh/h)	176	955	33	30	670	433	33	64	64	596	33	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	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	1841	1841	1841	1737	1737	1737	1870	1945	1870	1678	1678	1693
Adj Flow Rate, veh/h	191	1038	36	33	728	471	36	70	70	648	36	402
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	11	11	11	2	2	2	15	15	14
Cap, veh/h	224	1228	537	72	881	859	261	91	91	626	638	729
Arrive On Green	0.13	0.35	0.35	0.04	0.27	0.27	0.05	0.10	0.10	0.32	0.38	0.38
Sat Flow, veh/h	1753	3497	1529	1654	3300	1433	1781	885	885	1598	1678	1434
Grp Volume(v), veh/h	191	1038	36	33	728	471	36	0	140	648	36	402
Grp Sat Flow(s),veh/h/ln	1753	1749	1529	1654	1650	1433	1781	0	1771	1598	1678	1434
Q Serve(g_s), s	9.6	24.6	1.4	1.7	18.6	18.0	1.6	0.0	6.9	29.0	1.2	17.2
Cycle Q Clear(g_c), s	9.6	24.6	1.4	1.7	18.6	18.0	1.6	0.0	6.9	29.0	1.2	17.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	224	1228	537	72	881	859	261	0	183	626	638	729
V/C Ratio(X)	0.85	0.84	0.07	0.46	0.83	0.55	0.14	0.00	0.77	1.03	0.06	0.55
Avail Cap(c_a), veh/h	235	1248	545	129	993	907	318	0	316	626	711	791
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	1.00	1.00
Uniform Delay (d), s/veh	38.3	26.8	19.3	41.8	30.9	11.2	33.1	0.0	39.2	23.5	17.6	15.1
Incr Delay (d2), s/veh	23.9	5.5	0.1	4.4	5.3	0.6	0.2	0.0	6.5	45.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	10.2	0.5	0.8	7.5	5.3	0.7	0.0	3.3	19.0	0.5	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.2	32.3	19.4	46.3	36.2	11.8	33.3	0.0	45.7	68.7	17.6	15.7
LnGrp LOS	E	C	B	D	D	B	C	A	D	F	B	B
Approach Vol, veh/h		1265			1232			176			1086	
Approach Delay, s/veh		36.4			27.2			43.2			47.4	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	35.5	8.1	38.1	15.5	27.9	33.0	13.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	32.0	7.0	38.0	12.0	27.0	29.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	26.6	3.6	19.2	11.6	20.6	31.0	8.9
Green Ext Time (p_c), s	0.0	3.0	0.0	1.6	0.0	3.3	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	244	1	314	2	621	202	204	846	7
Future Volume (veh/h)	0	0	0	244	1	314	2	621	202	204	846	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1900	1900	1663	1663	1307	1760	1796	1796	1128	1796	1796
Adj Flow Rate, veh/h	0	0	0	265	1	341	2	675	220	222	920	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	16	16	40	14	7	7	55	7	7
Cap, veh/h	0	531	0	445	1	560	6	775	253	242	1832	16
Arrive On Green	0.00	0.00	0.00	0.28	0.28	0.28	0.00	0.31	0.31	0.23	0.53	0.53
Sat Flow, veh/h	0	1900	0	1257	5	1108	1676	2529	824	1075	3467	30
Grp Volume(v), veh/h	0	0	0	266	0	341	2	455	440	222	453	475
Grp Sat Flow(s),veh/h/ln	0	1900	0	1261	0	1108	1676	1706	1646	1075	1706	1791
Q Serve(g_s), s	0.0	0.0	0.0	14.8	0.0	16.9	0.1	19.4	19.4	15.5	13.1	13.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	14.8	0.0	16.9	0.1	19.4	19.4	15.5	13.1	13.1
Prop In Lane	0.00		0.00	1.00		1.00	1.00		0.50	1.00		0.02
Lane Grp Cap(c), veh/h	0	531	0	446	0	560	6	523	505	242	902	946
V/C Ratio(X)	0.00	0.00	0.00	0.60	0.00	0.61	0.31	0.87	0.87	0.92	0.50	0.50
Avail Cap(c_a), veh/h	0	790	0	618	0	710	152	576	556	244	902	946
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)	0.00	0.00	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	0.0	0.0	0.0	25.3	0.0	13.6	38.2	25.2	25.3	29.1	11.7	11.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	1.1	25.7	12.7	13.2	35.6	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	0.0	0.0	0.0	4.5	0.0	4.1	0.1	8.7	8.5	6.0	4.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	26.6	0.0	14.7	63.9	38.0	38.4	64.7	12.1	12.1
LnGrp LOS	A	A	A	C	A	B	E	D	D	E	B	B
Approach Vol, veh/h		0			607			897			1150	
Approach Delay, s/veh		0.0			19.9			38.3			22.2	
Approach LOS					B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	29.1		26.0	4.8	46.2		26.0
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	7.5	26.0		32.0	7.0	36.5		32.0
Max Q Clear Time (g_c+I1), s	7.5	21.4		0.0	2.1	15.1		18.9
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	5.3		2.6

Intersection Summary		
HCM 6th Ctrl Delay		27.1
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	2	24	14	0	24	74	948	37	38	860	38
Future Volume (veh/h)	6	2	24	14	0	24	74	948	37	38	860	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
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	1678	1678	1678	1530	1530	1530	1781	1826	1899	1693	1781	1853
Adj Flow Rate, veh/h	7	2	26	15	0	26	80	1030	40	41	935	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	15	15	15	25	25	25	8	5	5	14	8	8
Cap, veh/h	24	7	88	128	0	112	156	1446	56	97	1296	57
Arrive On Green	0.08	0.08	0.08	0.09	0.00	0.09	0.09	0.42	0.42	0.06	0.39	0.39
Sat Flow, veh/h	290	83	1077	1457	0	1276	1697	3405	132	1612	3299	145
Grp Volume(v), veh/h	35	0	0	15	0	26	80	525	545	41	480	496
Grp Sat Flow(s),veh/h/ln	1449	0	0	1457	0	1276	1697	1735	1802	1612	1692	1752
Q Serve(g_s), s	1.2	0.0	0.0	0.5	0.0	1.0	2.3	13.0	13.0	1.3	12.5	12.5
Cycle Q Clear(g_c), s	1.2	0.0	0.0	0.5	0.0	1.0	2.3	13.0	13.0	1.3	12.5	12.5
Prop In Lane	0.20		0.74	1.00		1.00	1.00		0.07	1.00		0.08
Lane Grp Cap(c), veh/h	118	0	0	128	0	112	156	737	765	97	665	688
V/C Ratio(X)	0.30	0.00	0.00	0.12	0.00	0.23	0.51	0.71	0.71	0.42	0.72	0.72
Avail Cap(c_a), veh/h	890	0	0	895	0	784	251	1362	1414	220	1309	1355
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	0.0	0.0	21.9	0.0	22.1	22.5	12.4	12.4	23.6	13.4	13.4
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.4	0.0	1.0	2.6	1.3	1.2	2.9	1.5	1.4
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	0.4	0.0	0.0	0.2	0.0	0.3	0.9	3.7	3.8	0.5	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	0.0	0.0	22.3	0.0	23.2	25.1	13.7	13.6	26.5	14.9	14.9
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		35			41			1150			1017	
Approach Delay, s/veh		23.9			22.8			14.4			15.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	26.6		8.8	9.3	25.0		9.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	40.9		32.0	7.7	40.3		32.0
Max Q Clear Time (g_c+I1), s	3.3	15.0		3.2	4.3	14.5		3.0
Green Ext Time (p_c), s	0.0	6.7		0.1	0.0	6.0		0.1

Intersection Summary		
HCM 6th Ctrl Delay	15.1	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	84	152	550	253	456	0	0	921	151
Future Volume (veh/h)	0	0	0	84	152	550	253	456	0	0	921	151
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
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				1870	1870	1945	1841	1841	0	0	1811	1811
Adj Flow Rate, veh/h				91	422	427	275	496	0	0	1001	164
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	4	4	0	0	6	6
Cap, veh/h				93	433	468	311	2141	0	0	1132	185
Arrive On Green				0.28	0.28	0.28	0.18	0.61	0.00	0.00	0.38	0.38
Sat Flow, veh/h				329	1525	1648	1753	3589	0	0	3049	484
Grp Volume(v), veh/h				513	0	427	275	496	0	0	582	583
Grp Sat Flow(s),veh/h/ln				1854	0	1648	1753	1749	0	0	1721	1722
Q Serve(g_s), s				23.7	0.0	21.6	13.2	5.5	0.0	0.0	27.2	27.3
Cycle Q Clear(g_c), s				23.7	0.0	21.6	13.2	5.5	0.0	0.0	27.2	27.3
Prop In Lane				0.18		1.00	1.00		0.00	0.00		0.28
Lane Grp Cap(c), veh/h				526	0	468	311	2141	0	0	659	659
V/C Ratio(X)				0.98	0.00	0.91	0.88	0.23	0.00	0.00	0.88	0.89
Avail Cap(c_a), veh/h				526	0	468	335	2288	0	0	707	708
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				30.6	0.0	29.9	34.7	7.6	0.0	0.0	24.9	24.9
Incr Delay (d2), s/veh				32.9	0.0	22.3	22.3	0.1	0.0	0.0	12.1	12.3
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				15.0	0.0	11.1	7.4	1.9	0.0	0.0	12.7	12.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				63.6	0.0	52.2	57.0	7.6	0.0	0.0	37.0	37.2
LnGrp LOS				E	A	D	E	A	A	A	D	D
Approach Vol, veh/h					940			771			1165	
Approach Delay, s/veh					58.4			25.2			37.1	
Approach LOS					E			C			D	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	57.4		19.8	37.6		29.0
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	56.5		16.5	35.5		24.5
Max Q Clear Time (g_c+I1), s	7.5		15.2	29.3		25.7
Green Ext Time (p_c), s	3.8		0.1	3.7		0.0

Intersection Summary		
HCM 6th Ctrl Delay	40.9	
HCM 6th LOS	D	

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)	22	86	24	94	60	165	5	395	19	182	489	21
Future Volume (veh/h)	22	86	24	94	60	165	5	395	19	182	489	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.99	1.00		0.99
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	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	24	93	26	102	65	179	5	429	21	198	532	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	280	332	93	394	103	283	351	570	478	512	777	34
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.01	0.31	0.31	0.15	0.44	0.44
Sat Flow, veh/h	1123	1398	391	1251	432	1190	1767	1856	1555	1753	1751	76
Grp Volume(v), veh/h	24	0	119	102	0	244	5	429	21	198	0	555
Grp Sat Flow(s),veh/h/ln	1123	0	1789	1251	0	1623	1767	1856	1555	1753	0	1826
Q Serve(g_s), s	0.9	0.0	2.4	3.2	0.0	5.9	0.1	9.1	0.4	2.8	0.0	10.6
Cycle Q Clear(g_c), s	6.7	0.0	2.4	5.5	0.0	5.9	0.1	9.1	0.4	2.8	0.0	10.6
Prop In Lane	1.00		0.22	1.00		0.73	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	280	0	425	394	0	385	351	570	478	512	0	810
V/C Ratio(X)	0.09	0.00	0.28	0.26	0.00	0.63	0.01	0.75	0.04	0.39	0.00	0.68
Avail Cap(c_a), veh/h	477	0	738	613	0	670	618	910	763	542	0	900
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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	13.6	15.8	0.0	14.9	10.5	13.6	10.6	8.0	0.0	9.7
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.3	0.0	1.7	0.0	2.0	0.0	0.5	0.0	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	0.2	0.0	0.9	0.8	0.0	2.1	0.0	3.3	0.1	0.7	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	0.0	13.9	16.2	0.0	16.7	10.5	15.7	10.7	8.4	0.0	11.6
LnGrp LOS	B	A	B	B	A	B	B	B	B	A	A	B
Approach Vol, veh/h		143			346			455			753	
Approach Delay, s/veh		14.6			16.5			15.4			10.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.9	17.9		14.9	4.9	23.9		14.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	21.4		18.0	7.0	21.5		18.0
Max Q Clear Time (g_c+I1), s	4.8	11.1		8.7	2.1	12.6		7.9
Green Ext Time (p_c), s	0.1	1.9		0.4	0.0	2.3		1.4

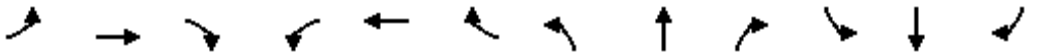
Intersection Summary		
HCM 6th Ctrl Delay		13.5
HCM 6th LOS		B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	124	138	734	201	271	933
Future Volume (veh/h)	124	138	734	201	271	933
Initial Q (Qb), veh	0	0	0	0	0	0
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	1441	1441	1693	1693	1441	1707
Adj Flow Rate, veh/h	135	150	798	218	295	1014
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	31	31	14	14	31	13
Cap, veh/h	219	195	960	262	332	2248
Arrive On Green	0.16	0.16	0.38	0.38	0.24	0.69
Sat Flow, veh/h	1372	1221	2581	682	1372	3329
Grp Volume(v), veh/h	135	150	514	502	295	1014
Grp Sat Flow(s),veh/h/ln	1372	1221	1608	1570	1372	1622
Q Serve(g_s), s	6.2	8.0	19.6	19.6	14.1	9.5
Cycle Q Clear(g_c), s	6.2	8.0	19.6	19.6	14.1	9.5
Prop In Lane	1.00	1.00		0.43	1.00	
Lane Grp Cap(c), veh/h	219	195	618	604	332	2248
V/C Ratio(X)	0.62	0.77	0.83	0.83	0.89	0.45
Avail Cap(c_a), veh/h	648	576	773	755	423	2776
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	26.6	27.3	18.9	18.9	24.8	4.6
Incr Delay (d2), s/veh	2.8	6.3	6.3	6.4	17.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.5	7.0	6.8	5.5	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.4	33.6	25.1	25.3	41.8	4.8
LnGrp LOS	C	C	C	C	D	A
Approach Vol, veh/h	285		1016			1309
Approach Delay, s/veh	31.6		25.2			13.1
Approach LOS	C		C			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	20.9	31.6			52.5	15.3
Change Period (Y+Rc), s	4.5	5.5			5.5	4.5
Max Green Setting (Gmax), s	20.3	32.6			58.0	32.0
Max Q Clear Time (g_c+I1), s	16.1	21.6			11.5	10.0
Green Ext Time (p_c), s	0.4	4.5			7.9	0.9

Intersection Summary	
HCM 6th Ctrl Delay	19.9
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	551	118	65	138	10	61	334	10	160	527	0
Future Volume (veh/h)	1	551	118	65	138	10	61	334	10	160	527	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1663	1729	1811	1841	1914	1841	1870	1945	1945	1870	1945	1870
Adj Flow Rate, veh/h	1	599	128	71	150	11	66	363	0	174	573	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	6	4	4	4	2	2	2	2	2	2
Cap, veh/h	1	581	516	83	176	215	101	472		201	581	0
Arrive On Green	0.34	0.34	0.34	0.14	0.14	0.14	0.06	0.24	0.00	0.11	0.30	0.00
Sat Flow, veh/h	3	1726	1535	605	1279	1560	1781	1945	0	1781	1945	0
Grp Volume(v), veh/h	600	0	128	221	0	11	66	363	0	174	573	0
Grp Sat Flow(s),veh/h/ln	1729	0	1535	1884	0	1560	1781	1945	0	1781	1945	0
Q Serve(g_s), s	35.5	0.0	6.4	12.1	0.0	0.6	3.8	18.3	0.0	10.1	30.9	0.0
Cycle Q Clear(g_c), s	35.5	0.0	6.4	12.1	0.0	0.6	3.8	18.3	0.0	10.1	30.9	0.0
Prop In Lane	0.00		1.00	0.32		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	582	0	516	259	0	215	101	472		201	581	0
V/C Ratio(X)	1.03	0.00	0.25	0.85	0.00	0.05	0.65	0.77		0.87	0.99	0.00
Avail Cap(c_a), veh/h	582	0	516	321	0	266	118	490		201	581	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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.0	0.0	25.3	44.4	0.0	39.5	48.7	37.2	0.0	46.0	36.8	0.0
Incr Delay (d2), s/veh	45.5	0.0	0.2	16.4	0.0	0.1	9.7	7.1	0.0	30.4	33.8	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.1	0.0	2.4	6.8	0.0	0.3	1.9	9.2	0.0	6.0	19.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.5	0.0	25.6	60.9	0.0	39.6	58.4	44.3	0.0	76.4	70.6	0.0
LnGrp LOS	F	A	C	E	A	D	E	D		E	E	A
Approach Vol, veh/h		728			232			429	A		747	
Approach Delay, s/veh		70.9			59.9			46.5			72.0	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.4	30.1		40.0	10.5	36.0		19.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	11.9	26.6		35.5	7.0	31.5		18.0				
Max Q Clear Time (g_c+I1), s	12.1	20.3		37.5	5.8	32.9		14.1				
Green Ext Time (p_c), s	0.0	1.0		0.0	0.0	0.0		0.4				

Intersection Summary		
HCM 6th Ctrl Delay		65.2
HCM 6th LOS		E

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)	3	506	38	15	480	4	221	0	370	9	0	47
Future Volume (veh/h)	3	506	38	15	480	4	221	0	370	9	0	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.98	1.00		1.00	1.00		0.98
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	1841	1781	1841	1856	1767	1767	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	3	550	0	16	522	4	240	0	402	10	0	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	8	4	3	9	9	5	5	5	9	9	9
Cap, veh/h	405	1119		395	1129	9	746	0	597	169	53	465
Arrive On Green	0.33	0.33	0.00	0.33	0.33	0.33	0.39	0.00	0.39	0.39	0.00	0.39
Sat Flow, veh/h	857	3385	1560	845	3413	26	1345	0	1541	99	137	1202
Grp Volume(v), veh/h	3	550	0	16	257	269	240	0	402	61	0	0
Grp Sat Flow(s),veh/h/ln	857	1692	1560	845	1678	1761	1345	0	1541	1437	0	0
Q Serve(g_s), s	0.1	4.1	0.0	0.5	3.9	3.9	3.2	0.0	6.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.9	4.1	0.0	4.6	3.9	3.9	4.0	0.0	6.9	0.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.16		0.84
Lane Grp Cap(c), veh/h	405	1119		395	555	582	746	0	597	688	0	0
V/C Ratio(X)	0.01	0.49		0.04	0.46	0.46	0.32	0.00	0.67	0.09	0.00	0.00
Avail Cap(c_a), veh/h	914	3129		897	1552	1629	2362	0	2488	2336	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)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.0	8.5	0.0	10.4	8.4	8.4	7.2	0.0	8.1	6.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.6	0.6	0.2	0.0	1.3	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	0.9	0.0	0.1	0.9	0.9	0.8	0.0	1.6	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.0	8.9	0.0	10.4	9.0	9.0	7.4	0.0	9.4	6.3	0.0	0.0
LnGrp LOS	B	A		B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		553	A		542			642			61	
Approach Delay, s/veh		8.9			9.1			8.7			6.3	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.9	15.1	16.9	15.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	51.5	29.5	51.5	29.5
Max Q Clear Time (g_c+I1), s	8.9	6.1	2.8	6.6
Green Ext Time (p_c), s	3.2	3.6	0.4	3.0

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] 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)	170	888	10	30	271	9	3	243	13	370	90	258
Future Volume (veh/h)	170	888	10	30	271	9	3	243	13	370	90	258
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1811	1811	1811	1856	1856	1856	1811	1884	1811	1870	1945	1870
Adj Flow Rate, veh/h	185	965	11	33	295	10	3	264	14	250	311	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	3	3	3	6	6	6	2	2	2
Cap, veh/h	195	1074	13	42	396	14	3	302	249	319	348	850
Arrive On Green	0.36	0.36	0.36	0.12	0.12	0.12	0.16	0.16	0.16	0.18	0.18	0.18
Sat Flow, veh/h	546	3006	36	343	3217	114	21	1861	1535	1781	1945	1585
Grp Volume(v), veh/h	605	0	556	177	0	161	267	0	14	250	311	280
Grp Sat Flow(s),veh/h/ln	1784	0	1804	1838	0	1835	1882	0	1535	1781	1945	1585
Q Serve(g_s), s	33.3	0.0	29.0	9.5	0.0	8.5	14.0	0.0	0.8	13.6	15.8	10.1
Cycle Q Clear(g_c), s	33.3	0.0	29.0	9.5	0.0	8.5	14.0	0.0	0.8	13.6	15.8	10.1
Prop In Lane	0.31		0.02	0.19		0.06	0.01		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	638	0	645	227	0	226	306	0	249	319	348	850
V/C Ratio(X)	0.95	0.00	0.86	0.78	0.00	0.71	0.87	0.00	0.06	0.78	0.89	0.33
Avail Cap(c_a), veh/h	644	0	651	327	0	326	354	0	288	326	356	856
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	0.0	30.2	43.0	0.0	42.6	41.4	0.0	35.8	39.7	40.6	13.2
Incr Delay (d2), s/veh	23.4	0.0	11.4	7.4	0.0	4.1	18.8	0.0	0.1	11.6	23.3	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	18.0	0.0	14.3	4.7	0.0	4.1	8.0	0.0	0.3	6.9	9.7	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	0.0	41.7	50.5	0.0	46.7	60.2	0.0	35.9	51.3	63.9	13.4
LnGrp LOS	E	A	D	D	A	D	E	A	D	D	E	B
Approach Vol, veh/h		1161			338			281			841	
Approach Delay, s/veh		48.6			48.7			59.0			43.3	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	20.9	40.7	22.6	17.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.0	36.5	18.5	18.0
Max Q Clear Time (g_c+I1), s	16.0	35.3	17.8	11.5
Green Ext Time (p_c), s	0.4	0.8	0.3	1.0

Intersection Summary	
HCM 6th Ctrl Delay	48.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	87	346	877	176	345	78
Future Volume (veh/h)	87	346	877	176	345	78
Initial Q (Qb), veh	0	0	0	0	0	0
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	1637	1668	1870	1945	1945	1945
Adj Flow Rate, veh/h	95	0	1089	0	375	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	22	20	2	2	2	2
Cap, veh/h	157		1404	767	479	
Arrive On Green	0.10	0.00	0.39	0.00	0.25	0.00
Sat Flow, veh/h	1559	1413	3563	1945	1945	1648
Grp Volume(v), veh/h	95	0	1089	0	375	0
Grp Sat Flow(s),veh/h/ln	1559	1413	1781	1945	1945	1648
Q Serve(g_s), s	3.0	0.0	13.9	0.0	9.4	0.0
Cycle Q Clear(g_c), s	3.0	0.0	13.9	0.0	9.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	157		1404	767	479	
V/C Ratio(X)	0.61		0.78	0.00	0.78	
Avail Cap(c_a), veh/h	539		2600	1419	766	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	22.4	0.0	13.8	0.0	18.3	0.0
Incr Delay (d2), s/veh	3.8	0.0	0.9	0.0	2.8	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	1.2	0.0	4.8	0.0	4.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.2	0.0	14.7	0.0	21.2	0.0
LnGrp LOS	C		B	A	C	
Approach Vol, veh/h	95	A		1089	375	A
Approach Delay, s/veh	26.2			14.7	21.2	
Approach LOS	C			B	C	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	25.0		9.7		17.3
Change Period (Y+Rc), s	4.5		4.5		4.5
Max Green Setting (Gmax), s	38.0		18.0		20.5
Max Q Clear Time (g_c+I1), s	15.9		5.0		11.4
Green Ext Time (p_c), s	4.6		0.2		1.5

Intersection Summary		
HCM 6th Ctrl Delay		17.0
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] 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)	280	1051	61	52	1193	645	40	127	33	259	95	337
Future Volume (veh/h)	280	1051	61	52	1193	645	40	127	33	259	95	337
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	0.99		0.99	0.99		0.99
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	1841	1826	1826	1856	1856	1856	1870	1945	1870	1752	1752	1781
Adj Flow Rate, veh/h	304	1142	66	57	1297	701	43	138	36	282	103	366
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	5	5	3	3	3	2	2	2	10	10	8
Cap, veh/h	320	1694	747	106	1289	734	317	229	60	349	380	601
Arrive On Green	0.18	0.49	0.49	0.06	0.37	0.37	0.05	0.15	0.15	0.11	0.22	0.22
Sat Flow, veh/h	1753	3469	1530	1767	3526	1516	1781	1483	387	1668	1752	1497
Grp Volume(v), veh/h	304	1142	66	57	1297	701	43	0	174	282	103	366
Grp Sat Flow(s),veh/h/ln	1753	1735	1530	1767	1763	1516	1781	0	1870	1668	1752	1497
Q Serve(g_s), s	15.0	22.0	2.0	2.7	32.0	32.0	1.7	0.0	7.6	10.0	4.3	17.0
Cycle Q Clear(g_c), s	15.0	22.0	2.0	2.7	32.0	32.0	1.7	0.0	7.6	10.0	4.3	17.0
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	320	1694	747	106	1289	734	317	0	289	349	380	601
V/C Ratio(X)	0.95	0.67	0.09	0.54	1.01	0.96	0.14	0.00	0.60	0.81	0.27	0.61
Avail Cap(c_a), veh/h	320	1694	747	141	1289	734	367	0	342	349	380	601
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	1.00	1.00
Uniform Delay (d), s/veh	35.4	17.1	12.0	40.0	27.8	22.0	28.2	0.0	34.5	29.1	28.5	20.9
Incr Delay (d2), s/veh	36.8	1.1	0.1	4.2	26.6	22.8	0.2	0.0	2.1	13.1	0.4	1.8
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	9.3	7.8	0.7	1.3	16.8	17.4	0.7	0.0	3.6	2.5	1.8	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.2	18.1	12.0	44.2	54.4	44.8	28.4	0.0	36.6	42.1	28.9	22.7
LnGrp LOS	E	B	B	D	F	D	C	A	D	D	C	C
Approach Vol, veh/h		1512			2055			217			751	
Approach Delay, s/veh		28.7			50.8			35.0			30.8	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	46.8	8.5	23.0	20.0	36.0	14.0	17.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	41.0	7.0	19.0	16.0	32.0	10.0	16.0
Max Q Clear Time (g_c+I1), s	4.7	24.0	3.7	19.0	17.0	34.0	12.0	9.6
Green Ext Time (p_c), s	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	39.4
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	1	225	1	300	2	890	313	347	1173	0
Future Volume (veh/h)	0	1	1	225	1	300	2	890	313	347	1173	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1870	1870	1870	1752	1752	1248	1822	1826	1826	1282	1856	1856
Adj Flow Rate, veh/h	0	1	1	245	1	326	2	967	340	377	1275	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	10	10	44	10	5	5	45	3	3
Cap, veh/h	0	197	197	353	1	544	6	964	336	348	2339	0
Arrive On Green	0.00	0.23	0.23	0.23	0.23	0.23	0.00	0.38	0.38	0.28	0.66	0.00
Sat Flow, veh/h	0	858	858	1316	5	1058	1735	2522	880	1221	3618	0
Grp Volume(v), veh/h	0	0	2	246	0	326	2	663	644	377	1275	0
Grp Sat Flow(s),veh/h/ln	0	0	1716	1321	0	1058	1735	1735	1667	1221	1763	0
Q Serve(g_s), s	0.0	0.0	0.1	24.6	0.0	30.3	0.2	53.5	53.5	39.9	26.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	24.7	0.0	30.3	0.2	53.5	53.5	39.9	26.7	0.0
Prop In Lane	0.00		0.50	1.00		1.00	1.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	393	354	0	544	6	663	637	348	2339	0
V/C Ratio(X)	0.00	0.00	0.01	0.69	0.00	0.60	0.31	1.00	1.01	1.08	0.55	0.00
Avail Cap(c_a), veh/h	0	0	393	354	0	544	87	663	637	348	2339	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)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	41.6	51.2	0.0	23.9	69.6	43.3	43.3	50.1	12.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.8	0.0	1.8	24.7	35.0	38.3	72.3	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	0.0	0.0	0.1	8.8	0.0	7.9	0.1	28.2	27.6	18.7	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	41.6	56.9	0.0	25.7	94.3	78.3	81.6	122.3	12.7	0.0
LnGrp LOS	A	A	D	E	A	C	F	F	F	F	B	A
Approach Vol, veh/h		2			572			1309			1652	
Approach Delay, s/veh		41.6			39.1			79.9			37.7	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	44.4	59.0		36.6	5.0	98.4		36.6
Change Period (Y+Rc), s	4.5	5.5		4.5	4.5	5.5		4.5
Max Green Setting (Gmax), s	39.9	53.5		32.1	7.0	86.4		32.1
Max Q Clear Time (g_c+I1), s	41.9	55.5		2.1	2.2	28.7		32.3
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	11.4		0.0

Intersection Summary			
HCM 6th Ctrl Delay		53.6	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	0	75	11	0	6	7	987	10	14	1112	8
Future Volume (veh/h)	37	0	75	11	0	6	7	987	10	14	1112	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1856	1856	1856	1500	1500	1500	1767	1826	1899	1811	1856	1930
Adj Flow Rate, veh/h	40	0	82	12	0	7	8	1073	11	15	1209	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	27	27	27	9	5	5	6	3	3
Cap, veh/h	61	0	125	46	0	41	25	1618	17	45	1691	13
Arrive On Green	0.12	0.00	0.12	0.03	0.00	0.03	0.01	0.46	0.46	0.03	0.47	0.47
Sat Flow, veh/h	530	0	1086	1428	0	1271	1682	3518	36	1725	3587	27
Grp Volume(v), veh/h	122	0	0	12	0	7	8	529	555	15	594	624
Grp Sat Flow(s),veh/h/ln	1616	0	0	1428	0	1271	1682	1735	1819	1725	1763	1851
Q Serve(g_s), s	3.6	0.0	0.0	0.4	0.0	0.3	0.2	11.7	11.7	0.4	13.2	13.2
Cycle Q Clear(g_c), s	3.6	0.0	0.0	0.4	0.0	0.3	0.2	11.7	11.7	0.4	13.2	13.2
Prop In Lane	0.33		0.67	1.00		1.00	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	186	0	0	46	0	41	25	798	837	45	831	873
V/C Ratio(X)	0.65	0.00	0.00	0.26	0.00	0.17	0.32	0.66	0.66	0.33	0.71	0.71
Avail Cap(c_a), veh/h	1051	0	0	929	0	826	239	1442	1512	249	1469	1542
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	0.0	23.2	0.0	23.2	24.0	10.3	10.3	23.5	10.4	10.4
Incr Delay (d2), s/veh	3.9	0.0	0.0	2.9	0.0	1.9	7.3	1.0	0.9	4.2	1.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	0.2	0.0	0.1	0.1	2.9	3.1	0.2	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	0.0	0.0	26.1	0.0	25.1	31.3	11.3	11.2	27.7	11.5	11.5
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		122			19			1092			1233	
Approach Delay, s/veh		24.7			25.7			11.4			11.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	27.1		10.2	5.2	27.7		6.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.1	40.9		32.0	7.0	41.0		32.0
Max Q Clear Time (g_c+I1), s	2.4	13.7		5.6	2.2	15.2		2.4
Green Ext Time (p_c), s	0.0	6.9		0.7	0.0	8.0		0.0

Intersection Summary		
HCM 6th Ctrl Delay	12.3	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	73	177	435	421	940	0	0	907	244
Future Volume (veh/h)	0	0	0	73	177	435	421	940	0	0	907	244
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		0.99
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				1841	1826	1914	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				79	344	372	458	1022	0	0	986	265
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	5	4	3	3	0	0	3	3
Cap, veh/h				77	334	364	476	2434	0	0	1042	279
Arrive On Green				0.23	0.23	0.23	0.27	0.69	0.00	0.00	0.38	0.38
Sat Flow, veh/h				338	1471	1601	1767	3618	0	0	2835	734
Grp Volume(v), veh/h				423	0	372	458	1022	0	0	632	619
Grp Sat Flow(s),veh/h/ln				1809	0	1601	1767	1763	0	0	1763	1713
Q Serve(g_s), s				24.9	0.0	24.9	28.0	13.8	0.0	0.0	38.0	38.4
Cycle Q Clear(g_c), s				24.9	0.0	24.9	28.0	13.8	0.0	0.0	38.0	38.4
Prop In Lane				0.19		1.00	1.00		0.00	0.00		0.43
Lane Grp Cap(c), veh/h				411	0	364	476	2434	0	0	670	651
V/C Ratio(X)				1.03	0.00	1.02	0.96	0.42	0.00	0.00	0.94	0.95
Avail Cap(c_a), veh/h				411	0	364	476	2449	0	0	677	658
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.3	0.0	42.3	39.5	7.4	0.0	0.0	32.8	32.9
Incr Delay (d2), s/veh				51.9	0.0	52.9	31.7	0.1	0.0	0.0	21.7	23.3
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				16.9	0.0	15.1	16.1	4.7	0.0	0.0	19.8	19.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				94.2	0.0	95.2	71.2	7.5	0.0	0.0	54.6	56.2
LnGrp LOS				F	A	F	E	A	A	A	D	E
Approach Vol, veh/h					795			1480			1251	
Approach Delay, s/veh					94.7			27.2			55.4	
Approach LOS					F			C			E	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	80.1		34.0	46.1		29.4
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5
Max Green Setting (Gmax), s	76.1		29.5	42.1		24.9
Max Q Clear Time (g_c+I1), s	15.8		30.0	40.4		26.9
Green Ext Time (p_c), s	9.9		0.0	1.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.4
HCM 6th LOS	D

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)	60	175	28	66	43	199	4	754	44	183	490	14
Future Volume (veh/h)	60	175	28	66	43	199	4	754	44	183	490	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.99	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	190	30	72	47	216	4	820	48	199	533	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	368	58	244	68	311	455	928	782	323	1049	30
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.01	0.50	0.50	0.09	0.58	0.58
Sat Flow, veh/h	1111	1568	248	1154	289	1326	1781	1870	1577	1781	1810	51
Grp Volume(v), veh/h	65	0	220	72	0	263	4	820	48	199	0	548
Grp Sat Flow(s),veh/h/ln	1111	0	1816	1154	0	1615	1781	1870	1577	1781	0	1861
Q Serve(g_s), s	4.3	0.0	8.0	4.4	0.0	11.3	0.1	29.8	1.2	3.7	0.0	13.3
Cycle Q Clear(g_c), s	15.6	0.0	8.0	12.4	0.0	11.3	0.1	29.8	1.2	3.7	0.0	13.3
Prop In Lane	1.00		0.14	1.00		0.82	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	190	0	426	244	0	379	455	928	782	323	0	1079
V/C Ratio(X)	0.34	0.00	0.52	0.30	0.00	0.69	0.01	0.88	0.06	0.62	0.00	0.51
Avail Cap(c_a), veh/h	201	0	444	255	0	395	607	1223	1031	361	0	1254
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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.6	0.0	25.2	30.6	0.0	26.5	9.7	17.1	9.9	15.4	0.0	9.5
Incr Delay (d2), s/veh	1.1	0.0	1.0	0.7	0.0	5.0	0.0	6.4	0.0	2.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	3.4	1.2	0.0	4.7	0.0	12.6	0.4	1.8	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	26.2	31.3	0.0	31.5	9.7	23.5	9.9	18.0	0.0	9.8
LnGrp LOS	C	A	C	C	A	C	A	C	A	B	A	A
Approach Vol, veh/h		285			335			872			747	
Approach Delay, s/veh		28.1			31.4			22.7			12.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	42.0		22.2	5.1	48.4		22.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.5	49.5		18.5	7.0	51.0		18.5				
Max Q Clear Time (g_c+I1), s	15.7	31.8		17.6	2.1	15.3		14.4				
Green Ext Time (p_c), s	0.1	5.8		0.1	0.0	3.9		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		21.1
HCM 6th LOS		C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	204	176	1003	186	305	1316
Future Volume (veh/h)	204	176	1003	186	305	1316
Initial Q (Qb), veh	0	0	0	0	0	0
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	1574	1574	1752	1752	1574	1752
Adj Flow Rate, veh/h	222	191	1090	202	332	1430
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	22	22	10	10	22	10
Cap, veh/h	262	233	1244	230	360	2423
Arrive On Green	0.17	0.17	0.44	0.44	0.24	0.73
Sat Flow, veh/h	1499	1334	2892	518	1499	3416
Grp Volume(v), veh/h	222	191	645	647	332	1430
Grp Sat Flow(s),veh/h/ln	1499	1334	1664	1659	1499	1664
Q Serve(g_s), s	14.7	14.2	36.1	36.5	22.2	21.0
Cycle Q Clear(g_c), s	14.7	14.2	36.1	36.5	22.2	21.0
Prop In Lane	1.00	1.00		0.31	1.00	
Lane Grp Cap(c), veh/h	262	233	738	736	360	2423
V/C Ratio(X)	0.85	0.82	0.87	0.88	0.92	0.59
Avail Cap(c_a), veh/h	469	417	871	868	434	2852
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	41.0	40.8	25.9	26.0	38.0	6.7
Incr Delay (d2), s/veh	7.5	7.0	8.7	9.1	22.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	5.0	14.5	14.7	9.9	5.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.5	47.8	34.6	35.2	60.6	6.9
LnGrp LOS	D	D	C	D	E	A
Approach Vol, veh/h	413		1292			1762
Approach Delay, s/veh	48.2		34.9			17.0
Approach LOS	D		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	29.2	51.0				80.2	22.4
Change Period (Y+Rc), s	4.5	5.5				5.5	4.5
Max Green Setting (Gmax), s	29.7	53.7				87.9	32.1
Max Q Clear Time (g_c+I1), s	24.2	38.5				23.0	16.7
Green Ext Time (p_c), s	0.5	7.0				14.3	1.2

Intersection Summary	
HCM 6th Ctrl Delay	27.4
HCM 6th LOS	C

APPENDIX C

CITY OF FONTANA TRUCK TRIP GENERATION STUDY TRIP RATES

SUMMARY OF RECOMMENDED TRIP GENERATION RATES AND EQUATIONS (Cont'd)

Classification: Light Industrial

	NO. OF EMPLOYEES			GROSS BUILDING AREA (KSF)			ACRES		
Period	Weighted Average Trips	Linear Regression	Logarithmic Regression	Weighted Average Trips	Linear Regression	Logarithmic Regression	Weighted Average Trips	Linear Regression	Logarithmic Regression
Daily									
Total Vehicles	8.046*X	9.322*X-55.491	64.160X1.035^X	11.744*X	Marginal	n.a.	37.313*X	35.607*X+16.007	87.895*1.132^X
AM Street									
Total Vehicles	0.466*X	Marginal	Marginal	0.679*X	n.a.	n.a.	2.159*X	n.a.	Marginal
Trucks	0.184*X	n.a.	n.a.	0.268*X	n.a.	n.a.	0.853*X	n.a.	n.a.
PM Street									
Total Vehicles	0.299*X	Marginal	Marginal	0.436*X	0.193*X+7.240	8.152*1.013^X	1.386*X	Marginal	6.258*1.070^X
Trucks	0.069*X	0.093*X-1.026	0.570*1.034^X	0.101*X	0.056*X+1.323	Marginal	0.320*X	0.329*X-.090	0.835*1.122^X
AM Site									
Total Vehicles	0.787*X	1.004*X-9.410	7.306*1.032^X	1.149*X	0.615*X+15.911	Marginal	3.651*X	3.729*X-0.725	9.947*1.119^X
Trucks	0.224*X	n.a.	n.a.	0.327*X	Marginal	15.086*0.977^X	1.039*X	n.a.	n.a.
PM Site									
Total Vehicles	1.069*X	1.224*X-6.744	12.310*1.028^X	1.560*X	0.742*X+24.373	26.078*1.015^X	4.957*X	4.345*X-5.749	16.771*1.098^X
Trucks	0.201*X	n.a.	n.a.	0.294*X	n.a.	n.a.	0.933*X	n.a.	n.a.

Note: All symbols are per Microsoft Excel (+, -, *, and ^) add, subtract, multiply and raise to a power. "X" is the independent variable.

SUMMARY OF RECOMMENDED TRIP GENERATION RATES AND EQUATIONS (Cont'd)

Classification: Industrial Park

	NO. OF EMPLOYEES			GROSS BUILDING AREA (KSF)			ACRES		
Period	Weighted Average Trips	Linear Regression	Logarithmic Regression	Weighted Average Trips	Linear Regression	Logarithmic Regression	Weighted Average Trips	Linear Regression	Logarithmic Regression
Daily									
Total Vehicles	2.485*X	1.638*X+156.726	188.297*1.004^X	1.236*X	Marginal	Marginal	24.805*X	n.a.	Marginal
AM Street									
Total Vehicles	0.191*X	Marginal	Marginal	0.095*X	n.a.	n.a.	1.902*X	n.a.	n.a.
Trucks	0.078*X	Marginal	Marginal	0.039*X	n.a.	n.a.	0.782*X	n.a.	n.a.
PM Street			Marginal						
Total Vehicles	0.193*X	Marginal	Marginal	0.096*X	n.a.	n.a.	1.929*X	n.a.	n.a.
Trucks	0.097*X	Marginal	Marginal	0.048*X	n.a.	n.a.	0.971*X	n.a.	n.a.
AM Site									
Total Vehicles	0.265*X	Marginal	Marginal	0.132*X	n.a.	n.a.	2.644*X	n.a.	n.a.
Trucks	0.053*X	n.a.	n.a.	0.026*X	n.a.	n.a.	0.526*X	n.a.	n.a.
PM Site									
Total Vehicles	0.382*X	0.397*X-2.740	16.146*1.007^X	0.190*X	n.a.	n.a.	3.818*X	n.a.	n.a.
Trucks	0.120*X	Marginal	Marginal	0.060*X	n.a.	n.a.	1.201*X	n.a.	n.a.

Note: All symbols are per Microsoft Excel (+, -, *, and ^) add, subtract, multiply and raise to a power. "X" is the independent variable.

VEHICLE MIX AND ENTER/EXIT SPLITS BY LAND USE CATEGORY (Cont'd)

Classification: Light Industrial

	Recommended Large Truck Mix (%)							
	Lge 2 Ax	3 Axle	4+ Axle	Total				
	32.7	17.9	49.4	100.0				
	Pass Veh	Lge 2 Ax	3 Axle	4+ Axle	Total			
	78.6	8.0	3.9	9.5	100.0			
	Site Entering & Exiting							
	a.m.				p.m.			
	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit
Split	64.96	35.04	41.03	58.97	43.01	56.99	42.86	57.14
	Street Entering & Exiting							
	a.m.				p.m.			
	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit
Split	60.49	39.51	37.50	62.50	29.17	70.83	66.67	33.33

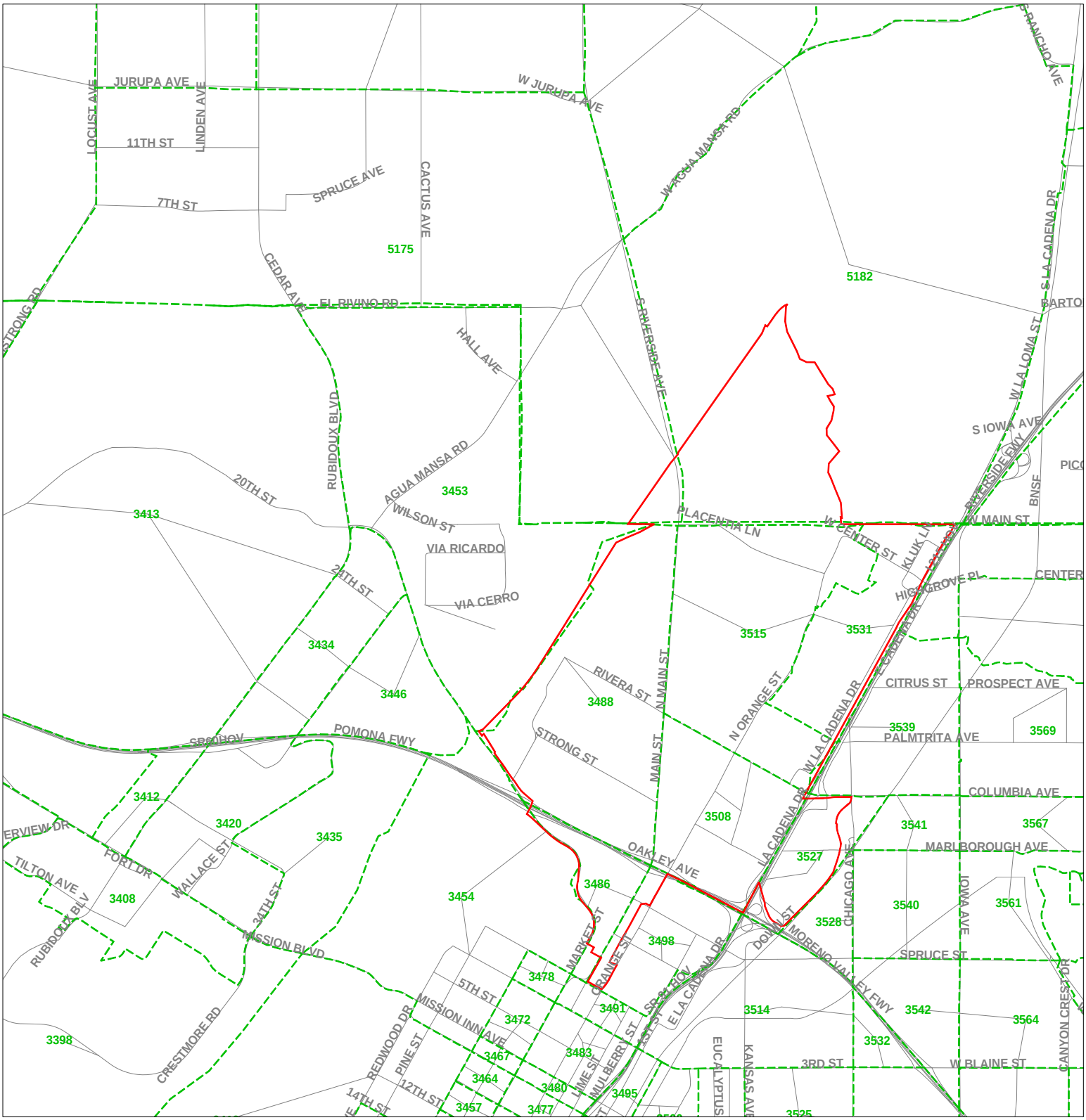
VEHICLE MIX AND ENTER/EXIT SPLITS BY LAND USE CATEGORY (Cont'd)

Classification: Industrial Park

	Recommended Large Truck Mix (%)							
	Lge 2 Ax	3 Axle	4+ Axle	Total				
	7.9	7.1	85.0	100.0				
	Pass Veh	Lge 2 Ax	3 Axle	4+ Axle	Total			
	52.8	4.0	3.3	39.8	100.0			
	Site Entering & Exiting							
	a.m.				p.m.			
	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit
Split	68.88	31.12	58.97	41.03	43.11	56.89	51.69	48.31
	Street Entering & Exiting							
	a.m.				p.m.			
	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit
Split	60.99	39.01	50.00	50.00	32.87	67.13	37.50	62.50

APPENDIX D

RIVTAM MODEL LAND USE INPUTS AND TAZ MAP


JURUPA AVE
W JURUPA AVE
LOCUST AVE
LINDEN AVE
11TH ST
7TH ST
SPRUCE AVE
CACTUS AVE
5175
CEDAR AVE
EL RIVINO RD
HALL AVE
RUBIDOUX BLVD
AGUA MANSA RD
20TH ST
3413
3453
WILSON ST
VIA RICARDO
VIA CERRO
25TH ST
3434
3446
3412
3420
3435
3408
3398
POMONA FWY
SB CD HOV
WALLACE ST
FORT DR
TILTON AVE
RUBIDOUX BLVD
34TH ST
MISSION BLVD
CRESTMORE RD
5182
S RIVERSIDE AVE
W LA LOMA ST
S LA CADENA DR
S IOWA AVE
RIVERSIDE FWY
BNSF
PLACENTIA LN
W CENTER ST
W MAIN ST
CENTER
HIGHGROVE PL
3515
3531
RIVERA ST
3488
MAIN ST
N ORANGE ST
STRONG ST
CITRUS ST
PROSPECT AVE
3539
PALMTRITA AVE
3569
W LA CADENA DR
COLUMBIA AVE
3508
3541
3567
MARLBOROUGH AVE
OAKLEY AVE
3527
3486
3454
3498
MARKET ST
ORANGE ST
3478
3491
5TH ST
MISSION INN AVE
3472
3467
3464
3457
3477
3480
3483
3495
REDWOOD DR
PINE ST
12TH ST
14TH ST
LIME ST
MULBERRY ST
1ST ST
SB CD HOV
E LA CADENA DR
DOLORES ST
MORENO VALLEY FWY
3528
CHICAGO AVE
3540
IOWA AVE
3561
SPRUCE ST
3514
3542
3564
3532
EUCALYPTUS
KANSAS AVE
3RD ST
W BLAINE ST
CANYON CREST DR
3525

TAZ Summary - Without Project

RivTAM TAZ	General Plan Land Use	Quantity	Units
3486	C - Commercial*	848.969	TSF
	HDR - High Density Residential	292	DU
	MDR - Medium Density Residential*	215	DU
3488	B/OP - Business/Office Park*	9,065.340	TSF
	C - Commercial*	98.050	TSF
	MDR - Medium Density Residential*	2,091	DU
	MHDR - Medium High Density Residential*	189	DU
	SRR - Semi Rural Residential*	7	DU
3498	C - Commercial*	512.655	TSF
	HDR - High Density Residential	177	DU
	MDR - Medium Density Residential*	16	DU
3508	B/OP - Business/Office Park*	683.333	TSF
	C - Commercial*	119.800	TSF
	MDR - Medium Density Residential*	1,020	DU
	MHDR - Medium High Density Residential*	377	DU
	O - Office*	1,543.560	TSF
	PF - Public Facilities/Institutions*	2,000.000	TSF
3515	B/OP - Business/Office Park*	8,839.433	TSF
	C - Commercial*	43.500	TSF
	MDR - Medium Density Residential*	213	DU
	OS - Open Space/Natural Resources	214.10	AC
	PF - Public Facilities/Institutions*	447.174	TSF
3527	B/OP - Business/Office Park*	2,200.000	TSF
	I - Industrial*	78.400	TSF
	MDR - Medium Density Residential*	328	DU
3531	B/OP - Business/Office Park*	2,733.333	TSF
	C - Commercial*	65.350	TSF
	MDR - Medium Density Residential*	1,038	DU
5175	LI - Light Industrial (Colton)	402.913	TSF
	VLDR - Very Low Density Residential (Colton)	6	DU
5182	LI - Light Industrial (Colton)	5,897.087	TSF

TAZ Summary - With Project Scenario 1

RivTAM TAZ	Scenario 1 General Plan Land Use	Quantity	Units
3486	C - Commercial*	98.010	TSF
	MDR - Medium Density Residential*	303	DU
	MHDR - Medium High Density Residential*	426	DU
	O - Office*	98.010	TSF
3488	B/OP - Business/Office Park*	9,000.000	TSF
	C - Commercial*	54.450	TSF
	MDR - Medium Density Residential*	2,035	DU
	MHDR - Medium High Density Residential*	189	DU
	PF - Public Facilities/Institutions*	479.160	TSF
3498	C - Commercial*	98.010	TSF
	MHDR - Medium High Density Residential*	426	DU
	O - Office*	98.010	TSF
3508	B/OP - Business/Office Park*	62.617	TSF
	C - Commercial*	438.320	TSF
	MDR - Medium Density Residential*	1,028	DU
	MHDR - Medium High Density Residential*	1,229	DU
	O - Office*	196.020	TSF
	PF - Public Facilities/Institutions*	2,000.000	TSF
3515	B/OP - Business/Office Park*	62.617	TSF
	C - Commercial*	506.300	TSF
	HDR - High Density Residential	2,889	DU
	MDR - Medium Density Residential*	442	DU
	MHDR - Medium High Density Residential*	432	DU
	OS - Open Space/Natural Resources	190.13	AC
3527	MDR - Medium Density Residential*	624	DU
3531	B/OP - Business/Office Park*	250.467	TSF
	C - Commercial*	187.850	TSF
	MDR - Medium Density Residential*	1,038	DU
5175	B/OP - Business/Office Park*	115.118	TSF
	C - Commercial*	555.400	TSF
5182	B/OP - Business/Office Park*	1,684.882	TSF
	C - Commercial*	196.020	TSF
	LI - Light Industrial (Colton)	1,480.000	TSF
	MDR - Medium Density Residential*	1,620	DU
	OS - Open Space/Natural Resources	42.00	AC

TAZ Summary - With Project Scenario 2

RivTAM TAZ	Scenario 2 General Plan Land Use	Quantity	Units
3486	C - Commercial*	98.010	TSF
	MDR - Medium Density Residential*	303	DU
	MHDR - Medium High Density Residential*	426	DU
	O - Office*	98.010	TSF
3488	B/OP - Business/Office Park*	9,000.000	TSF
	C - Commercial*	54.450	TSF
	MDR - Medium Density Residential*	2,035	DU
	MHDR - Medium High Density Residential*	189	DU
	PF - Public Facilities/Institutions*	479.160	TSF
3498	C - Commercial*	98.010	TSF
	MHDR - Medium High Density Residential*	426	DU
	O - Office*	98.010	TSF
3508	B/OP - Business/Office Park*	62.617	TSF
	C - Commercial*	438.320	TSF
	MDR - Medium Density Residential*	1,028	DU
	MHDR - Medium High Density Residential*	1,229	DU
	O - Office*	196.020	TSF
	PF - Public Facilities/Institutions*	2,000.000	TSF
3515	B/OP - Business/Office Park*	5,261.317	TSF
	C - Commercial*	549.800	TSF
	HDR - High Density Residential	1,200	DU
	MDR - Medium Density Residential*	442	DU
	OS - Open Space/Natural Resources	190.13	AC
3527	MDR - Medium Density Residential*	624	DU
3531	B/OP - Business/Office Park*	250.467	TSF
	C - Commercial*	187.850	TSF
	MDR - Medium Density Residential*	1,038	DU
5175	LI - Light Industrial (Colton)	255.818	TSF
5182	HDR - High Density Residential	2,430	TSF
	LI - Light Industrial (Colton)	3,744.182	TSF
	VLDR - Very Low Density Residential (Colton)	6	TSF

APPENDIX E

HORIZON YEAR 2040 POST-PROCESSED VOLUMES

HORIZON YEAR 2040 BASELINE (WITHOUT PROJECT)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Stephens Av. / West Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	66	84	18	28%	85	108	23	27%
	Through	2	3	1	28%	4	5	1	27%
	Right	87	111	24	28%	85	108	23	27%
	NB Total	155	198	43	28%	174	221	47	27%
SOUTH BOUND	Left	16	20	4	28%	7	9	2	27%
	Through	13	17	4	28%	4	5	1	27%
	Right	3	4	1	28%	2	3	1	27%
	SB Total	32	41	9	28%	13	17	4	27%
EAST BOUND	Left	0	0	0	#DIV/0!	1	1	0	27%
	Through	146	187	41	28%	260	330	70	27%
	Right	72	92	20	28%	154	196	42	27%
	EB Total	218	279	61	28%	415	527	112	27%
WEST BOUND	Left	316	404	88	28%	233	296	63	27%
	Through	160	205	45	28%	144	183	39	27%
	Right	11	14	3	28%	8	10	2	27%
	WB Total	487	623	136	28%	385	489	104	27%
TOTAL ENTERING VOLUME		892	1,142	249.76	28%	987	1,253	266	27%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	41	17			
North Leg	Outbound	17	17			
North Leg	**TOTAL**	**58**	**33**	**15%**	**9%**	**378**
South Leg	Inbound	198	221			
South Leg	Outbound	513	497			
South Leg	**TOTAL**	**712**	**718**	**9%**	**9%**	**8,222**
East Leg	Inbound	623	489			
East Leg	Outbound	319	447			
East Leg	**TOTAL**	**942**	**936**	**9%**	**9%**	**10,726**
West Leg	Inbound	279	527			
West Leg	Outbound	293	293			
West Leg	**TOTAL**	**572**	**820**	**8%**	**11%**	**7,585**
OVERALL TOTAL		***2,284***	***2,507***	***8%***	***9%***	***26,912***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: West La Cadena Dr./I-215 SB Ramps/Stephens Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	31	40	9	28%	41	52	11	27%
	Through	64	82	18	28%	224	284	60	27%
	Right	21	27	6	28%	7	9	2	27%
	NB Total	116	148	32	28%	272	345	73	27%
SOUTH BOUND	Left	103	132	29	28%	108	137	29	27%
	Through	270	346	76	28%	354	450	96	27%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	373	477	104	28%	462	587	125	27%
EAST BOUND	Left	1	1	0	28%	1	1	0	27%
	Through	312	399	87	28%	244	310	66	27%
	Right	60	77	17	28%	80	102	22	27%
	EB Total	373	477	104	28%	325	413	88	27%
WEST BOUND	Left	47	60	13	28%	44	56	12	27%
	Through	94	120	26	28%	93	118	25	27%
	Right	4	5	1	28%	7	9	2	27%
	WB Total	145	186	41	28%	144	183	39	27%
TOTAL ENTERING VOLUME		1,007	1,289	281.96	28%	1,203	1,528	325	27%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	477	587			
North Leg	Outbound	88	295			
North Leg	**TOTAL**	**566**	**881**	**5%**	**9%**	**10,327**
South Leg	Inbound	148	345			
South Leg	Outbound	483	607			
South Leg	**TOTAL**	**631**	**953**	**6%**	**9%**	**11,160**
East Leg	Inbound	186	183			
East Leg	Outbound	558	456			
East Leg	**TOTAL**	**744**	**639**	**10%**	**9%**	**7,485**
West Leg	Inbound	477	413			
West Leg	Outbound	160	170			
West Leg	**TOTAL**	**637**	**583**	**9%**	**9%**	**6,830**
OVERALL TOTAL		***2,578***	***3,056***	***7%***	***9%***	***35,801***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr./I-215 NB Ramps/Highgrove Pl.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	33	42	9	28%	91	116	25	27%
	Right	43	55	12	28%	80	102	22	27%
	NB Total	76	97	21	28%	171	217	46	27%
SOUTH BOUND	Left	1	1	0	28%	0	0	0	#DIV/0!
	Through	70	90	20	28%	77	98	21	27%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	71	91	20	28%	77	98	21	27%
EAST BOUND	Left	28	36	8	28%	37	47	10	27%
	Through	169	216	47	28%	224	284	60	27%
	Right	43	55	12	28%	12	15	3	27%
	EB Total	240	307	67	28%	273	347	74	27%
WEST BOUND	Left	26	33	7	28%	30	38	8	27%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	6	8	2	27%
	WB Total	26	33	7	28%	36	46	10	27%
TOTAL ENTERING VOLUME		413	529	115.64	28%	557	707	150	27%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	91	98			
North Leg	Outbound	78	170			
North Leg	**TOTAL**	**169**	**268**	**5%**	**9%**	**3,140**
South Leg	Inbound	97	217			
South Leg	Outbound	178	151			
South Leg	**TOTAL**	**275**	**368**	**6%**	**9%**	**4,315**
East Leg	Inbound	33	46			
East Leg	Outbound	273	386			
East Leg	**TOTAL**	**306**	**432**	**6%**	**9%**	**5,059**
West Leg	Inbound	307	347			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**307**	**347**	**8%**	**9%**	**4,062**
OVERALL TOTAL		***1,057***	***1,415***	***6%***	***9%***	***16,576***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Highgrove Pl. / West Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	54	69	15	28%	54	69	15	27%
	Through	1	1	0	28%	0	0	0	#DIV/0!
	Right	158	202	44	28%	250	318	68	27%
	NB Total	213	273	60	28%	304	386	82	27%
SOUTH BOUND	Left	3	4	1	28%	6	8	2	27%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	20	26	6	28%	32	41	9	27%
	SB Total	23	29	6	28%	38	48	10	27%
EAST BOUND	Left	0	0	0	#DIV/0!	2	3	1	27%
	Through	238	305	67	28%	324	411	87	27%
	Right	11	14	3	28%	26	33	7	27%
	EB Total	249	319	70	28%	352	447	95	27%
WEST BOUND	Left	15	19	4	28%	10	13	3	27%
	Through	413	529	116	28%	299	380	81	27%
	Right	4	5	1	28%	3	4	1	27%
	WB Total	432	553	121	28%	312	396	84	27%
TOTAL ENTERING VOLUME		917	1,174	256.76	28%	1,006	1,278	272	27%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	29	48			
North Leg	Outbound	6	6			
North Leg	**TOTAL**	**36**	**55**	**5%**	**7%**	**744**
South Leg	Inbound	273	386			
South Leg	Outbound	33	46			
South Leg	**TOTAL**	**306**	**432**	**6%**	**9%**	**5,059**
East Leg	Inbound	553	396			
East Leg	Outbound	511	737			
East Leg	**TOTAL**	**1,064**	**1,133**	**8%**	**9%**	**13,273**
West Leg	Inbound	319	447			
West Leg	Outbound	623	489			
West Leg	**TOTAL**	**942**	**936**	**9%**	**9%**	**10,967**
OVERALL TOTAL		***2,348***	***2,555***	**8%**	***9%***	***30,043***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 NP - Without Connection\[04 Highgrove_Center.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Primer St. / Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	275	352	77	28%	267	339	373	27%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	103	132	29	28%	154	196	215	27%
	SB Total	378	484	106	28%	421	535	114	27%
EAST BOUND	Left	155	198	43	28%	164	208	229	27%
	Through	500	640	140	28%	670	851	181	27%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	655	838	183	28%	834	1,059	225	27%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	362	463	101	28%	498	632	134	27%
	Right	357	457	100	28%	571	725	798	27%
	WB Total	719	920	201	28%	1,069	1,358	289	27%
TOTAL ENTERING VOLUME		1,752	2,243	490.56	28%	2,324	2,951	627	27%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	484	535			
North Leg	Outbound	655	933			
North Leg	**TOTAL**	**1,139**	**1,468**	**10%**	**12%**	**11,794**
South Leg	Inbound	0	0			
South Leg	Outbound	0	0			
South Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
East Leg	Inbound	920	1,358			
East Leg	Outbound	992	1,190			
East Leg	**TOTAL**	**1,912**	**2,548**	**8%**	**11%**	**22,930**
West Leg	Inbound	838	1,059			
West Leg	Outbound	595	828			
West Leg	**TOTAL**	**1,434**	**1,887**	**9%**	**12%**	**15,160**
OVERALL TOTAL		***4,485***	***5,903***	**9%**	***12%***	***49,884***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 NP - Without Connection\[05 Primer_Columbia.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: West La Cadena Dr. / I-215 SB Ramps / Interchange Dr.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	11	14	3	28%	20	25	5	27%
	Through	252	323	71	28%	182	231	49	27%
	Right	2	3	1	28%	6	8	2	27%
	NB Total	265	339	74	28%	208	264	56	27%
SOUTH BOUND	Left	88	113	25	28%	115	146	31	27%
	Through	417	534	117	28%	613	779	166	27%
	Right	5	6	1	28%	7	9	2	27%
	SB Total	510	653	143	28%	735	933	198	27%
EAST BOUND	Left	5	6	1	28%	2	3	1	27%
	Through	22	28	6	28%	164	208	44	27%
	Right	13	17	4	28%	9	11	2	27%
	EB Total	40	51	11	28%	175	222	47	27%
WEST BOUND	Left	246	315	69	28%	250	318	68	27%
	Through	31	40	9	28%	61	77	16	27%
	Right	149	191	42	28%	174	221	47	27%
	WB Total	426	545	119	28%	485	616	131	27%
TOTAL ENTERING VOLUME		1,241	1,588	347.48	28%	1,603	2,036	433	27%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	653	933			
North Leg	Outbound	520	455			
North Leg	**TOTAL**	**1,172**	**1,388**	**17%**	**20%**	**6,969**
South Leg	Inbound	339	264			
South Leg	Outbound	865	1,107			
South Leg	**TOTAL**	**1,204**	**1,372**	**51%**	**58%**	**2,381**
East Leg	Inbound	545	616			
East Leg	Outbound	143	362			
East Leg	**TOTAL**	**689**	**978**	**7%**	**10%**	**9,775**
West Leg	Inbound	51	222			
West Leg	Outbound	60	112			
West Leg	**TOTAL**	**111**	**334**	**1%**	**3%**	**9,891**
OVERALL TOTAL		***3,177***	***4,072***	**11%**	***14%***	***29,016***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 NP - Without Connection\[06 La Cadena 215 SB.xls]Output (3)

Project: Northside Specific Plan
Scenario: Horizon Year (2040)

Job #: 10322
Analyst: RV
Date: 08/12/19

LOCATION: East La Cadena Dr. / I-215 NB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	370	474	104	28%	589	748	159	27%
	Through	82	105	23	28%	119	151	32	27%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	452	579	127	28%	708	899	191	27%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	128	164	36	28%	233	296	63	27%
	Right	17	22	5	28%	53	67	14	27%
	SB Total	145	186	41	28%	286	363	77	27%
EAST BOUND	Left	153	196	43	28%	59	75	16	27%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	542	694	152	28%	242	307	65	27%
	EB Total	695	890	195	28%	301	382	81	27%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,292	1,654	361.76	28%	1,295	1,645	350	27%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	186	363			
North Leg	Outbound	301	226			
North Leg	**TOTAL**	**486**	**589**	**69%**	**84%**	**704**
South Leg	Inbound	579	899			
South Leg	Outbound	858	603			
South Leg	**TOTAL**	**1,436**	**1,502**	**8%**	**9%**	**17,603**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	890	382			
West Leg	Outbound	495	815			
West Leg	**TOTAL**	**1,385**	**1,198**	**10%**	**9%**	**14,032**
OVERALL TOTAL		***3,308***	***3,289***	**10%**	***10%***	***32,339***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 NP - Without Connection\[07 La Cadena_215NB.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	22	28	6	28%	27	34	7	27%
	Through	42	54	12	28%	86	109	23	27%
	Right	42	54	12	28%	22	28	6	27%
	NB Total	106	136	30	28%	135	171	36	27%
SOUTH BOUND	Left	392	502	110	28%	175	222	47	27%
	Through	22	28	6	28%	64	81	17	27%
	Right	256	328	72	28%	236	300	64	27%
	SB Total	670	858	188	28%	475	603	128	27%
EAST BOUND	Left	125	160	35	28%	186	236	50	27%
	Through	628	804	176	28%	710	902	192	27%
	Right	22	28	6	28%	41	52	11	27%
	EB Total	775	992	217	28%	937	1,190	253	27%
WEST BOUND	Left	20	26	6	28%	35	44	9	27%
	Through	441	564	123	28%	806	1,024	218	27%
	Right	285	365	80	28%	436	554	118	27%
	WB Total	746	955	209	28%	1,277	1,622	345	27%
TOTAL ENTERING VOLUME		2,297	2,940	643.16	28%	2,824	3,586	762	27%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	858	603			
North Leg	Outbound	579	899			
North Leg	**TOTAL**	**1,436**	**1,502**	**8%**	**9%**	**17,603**
South Leg	Inbound	136	171			
South Leg	Outbound	82	178			
South Leg	**TOTAL**	**218**	**349**	**5%**	**9%**	**4,092**
East Leg	Inbound	955	1,622			
East Leg	Outbound	1,359	1,152			
East Leg	**TOTAL**	**2,314**	**2,774**	**7%**	**9%**	**32,498**
West Leg	Inbound	992	1,190			
West Leg	Outbound	920	1,358			
West Leg	**TOTAL**	**1,912**	**2,548**	**6%**	**9%**	**29,849**
OVERALL TOTAL		***5,880***	***7,173***	***7%***	***9%***	***84,042***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St. / Placentia Ln.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	2	2	0	0%	2	2	0	10%
	Through	498	548	50	10%	749	863	114	15%
	Right	39	50	11	28%	88	107	19	22%
	NB Total	539	600	61	11%	839	972	133	16%
SOUTH BOUND	Left	71	100	29	41%	174	186	12	7%
	Through	719	836	117	16%	923	1,015	92	10%
	Right	5	6	1	20%	0	0	0	#DIV/0!
	SB Total	795	942	147	18%	1,097	1,201	104	10%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	1	1	0	10%
	Right	0	0	0	#DIV/0!	1	1	0	10%
	EB Total	0	0	0	#DIV/0!	2	2	0	10%
WEST BOUND	Left	46	54	8	17%	29	49	20	69%
	Through	1	1	0	0%	1	1	0	10%
	Right	114	124	10	9%	98	171	73	74%
	WB Total	161	179	18	11%	128	221	93	73%
TOTAL ENTERING VOLUME		1,495	1,721	225.8	15%	2,066	2,397	331	16%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	942	1,201			
North Leg	Outbound	672	1,034			
North Leg	**TOTAL**	**1,614**	**2,235**	**6%**	**9%**	**24,983**
South Leg	Inbound	600	972			
South Leg	Outbound	890	1,065			
South Leg	**TOTAL**	**1,490**	**2,038**	**7%**	**9%**	**22,126**
East Leg	Inbound	179	221			
East Leg	Outbound	150	294			
East Leg	**TOTAL**	**329**	**515**	**7%**	**10%**	**5,047**
West Leg	Inbound	0	2			
West Leg	Outbound	9	3			
West Leg	**TOTAL**	**9**	**6**	**16%**	**10%**	**55**
OVERALL TOTAL		***3,442***	***4,794***	***7%***	***9%***	***52,211***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Garner Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	58	60	2	3%	7	8	1	10%
	Through	825	908	83	10%	812	940	128	16%
	Right	17	41	24	141%	4	7	3	75%
	NB Total	900	1,009	109	12%	823	955	132	16%
SOUTH BOUND	Left	28	66	38	136%	8	13	5	63%
	Through	715	831	116	16%	1,017	1,119	102	10%
	Right	30	30	0	0%	7	8	1	10%
	SB Total	773	927	154	20%	1,032	1,139	107	10%
EAST BOUND	Left	6	6	0	0%	31	32	1	3%
	Through	1	2	1	100%	0	0	0	#DIV/0!
	Right	19	23	4	21%	58	58	0	0%
	EB Total	26	31	5	19%	89	90	1	1%
WEST BOUND	Left	3	6	3	100%	7	12	5	71%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	9	15	6	67%	4	7	3	75%
	WB Total	12	21	9	75%	11	19	8	73%
TOTAL ENTERING VOLUME		1,711	1,988	276.5	16%	1,955	2,203	248	13%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	927	1,139			
North Leg	Outbound	929	979			
North Leg	**TOTAL**	**1,856**	**2,118**	**8%**	**10%**	**22,126**
South Leg	Inbound	1,009	955			
South Leg	Outbound	860	1,189			
South Leg	**TOTAL**	**1,869**	**2,143**	**8%**	**9%**	**24,524**
East Leg	Inbound	21	19			
East Leg	Outbound	109	20			
East Leg	**TOTAL**	**130**	**39**	**7%**	**2%**	**1,969**
West Leg	Inbound	31	90			
West Leg	Outbound	90	15			
West Leg	**TOTAL**	**121**	**105**	**11%**	**10%**	**1,089**
OVERALL TOTAL		***3,975***	***4,406***	***8%***	***9%***	***49,708***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	14	17	3	21%	41	53	12	29%
	Through	731	804	73	10%	616	665	49	8%
	Right	132	188	56	42%	145	171	26	18%
	NB Total	877	1,009	132	15%	802	889	87	11%
SOUTH BOUND	Left	219	361	142	65%	443	492	49	11%
	Through	590	594	4	1%	776	854	78	10%
	Right	7	10	3	43%	21	26	5	24%
	SB Total	816	965	149	18%	1,240	1,372	132	11%
EAST BOUND	Left	16	24	8	50%	18	21	3	17%
	Through	122	271	149	122%	110	143	33	30%
	Right	60	81	21	35%	32	35	3	9%
	EB Total	198	376	178	90%	160	199	39	24%
WEST BOUND	Left	108	115	7	6%	144	212	68	47%
	Through	50	73	23	46%	91	176	85	93%
	Right	224	258	34	15%	138	222	84	61%
	WB Total	382	446	64	17%	373	610	237	64%
TOTAL ENTERING VOLUME		2,273	2,796	523.1	23%	2,575	3,070	495	19%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	965	1,372			
North Leg	Outbound	1,086	908			
North Leg	**TOTAL**	**2,051**	**2,280**	**8%**	**9%**	**24,524**
South Leg	Inbound	1,009	889			
South Leg	Outbound	790	1,101			
South Leg	**TOTAL**	**1,799**	**1,990**	**8%**	**9%**	**22,494**
East Leg	Inbound	446	610			
East Leg	Outbound	820	806			
East Leg	**TOTAL**	**1,266**	**1,416**	**7%**	**8%**	**18,807**
West Leg	Inbound	376	199			
West Leg	Outbound	100	255			
West Leg	**TOTAL**	**476**	**454**	**6%**	**6%**	**7,806**
OVERALL TOTAL		***5,592***	***6,139***	**8%**	***8%***	***73,631***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Strong St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	19	20	1	5%	32	46	14	44%
	Through	678	661	-17	-3%	837	951	114	14%
	Right	54	127	73	135%	74	119	45	61%
	NB Total	751	808	57	8%	943	1,116	173	18%
SOUTH BOUND	Left	18	41	23	128%	43	47	4	9%
	Through	716	762	46	6%	817	899	82	10%
	Right	67	69	2	3%	53	52	-1	-2%
	SB Total	801	872	71	9%	913	998	85	9%
EAST BOUND	Left	76	84	8	10%	91	100	9	10%
	Through	54	91	37	69%	154	204	50	32%
	Right	54	59	5	10%	50	55	5	10%
	EB Total	184	234	50	27%	295	359	64	22%
WEST BOUND	Left	15	17	2	10%	31	37	6	19%
	Through	51	56	5	10%	52	62	10	19%
	Right	17	19	2	10%	36	34	-2	-6%
	WB Total	83	91	8	10%	119	133	14	12%
TOTAL ENTERING VOLUME		1,819	2,005	186.3	10%	2,270	2,606	336	15%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	872	998			
North Leg	Outbound	763	1,085			
North Leg	**TOTAL**	**1,635**	**2,083**	**8%**	**11%**	**19,292**
South Leg	Inbound	808	1,116			
South Leg	Outbound	838	991			
South Leg	**TOTAL**	**1,646**	**2,107**	**7%**	**9%**	**22,756**
East Leg	Inbound	91	133			
East Leg	Outbound	259	370			
East Leg	**TOTAL**	**350**	**503**	**9%**	**12%**	**4,039**
West Leg	Inbound	234	359			
West Leg	Outbound	145	160			
West Leg	**TOTAL**	**379**	**519**	**11%**	**15%**	**3,504**
OVERALL TOTAL		***4,011***	***5,212***	***8%***	***11%***	***49,591***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Oakley Av./SR-60 WB On Ramp
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	126	228	102	81%	244	462	218	89%
	Through	423	534	111	26%	626	865	239	38%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	549	762	213	39%	870	1,327	457	53%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	781	853	72	9%	766	771	5	1%
	Right	121	133	12	10%	189	193	4	2%
	SB Total	902	986	84	9%	955	964	9	1%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	52	89	37	71%	65	79	14	22%
	Through	75	97	22	29%	150	186	36	24%
	Right	463	509	46	10%	380	418	38	10%
	WB Total	590	695	105	18%	595	683	88	15%
TOTAL ENTERING VOLUME		2,041	2,443	402.4	20%	2,420	2,974	554	23%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	986	964			
North Leg	Outbound	1,043	1,283			
North Leg	**TOTAL**	**2,029**	**2,247**	**10%**	**11%**	**21,007**
South Leg	Inbound	762	1,327			
South Leg	Outbound	942	850			
South Leg	**TOTAL**	**1,704**	**2,177**	**8%**	**10%**	**22,195**
East Leg	Inbound	695	683			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**695**	**683**	**19%**	**19%**	**3,655**
West Leg	Inbound	0	0			
West Leg	Outbound	458	841			
West Leg	**TOTAL**	**458**	**841**	**6%**	**11%**	**7,930**
OVERALL TOTAL		***4,887***	***5,948***	**9%**	***11%***	***54,787***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./SR-60 EB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	396	495	99	25%	762	1,185	423	56%
	Right	202	222	20	10%	172	199	27	16%
	NB Total	598	717	119	20%	934	1,384	450	48%
SOUTH BOUND	Left	420	459	39	9%	328	361	33	10%
	Through	413	480	67	16%	503	546	43	9%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	833	939	106	13%	831	907	76	9%
EAST BOUND	Left	153	275	122	80%	108	145	37	34%
	Through	0	0	0	#DIV/0!	9	9	0	0%
	Right	151	230	79	52%	182	214	32	18%
	EB Total	304	505	201	66%	299	368	69	23%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,735	2,161	426.2	25%	2,064	2,659	595	29%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	939	907			
North Leg	Outbound	770	1,330			
North Leg	**TOTAL**	**1,709**	**2,237**	**8%**	**10%**	**22,196**
South Leg	Inbound	717	1,384			
South Leg	Outbound	710	760			
South Leg	**TOTAL**	**1,427**	**2,144**	**9%**	**13%**	**16,290**
East Leg	Inbound	0	0			
East Leg	Outbound	681	569			
East Leg	**TOTAL**	**681**	**569**	**14%**	**11%**	**5,029**
West Leg	Inbound	505	368			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**505**	**368**	**12%**	**9%**	**4,115**
OVERALL TOTAL		***4,322***	***5,318***	**9%**	***11%***	***47,630***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 NP - Without Connection\[14 Main_60 EB.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Spruce St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	4	4	0	10%	3	3	0	10%
	Through	370	407	37	10%	565	693	128	23%
	Right	11	12	1	10%	33	36	3	10%
	NB Total	385	424	39	10%	601	733	132	22%
SOUTH BOUND	Left	104	222	118	113%	107	193	86	80%
	Through	392	412	20	5%	410	451	41	10%
	Right	12	16	4	33%	12	25	13	108%
	SB Total	508	650	142	28%	529	669	140	26%
EAST BOUND	Left	20	28	8	40%	51	124	73	143%
	Through	47	76	29	62%	156	178	22	14%
	Right	20	22	2	10%	24	26	2	10%
	EB Total	87	126	39	45%	231	328	97	42%
WEST BOUND	Left	44	52	8	18%	48	53	5	10%
	Through	53	81	28	53%	28	43	15	54%
	Right	85	180	95	112%	81	233	152	188%
	WB Total	182	313	131	72%	157	329	172	109%
TOTAL ENTERING VOLUME		1,162	1,513	350.5	30%	1,518	2,059	541	36%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	650	669			
North Leg	Outbound	615	1,050			
North Leg	**TOTAL**	**1,265**	**1,719**	**9%**	**12%**	**13,897**
South Leg	Inbound	424	733			
South Leg	Outbound	486	530			
South Leg	**TOTAL**	**910**	**1,263**	**8%**	**11%**	**11,383**
East Leg	Inbound	313	329			
East Leg	Outbound	310	407			
East Leg	**TOTAL**	**623**	**736**	**7%**	**8%**	**9,271**
West Leg	Inbound	126	328			
West Leg	Outbound	101	71			
West Leg	**TOTAL**	**227**	**400**	**6%**	**10%**	**4,114**
OVERALL TOTAL		***3,025***	***4,118***	***8%***	***11%***	***38,665***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Oakley Av./SR-60 WB Off Ramp
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	37	41	4	10%	89	91	2	2%
	Through	185	204	19	10%	248	249	1	0%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	222	244	22	10%	337	340	3	1%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	275	280	5	2%	304	334	30	10%
	Right	118	120	2	2%	92	101	9	10%
	SB Total	393	400	7	2%	396	436	40	10%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	88	90	2	2%	71	76	5	7%
	Through	450	464	14	3%	440	457	17	4%
	Right	62	66	4	6%	241	247	6	2%
	WB Total	600	620	20	3%	752	780	28	4%
TOTAL ENTERING VOLUME		1,215	1,264	49.2	4%	1,485	1,556	71	5%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	400	436			
North Leg	Outbound	270	496			
North Leg	**TOTAL**	**670**	**932**	**13%**	**18%**	**5,209**
South Leg	Inbound	244	340			
South Leg	Outbound	370	410			
South Leg	**TOTAL**	**614**	**750**	**15%**	**18%**	**4,190**
East Leg	Inbound	620	780			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**620**	**780**	**14%**	**18%**	**4,425**
West Leg	Inbound	0	0			
West Leg	Outbound	625	649			
West Leg	**TOTAL**	**625**	**649**	**17%**	**18%**	**3,655**
OVERALL TOTAL		***2,528***	***3,111***	**14%**	***18%***	***17,479***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Strong St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	30	33	3	10%	60	66	6	10%
	Through	107	123	16	15%	267	294	27	10%
	Right	34	37	3	10%	115	119	4	3%
	NB Total	171	193	22	13%	442	479	37	8%
SOUTH BOUND	Left	4	4	0	0%	5	6	1	20%
	Through	207	209	2	1%	202	222	20	10%
	Right	29	36	7	24%	16	18	2	13%
	SB Total	240	249	9	4%	223	246	23	10%
EAST BOUND	Left	55	144	89	162%	94	135	41	44%
	Through	22	34	12	55%	89	135	46	52%
	Right	55	82	27	49%	67	74	7	10%
	EB Total	132	260	128	97%	250	344	94	37%
WEST BOUND	Left	63	69	6	10%	67	74	7	10%
	Through	28	31	3	10%	37	43	6	16%
	Right	6	10	4	67%	2	2	0	0%
	WB Total	97	110	13	14%	106	119	13	12%
TOTAL ENTERING VOLUME		640	813	172.5	27%	1,021	1,187	166	16%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	249	246			
North Leg	Outbound	277	431			
North Leg	**TOTAL**	**526**	**677**	**12%**	**16%**	**4,248**
South Leg	Inbound	193	479			
South Leg	Outbound	360	370			
South Leg	**TOTAL**	**554**	**848**	**11%**	**16%**	**5,209**
East Leg	Inbound	110	119			
East Leg	Outbound	75	260			
East Leg	**TOTAL**	**186**	**379**	**9%**	**18%**	**2,058**
West Leg	Inbound	260	344			
West Leg	Outbound	100	127			
West Leg	**TOTAL**	**360**	**471**	**9%**	**12%**	**4,039**
OVERALL TOTAL		***1,625***	***2,375***	**10%**	***15%***	***15,554***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	27	30	3	10%	37	41	4	10%
	Through	79	86	7	9%	172	189	17	10%
	Right	105	168	63	60%	133	145	12	9%
	NB Total	211	284	73	34%	342	375	33	10%
SOUTH BOUND	Left	39	63	24	62%	36	59	23	64%
	Through	89	98	9	10%	83	91	8	10%
	Right	25	28	3	10%	21	32	11	52%
	SB Total	153	188	35	23%	140	182	42	30%
EAST BOUND	Left	34	41	7	21%	69	73	4	6%
	Through	468	839	371	79%	588	686	98	17%
	Right	20	22	2	10%	22	24	2	10%
	EB Total	522	902	380	73%	679	783	104	15%
WEST BOUND	Left	69	89	20	29%	127	140	13	10%
	Through	362	432	70	19%	408	692	284	70%
	Right	23	33	10	43%	52	88	36	69%
	WB Total	454	554	100	22%	587	920	333	57%
TOTAL ENTERING VOLUME		1,340	1,928	588.1	44%	1,748	2,260	512	29%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	188	182			
North Leg	Outbound	160	350			
North Leg	**TOTAL**	**348**	**533**	**7%**	**11%**	**4,984**
South Leg	Inbound	284	375			
South Leg	Outbound	209	255			
South Leg	**TOTAL**	**493**	**630**	**16%**	**20%**	**3,106**
East Leg	Inbound	554	920			
East Leg	Outbound	1,070	890			
East Leg	**TOTAL**	**1,624**	**1,810**	**7%**	**8%**	**22,369**
West Leg	Inbound	902	783			
West Leg	Outbound	489	765			
West Leg	**TOTAL**	**1,391**	**1,548**	**7%**	**8%**	**18,807**
OVERALL TOTAL		***3,856***	***4,520***	***8%***	***9%***	***49,266***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Garner Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	2	4	2	100%
	Through	67	95	28	42%	138	175	37	27%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	67	95	28	42%	140	179	39	28%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	57	85	28	49%	87	105	18	21%
	Right	1	1	0	10%	4	6	2	50%
	SB Total	58	86	28	48%	91	111	20	22%
EAST BOUND	Left	0	0	0	#DIV/0!	6	11	5	83%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	3	3	0	10%	4	9	5	125%
	EB Total	3	3	0	10%	10	20	10	100%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		128	184	56.4	44%	241	310	69	29%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	86	111			
North Leg	Outbound	95	186			
North Leg	**TOTAL**	**181**	**297**	**6%**	**10%**	**2,868**
South Leg	Inbound	95	179			
South Leg	Outbound	88	114			
South Leg	**TOTAL**	**183**	**293**	**5%**	**8%**	**3,826**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**0%**	**0%**	**446**
West Leg	Inbound	3	20			
West Leg	Outbound	1	10			
West Leg	**TOTAL**	**4**	**30**	**0%**	**1%**	**2,016**
OVERALL TOTAL		***369***	***620***	**4%**	***7%***	***9,156***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	5	6	1	10%	10	11	1	10%
	Through	3	3	0	10%	0	0	0	#DIV/0!
	Right	55	101	46	84%	140	224	84	60%
	NB Total	63	110	47	74%	150	235	85	57%
SOUTH BOUND	Left	1	1	0	10%	10	23	13	130%
	Through	3	3	0	10%	4	4	0	10%
	Right	3	3	0	10%	1	1	0	10%
	SB Total	7	8	1	10%	15	29	14	90%
EAST BOUND	Left	6	7	1	10%	0	0	0	#DIV/0!
	Through	90	178	88	98%	244	343	99	41%
	Right	2	2	0	10%	14	15	1	10%
	EB Total	98	187	89	91%	258	358	100	39%
WEST BOUND	Left	58	95	37	64%	60	89	29	48%
	Through	150	192	42	28%	80	169	89	111%
	Right	7	20	13	186%	3	3	0	10%
	WB Total	215	307	92	43%	143	261	118	83%
TOTAL ENTERING VOLUME		383	611	228.3	60%	566	883	317	56%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	8	29			
North Leg	Outbound	30	3			
North Leg	**TOTAL**	**38**	**32**	**18%**	**16%**	**205**
South Leg	Inbound	110	235			
South Leg	Outbound	101	109			
South Leg	**TOTAL**	**210**	**344**	**7%**	**12%**	**2,868**
East Leg	Inbound	307	261			
East Leg	Outbound	280	590			
East Leg	**TOTAL**	**587**	**851**	**7%**	**11%**	**7,940**
West Leg	Inbound	187	358			
West Leg	Outbound	201	181			
West Leg	**TOTAL**	**388**	**540**	**8%**	**11%**	**5,047**
OVERALL TOTAL		***1,223***	***1,766***	***8%***	***11%***	***16,060***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	08/12/19

LOCATION: Rivera St./Market St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	1	2	1	100%	1	3	2	200%
	Through	0	0	0	#DIV/0!	4	5	1	25%
	Right	5	8	3	60%	22	24	2	10%
	NB Total	6	10	4	67%	27	32	5	19%
SOUTH BOUND	Left	283	311	28	10%	243	267	24	10%
	Through	1	1	0	0%	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	284	312	28	10%	243	267	24	10%
EAST BOUND	Left	42	63	21	50%	87	165	78	90%
	Through	624	1,104	480	77%	729	1,125	396	54%
	Right	3	6	3	100%	1	2	1	100%
	EB Total	669	1,173	504	75%	817	1,292	475	58%
WEST BOUND	Left	11	13	2	18%	10	11	1	10%
	Through	511	678	167	33%	606	1,151	545	90%
	Right	325	358	33	10%	273	300	27	10%
	WB Total	847	1,049	202	24%	889	1,462	573	64%
TOTAL ENTERING VOLUME		1,806	2,544	737.8	41%	1,976	3,054	1078	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	312	267			
North Leg	Outbound	421	470			
North Leg	**TOTAL**	**733**	**738**	**13%**	**13%**	**5,591**
South Leg	Inbound	10	32			
South Leg	Outbound	20	13			
South Leg	**TOTAL**	**30**	**45**	**7%**	**10%**	**442**
East Leg	Inbound	1,049	1,462			
East Leg	Outbound	1,423	1,417			
East Leg	**TOTAL**	**2,472**	**2,879**	**8%**	**9%**	**30,843**
West Leg	Inbound	1,173	1,292			
West Leg	Outbound	680	1,154			
West Leg	**TOTAL**	**1,853**	**2,446**	**6%**	**8%**	**28,966**
OVERALL TOTAL		***5,088***	***6,108***	***8%***	***9%***	***65,842***

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE WITHOUT ORANGE STREET EXTENSION

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Stephens Av. / West Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	66	100	34	52%	85	124	39	46%
	Through	2	3	1	52%	4	6	2	46%
	Right	87	132	45	52%	85	124	39	46%
	NB Total	155	236	81	52%	174	254	80	46%
SOUTH BOUND	Left	16	24	8	52%	7	10	3	46%
	Through	13	20	7	52%	4	6	2	46%
	Right	3	5	2	52%	2	3	1	46%
	SB Total	32	49	17	52%	13	19	6	46%
EAST BOUND	Left	0	0	0	#DIV/0!	1	1	0	46%
	Through	146	222	76	52%	260	380	120	46%
	Right	72	109	37	52%	154	225	71	46%
	EB Total	218	331	113	52%	415	606	191	46%
WEST BOUND	Left	316	480	164	52%	233	340	107	46%
	Through	160	243	83	52%	144	210	66	46%
	Right	11	17	6	52%	8	12	4	46%
	WB Total	487	740	253	52%	385	562	177	46%
TOTAL ENTERING VOLUME		892	1,356	463.84	52%	987	1,441	454	46%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	49	19			
North Leg	Outbound	20	19			
North Leg	**TOTAL**	**68**	**38**	**15%**	**8%**	**458**
South Leg	Inbound	236	254			
South Leg	Outbound	610	571			
South Leg	**TOTAL**	**845**	**825**	**8%**	**8%**	**9,947**
East Leg	Inbound	740	562			
East Leg	Outbound	378	514			
East Leg	**TOTAL**	**1,119**	**1,076**	**9%**	**8%**	**12,975**
West Leg	Inbound	331	606			
West Leg	Outbound	348	337			
West Leg	**TOTAL**	**679**	**943**	**7%**	**10%**	**9,176**
OVERALL TOTAL		***2,712***	***2,882***	***8%***	***9%***	***32,555***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: West La Cadena Dr./I-215 SB Ramps/Stephens Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	31	47	16	52%	41	60	19	46%
	Through	64	97	33	52%	224	327	103	46%
	Right	21	32	11	52%	7	10	3	46%
	NB Total	116	176	60	52%	272	397	125	46%
SOUTH BOUND	Left	103	157	54	52%	108	158	50	46%
	Through	270	410	140	52%	354	517	163	46%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	373	567	194	52%	462	675	213	46%
EAST BOUND	Left	1	2	1	52%	1	1	0	46%
	Through	312	474	162	52%	244	356	112	46%
	Right	60	91	31	52%	80	117	37	46%
	EB Total	373	567	194	52%	325	475	150	46%
WEST BOUND	Left	47	71	24	52%	44	64	20	46%
	Through	94	143	49	52%	93	136	43	46%
	Right	4	6	2	52%	7	10	3	46%
	WB Total	145	220	75	52%	144	210	66	46%
TOTAL ENTERING VOLUME		1,007	1,531	523.64	52%	1,203	1,756	553	46%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	567	675			
North Leg	Outbound	105	339			
North Leg	**TOTAL**	**672**	**1,013**	**5%**	**8%**	**12,492**
South Leg	Inbound	176	397			
South Leg	Outbound	573	698			
South Leg	**TOTAL**	**749**	**1,095**	**6%**	**8%**	**13,500**
East Leg	Inbound	220	210			
East Leg	Outbound	663	524			
East Leg	**TOTAL**	**883**	**734**	**10%**	**8%**	**9,054**
West Leg	Inbound	567	475			
West Leg	Outbound	190	196			
West Leg	**TOTAL**	**757**	**670**	**9%**	**8%**	**8,262**
OVERALL TOTAL		***3,061***	***3,513***	***7%***	***8%***	***43,308***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr./I-215 NB Ramps/Highgrove Pl.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	33	50	17	52%	91	133	42	46%
	Right	43	65	22	52%	80	117	37	46%
	NB Total	76	116	40	52%	171	250	79	46%
SOUTH BOUND	Left	1	2	1	52%	0	0	0	#DIV/0!
	Through	70	106	36	52%	77	112	35	46%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	71	108	37	52%	77	112	35	46%
EAST BOUND	Left	28	43	15	52%	37	54	17	46%
	Through	169	257	88	52%	224	327	103	46%
	Right	43	65	22	52%	12	18	6	46%
	EB Total	240	365	125	52%	273	399	126	46%
WEST BOUND	Left	26	40	14	52%	30	44	14	46%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	6	9	3	46%
	WB Total	26	40	14	52%	36	53	17	46%
TOTAL ENTERING VOLUME		413	628	214.76	52%	557	813	256	46%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	108	112			
North Leg	Outbound	93	196			
North Leg	**TOTAL**	**201**	**308**	**5%**	**8%**	**3,798**
South Leg	Inbound	116	250			
South Leg	Outbound	211	174			
South Leg	**TOTAL**	**327**	**423**	**6%**	**8%**	**5,220**
East Leg	Inbound	40	53			
East Leg	Outbound	324	444			
East Leg	**TOTAL**	**363**	**496**	**6%**	**8%**	**6,120**
West Leg	Inbound	365	399			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**365**	**399**	**7%**	**8%**	**4,914**
OVERALL TOTAL		***1,256***	***1,626***	**6%**	***8%***	***20,052***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 1 - Without Connection\[03 La Cadena_215 NB_Highgrove.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Highgrove Pl. / West Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	54	82	28	52%	54	79	25	46%
	Through	1	2	1	52%	0	0	0	#DIV/0!
	Right	158	240	82	52%	250	365	115	46%
	NB Total	213	324	111	52%	304	444	140	46%
SOUTH BOUND	Left	3	5	2	52%	6	9	3	46%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	20	30	10	52%	32	47	15	46%
	SB Total	23	35	12	52%	38	55	17	46%
EAST BOUND	Left	0	0	0	#DIV/0!	2	3	1	46%
	Through	238	362	124	52%	324	473	149	46%
	Right	11	17	6	52%	26	38	12	46%
	EB Total	249	378	129	52%	352	514	162	46%
WEST BOUND	Left	15	23	8	52%	10	15	5	46%
	Through	413	628	215	52%	299	437	138	46%
	Right	4	6	2	52%	3	4	1	46%
	WB Total	432	657	225	52%	312	456	144	46%
TOTAL ENTERING VOLUME		917	1,394	476.84	52%	1,006	1,469	463	46%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	35	55			
North Leg	Outbound	8	7			
North Leg	**TOTAL**	**43**	**63**	**5%**	**7%**	**900**
South Leg	Inbound	324	444			
South Leg	Outbound	40	53			
South Leg	**TOTAL**	**363**	**496**	**6%**	**8%**	**6,120**
East Leg	Inbound	657	456			
East Leg	Outbound	606	847			
East Leg	**TOTAL**	**1,263**	**1,302**	**8%**	**8%**	**16,056**
West Leg	Inbound	378	514			
West Leg	Outbound	740	562			
West Leg	**TOTAL**	**1,119**	**1,076**	**8%**	**8%**	**13,266**
OVERALL TOTAL		***2,788***	***2,938***	***8%***	***8%***	***36,342***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Primer St. / Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	275	418	143	52%	267	390	429	46%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	103	157	54	52%	154	225	247	46%
	SB Total	378	575	197	52%	421	615	194	46%
EAST BOUND	Left	155	236	81	52%	164	239	263	46%
	Through	500	760	260	52%	670	978	308	46%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	655	996	341	52%	834	1,218	384	46%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	362	550	188	52%	498	727	229	46%
	Right	357	543	186	52%	571	834	917	46%
	WB Total	719	1,093	374	52%	1,069	1,561	492	46%
TOTAL ENTERING VOLUME		1,752	2,663	911.04	52%	2,324	3,393	1069	46%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	575	615			
North Leg	Outbound	778	1,073			
North Leg	**TOTAL**	**1,353**	**1,688**	**9%**	**12%**	**14,267**
South Leg	Inbound	0	0			
South Leg	Outbound	0	0			
South Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
East Leg	Inbound	1,093	1,561			
East Leg	Outbound	1,178	1,368			
East Leg	**TOTAL**	**2,271**	**2,929**	**8%**	**11%**	**27,738**
West Leg	Inbound	996	1,218			
West Leg	Outbound	707	952			
West Leg	**TOTAL**	**1,702**	**2,170**	**9%**	**12%**	**18,339**
OVERALL TOTAL		***5,326***	***6,786***	**9%**	***11%***	***60,344***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: West La Cadena Dr. / I-215 SB Ramps / Interchange Dr.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	11	17	6	52%	20	29	9	46%
	Through	252	383	131	52%	182	266	84	46%
	Right	2	3	1	52%	6	9	3	46%
	NB Total	265	403	138	52%	208	304	96	46%
SOUTH BOUND	Left	88	134	46	52%	115	168	53	46%
	Through	417	634	217	52%	613	895	282	46%
	Right	5	8	3	52%	7	10	3	46%
	SB Total	510	775	265	52%	735	1,073	338	46%
EAST BOUND	Left	5	8	3	52%	2	3	1	46%
	Through	22	33	11	52%	164	239	75	46%
	Right	13	20	7	52%	9	13	4	46%
	EB Total	40	61	21	52%	175	256	81	46%
WEST BOUND	Left	246	374	128	52%	250	365	115	46%
	Through	31	47	16	52%	61	89	28	46%
	Right	149	226	77	52%	174	254	80	46%
	WB Total	426	648	222	52%	485	708	223	46%
TOTAL ENTERING VOLUME		1,241	1,886	645.32	52%	1,603	2,340	737	46%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	775	1,073			
North Leg	Outbound	617	523			
North Leg	**TOTAL**	**1,392**	**1,596**	**17%**	**19%**	**8,430**
South Leg	Inbound	403	304			
South Leg	Outbound	1,028	1,273			
South Leg	**TOTAL**	**1,430**	**1,577**	**50%**	**55%**	**2,880**
East Leg	Inbound	648	708			
East Leg	Outbound	170	416			
East Leg	**TOTAL**	**818**	**1,124**	**7%**	**10%**	**11,825**
West Leg	Inbound	61	256			
West Leg	Outbound	71	128			
West Leg	**TOTAL**	**132**	**384**	**1%**	**3%**	**11,966**
OVERALL TOTAL		***3,773***	***4,681***	**11%**	***13%***	***35,100***

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Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr. / I-215 NB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	370	562	192	52%	589	860	271	46%
	Through	82	125	43	52%	119	174	55	46%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	452	687	235	52%	708	1,034	326	46%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	128	195	67	52%	233	340	107	46%
	Right	17	26	9	52%	53	77	24	46%
	SB Total	145	220	75	52%	286	418	132	46%
EAST BOUND	Left	153	233	80	52%	59	86	27	46%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	542	824	282	52%	242	353	111	46%
	EB Total	695	1,056	361	52%	301	439	138	46%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,292	1,964	671.84	52%	1,295	1,891	596	46%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	220	418			
North Leg	Outbound	357	260			
North Leg	**TOTAL**	**578**	**677**	**68%**	**80%**	**852**
South Leg	Inbound	687	1,034			
South Leg	Outbound	1,018	694			
South Leg	**TOTAL**	**1,705**	**1,727**	**8%**	**8%**	**21,294**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	1,056	439			
West Leg	Outbound	588	937			
West Leg	**TOTAL**	**1,645**	**1,377**	**10%**	**8%**	**16,974**
OVERALL TOTAL		***3,928***	***3,781***	**10%**	***10%***	***39,120***

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Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	22	33	11	52%	27	39	12	46%
	Through	42	64	22	52%	86	126	40	46%
	Right	42	64	22	52%	22	32	10	46%
	NB Total	106	161	55	52%	135	197	62	46%
SOUTH BOUND	Left	392	596	204	52%	175	256	81	46%
	Through	22	33	11	52%	64	93	29	46%
	Right	256	389	133	52%	236	345	109	46%
	SB Total	670	1,018	348	52%	475	694	219	46%
EAST BOUND	Left	125	190	65	52%	186	272	86	46%
	Through	628	955	327	52%	710	1,037	327	46%
	Right	22	33	11	52%	41	60	19	46%
	EB Total	775	1,178	403	52%	937	1,368	431	46%
WEST BOUND	Left	20	30	10	52%	35	51	16	46%
	Through	441	670	229	52%	806	1,177	371	46%
	Right	285	433	148	52%	436	637	201	46%
	WB Total	746	1,134	388	52%	1,277	1,864	587	46%
TOTAL ENTERING VOLUME		2,297	3,491	1194.44	52%	2,824	4,123	1299	46%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,018	694			
North Leg	Outbound	687	1,034			
North Leg	**TOTAL**	**1,705**	**1,727**	**8%**	**8%**	**21,294**
South Leg	Inbound	161	197			
South Leg	Outbound	97	204			
South Leg	**TOTAL**	**258**	**402**	**5%**	**8%**	**4,950**
East Leg	Inbound	1,134	1,864			
East Leg	Outbound	1,614	1,324			
East Leg	**TOTAL**	**2,748**	**3,189**	**7%**	**8%**	**39,312**
West Leg	Inbound	1,178	1,368			
West Leg	Outbound	1,093	1,561			
West Leg	**TOTAL**	**2,271**	**2,929**	**6%**	**8%**	**36,108**
OVERALL TOTAL		***6,983***	***8,246***	***7%***	***8%***	***101,664***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St. / Placentia Ln.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	2	2	0	0%	2	2	0	10%
	Through	498	548	50	10%	749	822	73	10%
	Right	39	46	7	18%	88	118	30	34%
	NB Total	539	596	57	11%	839	942	103	12%
SOUTH BOUND	Left	71	94	23	32%	174	217	43	25%
	Through	719	789	70	10%	923	923	0	0%
	Right	5	6	1	20%	0	0	0	#DIV/0!
	SB Total	795	889	94	12%	1,097	1,140	43	4%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	1	1	0	10%
	Right	0	0	0	#DIV/0!	1	1	0	10%
	EB Total	0	0	0	#DIV/0!	2	2	0	10%
WEST BOUND	Left	46	51	5	11%	29	49	20	69%
	Through	1	1	0	0%	1	1	0	10%
	Right	114	128	14	12%	98	171	73	74%
	WB Total	161	180	19	12%	128	221	93	73%
TOTAL ENTERING VOLUME		1,495	1,665	169.8	11%	2,066	2,306	240	12%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	889	1,140			
North Leg	Outbound	676	993			
North Leg	**TOTAL**	**1,565**	**2,133**	**6%**	**8%**	**27,259**
South Leg	Inbound	596	942			
South Leg	Outbound	840	973			
South Leg	**TOTAL**	**1,436**	**1,915**	**6%**	**8%**	**24,200**
East Leg	Inbound	180	221			
East Leg	Outbound	140	336			
East Leg	**TOTAL**	**320**	**557**	**6%**	**11%**	**5,249**
West Leg	Inbound	0	2			
West Leg	Outbound	9	3			
West Leg	**TOTAL**	**9**	**6**	**16%**	**10%**	**55**
OVERALL TOTAL		***3,330***	***4,611***	**6%**	***8%***	***56,763***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Garner Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	58	75	17	29%	7	7	0	0%
	Through	825	908	83	10%	812	951	139	17%
	Right	17	77	60	353%	4	35	31	775%
	NB Total	900	1,060	160	18%	823	993	170	21%
SOUTH BOUND	Left	28	51	23	82%	8	37	29	363%
	Through	715	914	199	28%	1,017	1,025	8	1%
	Right	30	33	3	10%	7	8	1	10%
	SB Total	773	998	225	29%	1,032	1,070	38	4%
EAST BOUND	Left	6	7	1	10%	31	34	3	10%
	Through	1	2	1	100%	0	0	0	#DIV/0!
	Right	19	30	11	58%	58	68	10	17%
	EB Total	26	39	13	48%	89	102	13	15%
WEST BOUND	Left	3	47	44	1467%	7	22	15	214%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	9	43	34	378%	4	8	4	100%
	WB Total	12	90	78	650%	11	30	19	173%
TOTAL ENTERING VOLUME		1,711	2,186	475.1	28%	1,955	2,195	240	12%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	998	1,070			
North Leg	Outbound	957	993			
North Leg	**TOTAL**	**1,955**	**2,063**	**8%**	**9%**	**24,200**
South Leg	Inbound	1,060	993			
South Leg	Outbound	991	1,115			
South Leg	**TOTAL**	**2,051**	**2,108**	**7%**	**7%**	**28,387**
East Leg	Inbound	90	30			
East Leg	Outbound	130	72			
East Leg	**TOTAL**	**220**	**102**	**2%**	**1%**	**9,195**
West Leg	Inbound	39	102			
West Leg	Outbound	108	15			
West Leg	**TOTAL**	**147**	**117**	**13%**	**11%**	**1,089**
OVERALL TOTAL		***4,372***	***4,390***	***7%***	***7%***	***62,871***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	14	18	4	29%	41	55	14	34%
	Through	731	804	73	10%	616	733	117	19%
	Right	132	173	41	31%	145	163	18	12%
	NB Total	877	995	118	13%	802	951	149	19%
SOUTH BOUND	Left	219	365	146	67%	443	481	38	9%
	Through	590	718	128	22%	776	854	78	10%
	Right	7	12	5	71%	21	27	6	29%
	SB Total	816	1,095	279	34%	1,240	1,362	122	10%
EAST BOUND	Left	16	23	7	44%	18	28	10	56%
	Through	122	242	120	98%	110	161	51	46%
	Right	60	87	27	45%	32	41	9	28%
	EB Total	198	352	154	78%	160	230	70	44%
WEST BOUND	Left	108	125	17	16%	144	185	41	28%
	Through	50	80	30	60%	91	160	69	76%
	Right	224	256	32	14%	138	216	78	57%
	WB Total	382	461	79	21%	373	561	188	50%
TOTAL ENTERING VOLUME		2,273	2,903	630.1	28%	2,575	3,104	529	21%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,095	1,362			
North Leg	Outbound	1,083	977			
North Leg	**TOTAL**	**2,178**	**2,339**	**8%**	**8%**	**28,387**
South Leg	Inbound	995	951			
South Leg	Outbound	930	1,080			
South Leg	**TOTAL**	**1,925**	**2,031**	**9%**	**9%**	**21,818**
East Leg	Inbound	461	561			
East Leg	Outbound	780	805			
East Leg	**TOTAL**	**1,241**	**1,366**	**7%**	**7%**	**18,556**
West Leg	Inbound	352	230			
West Leg	Outbound	110	242			
West Leg	**TOTAL**	**462**	**472**	**5%**	**6%**	**8,489**
OVERALL TOTAL		***5,806***	***6,207***	**8%**	***8%***	***77,250***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Strong St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	19	19	0	0%	32	41	9	28%
	Through	678	690	12	2%	837	1,019	182	22%
	Right	54	111	57	106%	74	128	54	73%
	NB Total	751	820	69	9%	943	1,188	245	26%
SOUTH BOUND	Left	18	50	32	178%	43	57	14	33%
	Through	716	895	179	25%	817	899	82	10%
	Right	67	89	22	33%	53	58	5	10%
	SB Total	801	1,034	233	29%	913	1,014	101	11%
EAST BOUND	Left	76	84	8	10%	91	93	2	2%
	Through	54	89	35	65%	154	225	71	46%
	Right	54	59	5	10%	50	55	5	10%
	EB Total	184	232	48	26%	295	373	78	26%
WEST BOUND	Left	15	15	0	0%	31	35	4	13%
	Through	51	52	1	2%	52	58	6	12%
	Right	17	18	1	6%	36	38	2	6%
	WB Total	83	85	2	2%	119	131	12	10%
TOTAL ENTERING VOLUME		1,819	2,171	352	19%	2,270	2,706	436	19%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,034	1,014			
North Leg	Outbound	792	1,150			
North Leg	**TOTAL**	**1,826**	**2,164**	**8%**	**10%**	**21,818**
South Leg	Inbound	820	1,188			
South Leg	Outbound	969	989			
South Leg	**TOTAL**	**1,789**	**2,177**	**8%**	**9%**	**23,257**
East Leg	Inbound	85	131			
East Leg	Outbound	250	410			
East Leg	**TOTAL**	**335**	**541**	**8%**	**13%**	**4,238**
West Leg	Inbound	232	373			
West Leg	Outbound	160	157			
West Leg	**TOTAL**	**392**	**530**	**11%**	**15%**	**3,654**
OVERALL TOTAL		***4,342***	***5,412***	***8%***	***10%***	***52,967***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Oakley Av./SR-60 WB On Ramp
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	126	257	131	104%	244	445	201	82%
	Through	423	501	78	18%	626	982	356	57%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	549	758	209	38%	870	1,427	557	64%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	781	919	138	18%	766	789	23	3%
	Right	121	185	64	53%	189	208	19	10%
	SB Total	902	1,104	202	22%	955	997	42	4%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	52	64	12	23%	65	79	14	22%
	Through	75	121	46	61%	150	164	14	9%
	Right	463	509	46	10%	380	418	38	10%
	WB Total	590	694	104	18%	595	661	66	11%
TOTAL ENTERING VOLUME		2,041	2,556	515.3	25%	2,420	3,085	665	27%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,104	997			
North Leg	Outbound	1,010	1,400			
North Leg	**TOTAL**	**2,114**	**2,397**	**9%**	**10%**	**23,631**
South Leg	Inbound	758	1,427			
South Leg	Outbound	983	868			
South Leg	**TOTAL**	**1,741**	**2,295**	**7%**	**10%**	**23,515**
East Leg	Inbound	694	661			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**694**	**661**	**19%**	**18%**	**3,655**
West Leg	Inbound	0	0			
West Leg	Outbound	563	817			
West Leg	**TOTAL**	**563**	**817**	**7%**	**10%**	**8,320**
OVERALL TOTAL		***5,113***	***6,170***	**9%**	***10%***	***59,121***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./SR-60 EB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	396	507	111	28%	762	1,260	498	65%
	Right	202	206	4	2%	172	184	12	7%
	NB Total	598	713	115	19%	934	1,444	510	55%
SOUTH BOUND	Left	420	494	74	18%	328	361	33	10%
	Through	413	504	91	22%	503	551	48	10%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	833	998	165	20%	831	912	81	10%
EAST BOUND	Left	153	253	100	65%	108	170	62	57%
	Through	0	0	0	#DIV/0!	9	9	0	0%
	Right	151	206	55	36%	182	209	27	15%
	EB Total	304	459	155	51%	299	388	89	30%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,735	2,170	435	25%	2,064	2,744	680	33%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	998	912			
North Leg	Outbound	760	1,430			
North Leg	**TOTAL**	**1,758**	**2,342**	**7%**	**10%**	**23,516**
South Leg	Inbound	713	1,444			
South Leg	Outbound	710	760			
South Leg	**TOTAL**	**1,423**	**2,204**	**9%**	**14%**	**16,311**
East Leg	Inbound	0	0			
East Leg	Outbound	700	554			
East Leg	**TOTAL**	**700**	**554**	**15%**	**12%**	**4,787**
West Leg	Inbound	459	388			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**459**	**388**	**11%**	**9%**	**4,345**
OVERALL TOTAL		***4,340***	***5,488***	**9%**	***11%***	***48,959***

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Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Spruce St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	4	4	0	10%	3	3	0	10%
	Through	370	373	3	1%	565	773	208	37%
	Right	11	12	1	10%	33	36	3	10%
	NB Total	385	390	5	1%	601	813	212	35%
SOUTH BOUND	Left	104	181	77	74%	107	175	68	64%
	Through	392	467	75	19%	410	451	41	10%
	Right	12	13	1	10%	12	13	1	8%
	SB Total	508	661	153	30%	529	639	110	21%
EAST BOUND	Left	20	24	4	20%	51	72	21	41%
	Through	47	83	36	77%	156	172	16	10%
	Right	20	24	4	20%	24	26	2	10%
	EB Total	87	131	44	51%	231	270	39	17%
WEST BOUND	Left	44	89	45	102%	48	53	5	10%
	Through	53	60	7	13%	28	35	7	25%
	Right	85	173	88	104%	81	216	135	167%
	WB Total	182	322	140	77%	157	304	147	94%
TOTAL ENTERING VOLUME		1,162	1,504	341.7	29%	1,518	2,025	507	33%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	661	639			
North Leg	Outbound	570	1,061			
North Leg	**TOTAL**	**1,231**	**1,700**	**9%**	**12%**	**13,918**
South Leg	Inbound	390	813			
South Leg	Outbound	580	530			
South Leg	**TOTAL**	**970**	**1,343**	**7%**	**10%**	**14,103**
East Leg	Inbound	322	304			
East Leg	Outbound	276	383			
East Leg	**TOTAL**	**598**	**687**	**7%**	**8%**	**8,658**
West Leg	Inbound	131	270			
West Leg	Outbound	78	51			
West Leg	**TOTAL**	**209**	**321**	**8%**	**12%**	**2,701**
OVERALL TOTAL		***3,007***	***4,051***	***8%***	***10%***	***39,380***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Oakley Av./SR-60 WB Off Ramp
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	37	41	4	10%	89	89	0	0%
	Through	185	204	19	10%	248	304	56	23%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	222	244	22	10%	337	393	56	17%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	275	314	39	14%	304	334	30	10%
	Right	118	143	25	21%	92	101	9	10%
	SB Total	393	457	64	16%	396	436	40	10%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	88	97	9	10%	71	71	0	0%
	Through	450	469	19	4%	440	438	-2	0%
	Right	62	64	2	3%	241	296	55	23%
	WB Total	600	630	30	5%	752	805	53	7%
TOTAL ENTERING VOLUME		1,215	1,331	116	10%	1,485	1,634	149	10%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	457	436			
North Leg	Outbound	268	600			
North Leg	**TOTAL**	**725**	**1,036**	**14%**	**20%**	**5,209**
South Leg	Inbound	244	393			
South Leg	Outbound	411	405			
South Leg	**TOTAL**	**655**	**798**	**16%**	**19%**	**4,190**
East Leg	Inbound	630	805			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**630**	**805**	**14%**	**18%**	**4,425**
West Leg	Inbound	0	0			
West Leg	Outbound	653	628			
West Leg	**TOTAL**	**653**	**628**	**18%**	**17%**	**3,655**
OVERALL TOTAL		***2,662***	***3,267***	**15%**	***19%***	***17,479***

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Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Strong St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	30	33	3	10%	60	66	6	10%
	Through	107	118	11	10%	267	357	90	34%
	Right	34	37	3	10%	115	138	23	20%
	NB Total	171	188	17	10%	442	561	119	27%
SOUTH BOUND	Left	4	6	2	50%	5	7	2	40%
	Through	207	256	49	24%	202	222	20	10%
	Right	29	38	9	31%	16	18	2	13%
	SB Total	240	300	60	25%	223	247	24	11%
EAST BOUND	Left	55	109	54	98%	94	170	76	81%
	Through	22	45	23	105%	89	145	56	63%
	Right	55	96	41	75%	67	74	7	10%
	EB Total	132	250	118	89%	250	389	139	55%
WEST BOUND	Left	63	69	6	10%	67	74	7	10%
	Through	28	30	2	7%	37	42	5	14%
	Right	6	7	1	17%	2	3	1	50%
	WB Total	97	106	9	10%	106	119	13	12%
TOTAL ENTERING VOLUME		640	844	204.4	32%	1,021	1,316	295	29%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	300	247			
North Leg	Outbound	234	530			
North Leg	**TOTAL**	**534**	**777**	**11%**	**16%**	**4,725**
South Leg	Inbound	188	561			
South Leg	Outbound	421	370			
South Leg	**TOTAL**	**609**	**931**	**12%**	**18%**	**5,209**
East Leg	Inbound	106	119			
East Leg	Outbound	88	290			
East Leg	**TOTAL**	**195**	**409**	**9%**	**18%**	**2,285**
West Leg	Inbound	250	389			
West Leg	Outbound	101	126			
West Leg	**TOTAL**	**351**	**515**	**8%**	**12%**	**4,238**
OVERALL TOTAL		***1,689***	***2,631***	**10%**	***16%***	***16,457***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	27	30	3	10%	37	41	4	10%
	Through	79	87	8	10%	172	241	69	40%
	Right	105	177	72	69%	133	139	6	5%
	NB Total	211	294	83	39%	342	421	79	23%
SOUTH BOUND	Left	39	266	227	582%	36	106	70	194%
	Through	89	117	28	31%	83	91	8	10%
	Right	25	49	24	96%	21	29	8	38%
	SB Total	153	432	279	182%	140	226	86	62%
EAST BOUND	Left	34	37	3	10%	69	108	39	57%
	Through	468	827	359	77%	588	686	98	17%
	Right	20	22	2	10%	22	24	2	10%
	EB Total	522	886	364	70%	679	818	139	21%
WEST BOUND	Left	69	76	7	10%	127	140	13	10%
	Through	362	438	76	21%	408	653	245	60%
	Right	23	50	27	117%	52	240	188	362%
	WB Total	454	564	110	24%	587	1,033	446	76%
TOTAL ENTERING VOLUME		1,340	2,176	835.9	62%	1,748	2,498	750	43%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	432	226			
North Leg	Outbound	174	589			
North Leg	**TOTAL**	**606**	**815**	**7%**	**10%**	**8,499**
South Leg	Inbound	294	421			
South Leg	Outbound	215	255			
South Leg	**TOTAL**	**509**	**676**	**16%**	**22%**	**3,106**
East Leg	Inbound	564	1,033			
East Leg	Outbound	1,270	931			
East Leg	**TOTAL**	**1,834**	**1,964**	**7%**	**8%**	**25,467**
West Leg	Inbound	886	818			
West Leg	Outbound	517	723			
West Leg	**TOTAL**	**1,403**	**1,541**	**8%**	**8%**	**18,556**
OVERALL TOTAL		***4,352***	***4,996***	***8%***	***9%***	***55,628***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Garner Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	2	46	44	2200%
	Through	67	230	163	243%	138	378	240	174%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	67	230	163	243%	140	424	284	203%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	57	207	150	263%	87	237	150	172%
	Right	1	1	0	10%	4	28	24	600%
	SB Total	58	208	150	259%	91	265	174	191%
EAST BOUND	Left	0	0	0	#DIV/0!	6	10	4	67%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	3	23	20	667%	4	21	17	425%
	EB Total	3	23	20	667%	10	31	21	210%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		128	461	333.1	260%	241	720	479	199%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	208	265			
North Leg	Outbound	230	388			
North Leg	**TOTAL**	**438**	**653**	**8%**	**12%**	**5,233**
South Leg	Inbound	230	424			
South Leg	Outbound	230	258			
South Leg	**TOTAL**	**460**	**682**	**6%**	**9%**	**7,341**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**0%**	**0%**	**108**
West Leg	Inbound	23	31			
West Leg	Outbound	1	74			
West Leg	**TOTAL**	**24**	**105**	**0%**	**1%**	**8,603**
OVERALL TOTAL		***922***	***1,440***	**4%**	***7%***	***21,285***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	5	6	1	10%	10	11	1	10%
	Through	3	3	0	10%	0	0	0	#DIV/0!
	Right	55	270	215	391%	140	261	121	86%
	NB Total	63	279	216	343%	150	272	122	81%
SOUTH BOUND	Left	1	1	0	10%	10	23	13	130%
	Through	3	3	0	10%	4	4	0	10%
	Right	3	3	0	10%	1	1	0	10%
	SB Total	7	8	1	10%	15	29	14	90%
EAST BOUND	Left	6	7	1	10%	0	0	0	#DIV/0!
	Through	90	160	70	78%	244	391	147	60%
	Right	2	2	0	10%	14	15	1	10%
	EB Total	98	169	71	72%	258	406	148	58%
WEST BOUND	Left	58	95	37	64%	60	227	167	278%
	Through	150	192	42	28%	80	176	96	120%
	Right	7	20	13	186%	3	3	0	10%
	WB Total	215	307	92	43%	143	406	263	184%
TOTAL ENTERING VOLUME		383	762	379.3	99%	566	1,113	547	97%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	8	29			
North Leg	Outbound	30	3			
North Leg	**TOTAL**	**38**	**32**	**18%**	**16%**	**205**
South Leg	Inbound	279	272			
South Leg	Outbound	101	247			
South Leg	**TOTAL**	**379**	**519**	**7%**	**10%**	**5,233**
East Leg	Inbound	307	406			
East Leg	Outbound	431	675			
East Leg	**TOTAL**	**738**	**1,081**	**7%**	**10%**	**10,739**
West Leg	Inbound	169	406			
West Leg	Outbound	201	188			
West Leg	**TOTAL**	**370**	**595**	**7%**	**11%**	**5,249**
OVERALL TOTAL		***1,525***	***2,226***	***7%***	***10%***	***21,426***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 1	Analyst:	RV
		Date:	08/12/19

LOCATION: Rivera St./Market St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	1	3	2	200%	1	3	2	200%
	Through	0	0	0	#DIV/0!	4	6	2	50%
	Right	5	7	2	40%	22	24	2	10%
	NB Total	6	10	4	67%	27	33	6	23%
SOUTH BOUND	Left	283	311	28	10%	243	267	24	10%
	Through	1	1	0	0%	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	284	312	28	10%	243	267	24	10%
EAST BOUND	Left	42	84	42	100%	87	231	144	166%
	Through	624	1,111	487	78%	729	1,121	392	54%
	Right	3	7	4	133%	1	2	1	100%
	EB Total	669	1,202	533	80%	817	1,354	537	66%
WEST BOUND	Left	11	12	1	9%	10	11	1	10%
	Through	511	699	188	37%	606	1,190	584	96%
	Right	325	358	33	10%	273	300	27	10%
	WB Total	847	1,069	222	26%	889	1,501	612	69%
TOTAL ENTERING VOLUME		1,806	2,593	786.8	44%	1,976	3,156	1180	60%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	312	267			
North Leg	Outbound	442	537			
North Leg	**TOTAL**	**754**	**805**	**10%**	**11%**	**7,566**
South Leg	Inbound	10	33			
South Leg	Outbound	20	13			
South Leg	**TOTAL**	**30**	**46**	**7%**	**10%**	**442**
East Leg	Inbound	1,069	1,501			
East Leg	Outbound	1,429	1,413			
East Leg	**TOTAL**	**2,498**	**2,914**	**8%**	**9%**	**31,938**
West Leg	Inbound	1,202	1,354			
West Leg	Outbound	702	1,193			
West Leg	**TOTAL**	**1,904**	**2,547**	**6%**	**8%**	**30,194**
OVERALL TOTAL		***5,186***	***6,312***	***7%***	***9%***	***70,140***

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO ONE WITH ORANGE STREET EXTENSION

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Stephens Av. / West Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	66	106	40	60%	85	132	47	55%
	Through	2	3	1	60%	4	6	2	55%
	Right	87	139	52	60%	85	132	47	55%
	NB Total	155	248	93	60%	174	270	96	55%
SOUTH BOUND	Left	16	26	10	60%	7	11	4	55%
	Through	13	21	8	60%	4	6	2	55%
	Right	3	5	2	60%	2	3	1	55%
	SB Total	32	51	19	60%	13	20	7	55%
EAST BOUND	Left	0	0	0	#DIV/0!	1	2	1	55%
	Through	146	234	88	60%	260	403	143	55%
	Right	72	115	43	60%	154	239	85	55%
	EB Total	218	349	131	60%	415	643	228	55%
WEST BOUND	Left	316	506	190	60%	233	361	128	55%
	Through	160	256	96	60%	144	223	79	55%
	Right	11	18	7	60%	8	12	4	55%
	WB Total	487	779	292	60%	385	597	212	55%
TOTAL ENTERING VOLUME		892	1,427	535.2	60%	987	1,530	543	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	51	20			
North Leg	Outbound	21	20			
North Leg	**TOTAL**	**72**	**40**	**14%**	**8%**	**528**
South Leg	Inbound	248	270			
South Leg	Outbound	642	606			
South Leg	**TOTAL**	**890**	**876**	**8%**	**8%**	**11,472**
East Leg	Inbound	779	597			
East Leg	Outbound	398	546			
East Leg	**TOTAL**	**1,178**	**1,142**	**8%**	**8%**	**14,965**
West Leg	Inbound	349	643			
West Leg	Outbound	366	358			
West Leg	**TOTAL**	**715**	**1,001**	**7%**	**9%**	**10,582**
OVERALL TOTAL		***2,854***	***3,060***	***8%***	***8%***	***37,546***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: West La Cadena Dr./I-215 SB Ramps/Stephens Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	31	50	19	60%	41	64	23	55%
	Through	64	102	38	60%	224	347	123	55%
	Right	21	34	13	60%	7	11	4	55%
	NB Total	116	186	70	60%	272	422	150	55%
SOUTH BOUND	Left	103	165	62	60%	108	167	59	55%
	Through	270	432	162	60%	354	549	195	55%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	373	597	224	60%	462	716	254	55%
EAST BOUND	Left	1	2	1	60%	1	2	1	55%
	Through	312	499	187	60%	244	378	134	55%
	Right	60	96	36	60%	80	124	44	55%
	EB Total	373	597	224	60%	325	504	179	55%
WEST BOUND	Left	47	75	28	60%	44	68	24	55%
	Through	94	150	56	60%	93	144	51	55%
	Right	4	6	2	60%	7	11	4	55%
	WB Total	145	232	87	60%	144	223	79	55%
TOTAL ENTERING VOLUME		1,007	1,611	604.2	60%	1,203	1,865	662	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	597	716			
North Leg	Outbound	110	360			
North Leg	**TOTAL**	**707**	**1,076**	**5%**	**7%**	**14,407**
South Leg	Inbound	186	422			
South Leg	Outbound	603	741			
South Leg	**TOTAL**	**789**	**1,163**	**5%**	**7%**	**15,570**
East Leg	Inbound	232	223			
East Leg	Outbound	698	556			
East Leg	**TOTAL**	**930**	**780**	**9%**	**7%**	**10,442**
West Leg	Inbound	597	504			
West Leg	Outbound	200	208			
West Leg	**TOTAL**	**797**	**711**	**8%**	**7%**	**9,529**
OVERALL TOTAL		***3,222***	***3,729***	**6%**	***7%***	***49,949***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr./I-215 NB Ramps/Highgrove Pl.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	33	53	20	60%	91	141	50	55%
	Right	43	69	26	60%	80	124	44	55%
	NB Total	76	122	46	60%	171	265	94	55%
SOUTH BOUND	Left	1	2	1	60%	0	0	0	#DIV/0!
	Through	70	112	42	60%	77	119	42	55%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	71	114	43	60%	77	119	42	55%
EAST BOUND	Left	28	45	17	60%	37	57	20	55%
	Through	169	270	101	60%	224	347	123	55%
	Right	43	69	26	60%	12	19	7	55%
	EB Total	240	384	144	60%	273	423	150	55%
WEST BOUND	Left	26	42	16	60%	30	47	17	55%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	6	9	3	55%
	WB Total	26	42	16	60%	36	56	20	55%
TOTAL ENTERING VOLUME		413	661	247.8	60%	557	863	306	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	114	119			
North Leg	Outbound	98	208			
North Leg	**TOTAL**	**211**	**327**	**5%**	**7%**	**4,380**
South Leg	Inbound	122	265			
South Leg	Outbound	222	184			
South Leg	**TOTAL**	**344**	**450**	**6%**	**7%**	**6,020**
East Leg	Inbound	42	56			
East Leg	Outbound	341	471			
East Leg	**TOTAL**	**382**	**527**	**5%**	**7%**	**7,058**
West Leg	Inbound	384	423			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**384**	**423**	**7%**	**7%**	**5,667**
OVERALL TOTAL		***1,322***	***1,727***	**6%**	***7%***	***23,127***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Highgrove Pl. / West Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	54	86	32	60%	54	84	30	55%
	Through	1	2	1	60%	0	0	0	#DIV/0!
	Right	158	253	95	60%	250	388	138	55%
	NB Total	213	341	128	60%	304	471	167	55%
SOUTH BOUND	Left	3	5	2	60%	6	9	3	55%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	20	32	12	60%	32	50	18	55%
	SB Total	23	37	14	60%	38	59	21	55%
EAST BOUND	Left	0	0	0	#DIV/0!	2	3	1	55%
	Through	238	381	143	60%	324	502	178	55%
	Right	11	18	7	60%	26	40	14	55%
	EB Total	249	398	149	60%	352	546	194	55%
WEST BOUND	Left	15	24	9	60%	10	16	6	55%
	Through	413	661	248	60%	299	463	164	55%
	Right	4	6	2	60%	3	5	2	55%
	WB Total	432	691	259	60%	312	484	172	55%
TOTAL ENTERING VOLUME		917	1,467	550.2	60%	1,006	1,559	553	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	37	59			
North Leg	Outbound	8	8			
North Leg	**TOTAL**	**45**	**67**	**4%**	**6%**	**1,038**
South Leg	Inbound	341	471			
South Leg	Outbound	42	56			
South Leg	**TOTAL**	**382**	**527**	**5%**	**7%**	**7,058**
East Leg	Inbound	691	484			
East Leg	Outbound	638	899			
East Leg	**TOTAL**	**1,330**	**1,383**	**7%**	**7%**	**18,518**
West Leg	Inbound	398	546			
West Leg	Outbound	779	597			
West Leg	**TOTAL**	**1,178**	**1,142**	**8%**	**7%**	**15,300**
OVERALL TOTAL		***2,934***	***3,119***	***7%***	***7%***	***41,914***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Primer St. / Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	275	440	165	60%	267	414	455	55%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	103	165	62	60%	154	239	263	55%
	SB Total	378	605	227	60%	421	653	232	55%
EAST BOUND	Left	155	248	93	60%	164	254	280	55%
	Through	500	800	300	60%	670	1,039	369	55%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	655	1,048	393	60%	834	1,293	459	55%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	362	579	217	60%	498	772	274	55%
	Right	357	571	214	60%	571	885	974	55%
	WB Total	719	1,150	431	60%	1,069	1,657	588	55%
TOTAL ENTERING VOLUME		1,752	2,803	1051.2	60%	2,324	3,602	1278	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	605	653			
North Leg	Outbound	819	1,139			
North Leg	**TOTAL**	**1,424**	**1,792**	**9%**	**11%**	**16,454**
South Leg	Inbound	0	0			
South Leg	Outbound	0	0			
South Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
East Leg	Inbound	1,150	1,657			
East Leg	Outbound	1,240	1,452			
East Leg	**TOTAL**	**2,390**	**3,109**	**7%**	**10%**	**31,991**
West Leg	Inbound	1,048	1,293			
West Leg	Outbound	744	1,011			
West Leg	**TOTAL**	**1,792**	**2,303**	**8%**	**11%**	**21,151**
OVERALL TOTAL		***5,606***	***7,204***	**8%**	***10%***	***69,596***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: West La Cadena Dr. / I-215 SB Ramps / Interchange Dr.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	11	18	7	60%	20	31	11	55%
	Through	252	403	151	60%	182	282	100	55%
	Right	2	3	1	60%	6	9	3	55%
	NB Total	265	424	159	60%	208	322	114	55%
SOUTH BOUND	Left	88	141	53	60%	115	178	63	55%
	Through	417	667	250	60%	613	950	337	55%
	Right	5	8	3	60%	7	11	4	55%
	SB Total	510	816	306	60%	735	1,139	404	55%
EAST BOUND	Left	5	8	3	60%	2	3	1	55%
	Through	22	35	13	60%	164	254	90	55%
	Right	13	21	8	60%	9	14	5	55%
	EB Total	40	64	24	60%	175	271	96	55%
WEST BOUND	Left	246	394	148	60%	250	388	138	55%
	Through	31	50	19	60%	61	95	34	55%
	Right	149	238	89	60%	174	270	96	55%
	WB Total	426	682	256	60%	485	752	267	55%
TOTAL ENTERING VOLUME		1,241	1,986	744.6	60%	1,603	2,485	882	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	816	1,139			
North Leg	Outbound	650	555			
North Leg	**TOTAL**	**1,466**	**1,694**	**15%**	**17%**	**9,723**
South Leg	Inbound	424	322			
South Leg	Outbound	1,082	1,352			
South Leg	**TOTAL**	**1,506**	**1,674**	**45%**	**50%**	**3,322**
East Leg	Inbound	682	752			
East Leg	Outbound	179	442			
East Leg	**TOTAL**	**861**	**1,194**	**6%**	**9%**	**13,638**
West Leg	Inbound	64	271			
West Leg	Outbound	75	136			
West Leg	**TOTAL**	**139**	**408**	**1%**	**3%**	**13,800**
OVERALL TOTAL		***3,971***	***4,969***	**10%**	***12%***	***40,482***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 1 - With Connection\[06 La Cadena 215 SB.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr. / I-215 NB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	370	592	222	60%	589	913	324	55%
	Through	82	131	49	60%	119	184	65	55%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	452	723	271	60%	708	1,097	389	55%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	128	205	77	60%	233	361	128	55%
	Right	17	27	10	60%	53	82	29	55%
	SB Total	145	232	87	60%	286	443	157	55%
EAST BOUND	Left	153	245	92	60%	59	91	32	55%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	542	867	325	60%	242	375	133	55%
	EB Total	695	1,112	417	60%	301	467	166	55%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,292	2,067	775.2	60%	1,295	2,007	712	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	232	443			
North Leg	Outbound	376	276			
North Leg	**TOTAL**	**608**	**719**	**62%**	**73%**	**983**
South Leg	Inbound	723	1,097			
South Leg	Outbound	1,072	736			
South Leg	**TOTAL**	**1,795**	**1,834**	**7%**	**7%**	**24,559**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	1,112	467			
West Leg	Outbound	619	995			
West Leg	**TOTAL**	**1,731**	**1,462**	**9%**	**7%**	**19,577**
OVERALL TOTAL		***4,134***	***4,015***	**9%**	***9%***	***45,118***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 1 - With Connection\[07 La Cadena_215NB.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	22	35	13	60%	27	42	15	55%
	Through	42	67	25	60%	86	133	47	55%
	Right	42	67	25	60%	22	34	12	55%
	NB Total	106	170	64	60%	135	209	74	55%
SOUTH BOUND	Left	392	627	235	60%	175	271	96	55%
	Through	22	35	13	60%	64	99	35	55%
	Right	256	410	154	60%	236	366	130	55%
	SB Total	670	1,072	402	60%	475	736	261	55%
EAST BOUND	Left	125	200	75	60%	186	288	102	55%
	Through	628	1,005	377	60%	710	1,101	391	55%
	Right	22	35	13	60%	41	64	23	55%
	EB Total	775	1,240	465	60%	937	1,452	515	55%
WEST BOUND	Left	20	32	12	60%	35	54	19	55%
	Through	441	706	265	60%	806	1,249	443	55%
	Right	285	456	171	60%	436	676	240	55%
	WB Total	746	1,194	448	60%	1,277	1,979	702	55%
TOTAL ENTERING VOLUME		2,297	3,675	1378.2	60%	2,824	4,377	1553	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,072	736			
North Leg	Outbound	723	1,097			
North Leg	**TOTAL**	**1,795**	**1,834**	**7%**	**7%**	**24,559**
South Leg	Inbound	170	209			
South Leg	Outbound	102	217			
South Leg	**TOTAL**	**272**	**426**	**5%**	**7%**	**5,709**
East Leg	Inbound	1,194	1,979			
East Leg	Outbound	1,699	1,406			
East Leg	**TOTAL**	**2,893**	**3,385**	**6%**	**7%**	**45,340**
West Leg	Inbound	1,240	1,452			
West Leg	Outbound	1,150	1,657			
West Leg	**TOTAL**	**2,390**	**3,109**	**6%**	**7%**	**41,645**
OVERALL TOTAL		***7,350***	***8,754***	**6%**	***7%***	***117,252***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 1 - With Connection\[08 La Cadena_Columbia.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St. / Placentia Ln.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	2	2	0	0%	2	2	0	10%
	Through	498	503	5	1%	749	837	88	12%
	Right	39	41	2	5%	88	114	26	30%
	NB Total	539	546	7	1%	839	953	114	14%
SOUTH BOUND	Left	71	89	18	25%	174	211	37	21%
	Through	719	797	78	11%	923	929	6	1%
	Right	5	7	2	40%	0	0	0	#DIV/0!
	SB Total	795	893	98	12%	1,097	1,140	43	4%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	1	1	0	10%
	Right	0	0	0	#DIV/0!	1	1	0	10%
	EB Total	0	0	0	#DIV/0!	2	2	0	10%
WEST BOUND	Left	46	51	5	10%	29	44	15	52%
	Through	1	1	0	0%	1	1	0	10%
	Right	114	117	3	3%	98	156	58	59%
	WB Total	161	169	8	5%	128	201	73	57%
TOTAL ENTERING VOLUME		1,495	1,608	112.6	8%	2,066	2,297	231	11%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	893	1,140			
North Leg	Outbound	620	993			
North Leg	**TOTAL**	**1,513**	**2,133**	**6%**	**8%**	**27,424**
South Leg	Inbound	546	953			
South Leg	Outbound	848	974			
South Leg	**TOTAL**	**1,394**	**1,927**	**6%**	**8%**	**24,832**
East Leg	Inbound	169	201			
East Leg	Outbound	130	326			
East Leg	**TOTAL**	**299**	**527**	**6%**	**11%**	**4,783**
West Leg	Inbound	0	2			
West Leg	Outbound	10	3			
West Leg	**TOTAL**	**10**	**6**	**18%**	**10%**	**55**
OVERALL TOTAL		***3,215***	***4,593***	**6%**	***8%***	***57,094***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Garner Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	58	75	17	29%	7	7	0	0%
	Through	825	908	83	10%	812	967	155	19%
	Right	17	78	61	359%	4	36	32	800%
	NB Total	900	1,061	161	18%	823	1,010	187	23%
SOUTH BOUND	Left	28	50	22	79%	8	36	28	350%
	Through	715	922	207	29%	1,017	1,029	12	1%
	Right	30	33	3	10%	7	8	1	10%
	SB Total	773	1,005	232	30%	1,032	1,073	41	4%
EAST BOUND	Left	6	7	1	10%	31	34	3	10%
	Through	1	2	1	100%	0	0	0	#DIV/0!
	Right	19	30	11	58%	58	69	11	19%
	EB Total	26	39	13	48%	89	103	14	16%
WEST BOUND	Left	3	48	45	1500%	7	23	16	229%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	9	42	33	367%	4	8	4	100%
	WB Total	12	90	78	650%	11	31	20	182%
TOTAL ENTERING VOLUME		1,711	2,194	483.1	28%	1,955	2,217	262	13%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,005	1,073			
North Leg	Outbound	956	1,009			
North Leg	**TOTAL**	**1,961**	**2,082**	**8%**	**8%**	**24,832**
South Leg	Inbound	1,061	1,010			
South Leg	Outbound	1,000	1,121			
South Leg	**TOTAL**	**2,061**	**2,131**	**7%**	**7%**	**29,112**
East Leg	Inbound	90	31			
East Leg	Outbound	130	72			
East Leg	**TOTAL**	**220**	**103**	**2%**	**1%**	**9,254**
West Leg	Inbound	39	103			
West Leg	Outbound	108	15			
West Leg	**TOTAL**	**147**	**118**	**13%**	**11%**	**1,089**
OVERALL TOTAL		***4,388***	***4,434***	***7%***	***7%***	***64,287***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	14	18	4	29%	41	56	15	37%
	Through	731	804	73	10%	616	736	120	19%
	Right	132	171	39	30%	145	169	24	17%
	NB Total	877	993	116	13%	802	961	159	20%
SOUTH BOUND	Left	219	368	149	68%	443	484	41	9%
	Through	590	721	131	22%	776	854	78	10%
	Right	7	12	5	71%	21	27	6	29%
	SB Total	816	1,101	285	35%	1,240	1,365	125	10%
EAST BOUND	Left	16	23	7	44%	18	27	9	50%
	Through	122	241	119	98%	110	162	52	47%
	Right	60	86	26	43%	32	41	9	28%
	EB Total	198	350	152	77%	160	230	70	44%
WEST BOUND	Left	108	123	15	14%	144	187	43	30%
	Through	50	80	30	60%	91	160	69	76%
	Right	224	257	33	15%	138	213	75	54%
	WB Total	382	460	78	20%	373	560	187	50%
TOTAL ENTERING VOLUME		2,273	2,904	631.1	28%	2,575	3,116	541	21%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,101	1,365			
North Leg	Outbound	1,084	976			
North Leg	**TOTAL**	**2,185**	**2,341**	**8%**	**8%**	**29,112**
South Leg	Inbound	993	961			
South Leg	Outbound	930	1,082			
South Leg	**TOTAL**	**1,923**	**2,043**	**9%**	**9%**	**22,413**
East Leg	Inbound	460	560			
East Leg	Outbound	780	815			
East Leg	**TOTAL**	**1,240**	**1,375**	**7%**	**7%**	**18,406**
West Leg	Inbound	350	230			
West Leg	Outbound	110	243			
West Leg	**TOTAL**	**460**	**473**	**5%**	**6%**	**8,488**
OVERALL TOTAL		***5,808***	***6,231***	***7%***	***8%***	***78,419***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 1 - With Connection\[11 Main_Columbia.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Strong St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	19	21	2	10%	32	43	11	34%
	Through	678	687	9	1%	837	1,027	190	23%
	Right	54	110	56	104%	74	136	62	84%
	NB Total	751	818	67	9%	943	1,206	263	28%
SOUTH BOUND	Left	18	47	29	161%	43	55	12	28%
	Through	716	901	185	26%	817	899	82	10%
	Right	67	81	14	21%	53	58	5	10%
	SB Total	801	1,029	228	28%	913	1,012	99	11%
EAST BOUND	Left	76	84	8	10%	91	100	9	10%
	Through	54	92	38	70%	154	219	65	42%
	Right	54	59	5	10%	50	55	5	10%
	EB Total	184	235	51	28%	295	374	79	27%
WEST BOUND	Left	15	15	0	0%	31	36	5	16%
	Through	51	51	0	0%	52	57	5	10%
	Right	17	18	1	6%	36	36	0	0%
	WB Total	83	84	1	1%	119	129	10	8%
TOTAL ENTERING VOLUME		1,819	2,166	346.9	19%	2,270	2,721	451	20%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,029	1,012			
North Leg	Outbound	789	1,163			
North Leg	**TOTAL**	**1,818**	**2,175**	**8%**	**10%**	**22,413**
South Leg	Inbound	818	1,206			
South Leg	Outbound	975	990			
South Leg	**TOTAL**	**1,793**	**2,196**	**7%**	**9%**	**23,955**
East Leg	Inbound	84	129			
East Leg	Outbound	249	410			
East Leg	**TOTAL**	**333**	**539**	**8%**	**13%**	**4,273**
West Leg	Inbound	235	374			
West Leg	Outbound	153	158			
West Leg	**TOTAL**	**388**	**532**	**11%**	**15%**	**3,594**
OVERALL TOTAL		***4,332***	***5,442***	***8%***	***10%***	***54,235***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Oakley Av./SR-60 WB On Ramp
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	126	262	136	108%	244	443	199	82%
	Through	423	495	72	17%	626	1,004	378	60%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	549	757	208	38%	870	1,447	577	66%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	781	922	141	18%	766	792	26	3%
	Right	121	183	62	51%	189	208	19	10%
	SB Total	902	1,105	203	23%	955	1,000	45	5%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	52	68	16	31%	65	79	14	22%
	Through	75	125	50	67%	150	161	11	7%
	Right	463	509	46	10%	380	418	38	10%
	WB Total	590	702	112	19%	595	658	63	11%
TOTAL ENTERING VOLUME		2,041	2,564	523.3	26%	2,420	3,105	685	28%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,105	1,000			
North Leg	Outbound	1,004	1,422			
North Leg	**TOTAL**	**2,109**	**2,422**	**9%**	**10%**	**24,330**
South Leg	Inbound	757	1,447			
South Leg	Outbound	990	871			
South Leg	**TOTAL**	**1,747**	**2,318**	**7%**	**10%**	**24,233**
East Leg	Inbound	702	658			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**702**	**658**	**19%**	**18%**	**3,655**
West Leg	Inbound	0	0			
West Leg	Outbound	570	812			
West Leg	**TOTAL**	**570**	**812**	**7%**	**10%**	**8,543**
OVERALL TOTAL		***5,129***	***6,210***	***8%***	***10%***	***60,761***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./SR-60 EB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	396	512	116	29%	762	1,268	506	66%
	Right	202	205	3	1%	172	173	1	1%
	NB Total	598	717	119	20%	934	1,441	507	54%
SOUTH BOUND	Left	420	485	65	15%	328	328	0	0%
	Through	413	514	101	24%	503	548	45	9%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	833	999	166	20%	831	876	45	5%
EAST BOUND	Left	153	248	95	62%	108	182	74	69%
	Through	0	0	0	#DIV/0!	9	9	0	0%
	Right	151	206	55	36%	182	202	20	11%
	EB Total	304	454	150	49%	299	393	94	31%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,735	2,170	435	25%	2,064	2,710	646	31%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	999	876			
North Leg	Outbound	760	1,450			
North Leg	**TOTAL**	**1,759**	**2,326**	**7%**	**10%**	**24,234**
South Leg	Inbound	717	1,441			
South Leg	Outbound	720	750			
South Leg	**TOTAL**	**1,437**	**2,191**	**9%**	**13%**	**16,465**
East Leg	Inbound	0	0			
East Leg	Outbound	690	510			
East Leg	**TOTAL**	**690**	**510**	**14%**	**11%**	**4,805**
West Leg	Inbound	454	393			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**454**	**393**	**10%**	**9%**	**4,619**
OVERALL TOTAL		***4,340***	***5,420***	**9%**	***11%***	***50,123***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Spruce St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	4	4	0	10%	3	3	0	0%
	Through	370	373	3	1%	565	787	222	39%
	Right	11	18	7	64%	33	38	5	15%
	NB Total	385	395	10	3%	601	828	227	38%
SOUTH BOUND	Left	104	187	83	80%	107	173	66	62%
	Through	392	477	85	22%	410	451	41	10%
	Right	12	22	10	83%	12	15	3	25%
	SB Total	508	686	178	35%	529	639	110	21%
EAST BOUND	Left	20	22	2	10%	51	63	12	24%
	Through	47	85	38	81%	156	159	3	2%
	Right	20	24	4	20%	24	26	2	10%
	EB Total	87	131	44	51%	231	248	17	8%
WEST BOUND	Left	44	99	55	125%	48	59	11	23%
	Through	53	60	7	13%	28	43	15	54%
	Right	85	175	90	106%	81	200	119	147%
	WB Total	182	334	152	84%	157	302	145	92%
TOTAL ENTERING VOLUME		1,162	1,546	384.4	33%	1,518	2,017	499	33%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	686	639			
North Leg	Outbound	570	1,050			
North Leg	**TOTAL**	**1,256**	**1,689**	**9%**	**12%**	**14,072**
South Leg	Inbound	395	828			
South Leg	Outbound	600	536			
South Leg	**TOTAL**	**995**	**1,364**	**7%**	**10%**	**13,331**
East Leg	Inbound	334	302			
East Leg	Outbound	290	370			
East Leg	**TOTAL**	**624**	**672**	**7%**	**7%**	**9,086**
West Leg	Inbound	131	248			
West Leg	Outbound	86	61			
West Leg	**TOTAL**	**217**	**309**	**8%**	**11%**	**2,716**
OVERALL TOTAL		***3,093***	***4,035***	***8%***	***10%***	***39,205***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Oakley Av./SR-60 WB Off Ramp
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	37	37	0	0%	89	92	3	3%
	Through	185	186	1	1%	248	321	73	29%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	222	223	1	0%	337	413	76	23%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	275	343	68	25%	304	309	5	2%
	Right	118	154	36	31%	92	93	1	1%
	SB Total	393	497	104	26%	396	402	6	2%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	88	97	9	10%	71	71	0	0%
	Through	450	468	18	4%	440	484	44	10%
	Right	62	64	2	3%	241	299	58	24%
	WB Total	600	629	29	5%	752	854	102	14%
TOTAL ENTERING VOLUME		1,215	1,349	133.8	11%	1,485	1,669	184	12%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	497	402			
North Leg	Outbound	250	620			
North Leg	**TOTAL**	**747**	**1,022**	**15%**	**20%**	**5,098**
South Leg	Inbound	223	413			
South Leg	Outbound	440	380			
South Leg	**TOTAL**	**663**	**793**	**16%**	**19%**	**4,190**
East Leg	Inbound	629	854			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**629**	**854**	**14%**	**19%**	**4,425**
West Leg	Inbound	0	0			
West Leg	Outbound	659	669			
West Leg	**TOTAL**	**659**	**669**	**18%**	**18%**	**3,655**
OVERALL TOTAL		***2,698***	***3,338***	**16%**	***19%***	***17,369***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 1 - With Connection\[16 Orange_Oakley_60 WB.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Strong St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	30	33	3	10%	60	66	6	10%
	Through	107	111	4	4%	267	368	101	38%
	Right	34	34	0	0%	115	151	36	31%
	NB Total	171	178	7	4%	442	585	143	32%
SOUTH BOUND	Left	4	7	3	75%	5	8	3	60%
	Through	207	293	86	42%	202	222	20	10%
	Right	29	41	12	41%	16	18	2	13%
	SB Total	240	341	101	42%	223	248	25	11%
EAST BOUND	Left	55	113	58	105%	94	169	75	80%
	Through	22	43	21	95%	89	152	63	71%
	Right	55	94	39	71%	67	73	6	9%
	EB Total	132	250	118	89%	250	394	144	58%
WEST BOUND	Left	63	64	1	2%	67	72	5	7%
	Through	28	28	0	0%	37	45	8	22%
	Right	6	7	1	17%	2	4	2	100%
	WB Total	97	99	2	2%	106	121	15	14%
TOTAL ENTERING VOLUME		640	868	228	36%	1,021	1,348	327	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	341	248			
North Leg	Outbound	231	541			
North Leg	**TOTAL**	**572**	**789**	**10%**	**14%**	**5,462**
South Leg	Inbound	178	585			
South Leg	Outbound	451	367			
South Leg	**TOTAL**	**629**	**952**	**12%**	**19%**	**5,098**
East Leg	Inbound	99	121			
East Leg	Outbound	84	311			
East Leg	**TOTAL**	**183**	**432**	**8%**	**18%**	**2,378**
West Leg	Inbound	250	394			
West Leg	Outbound	102	129			
West Leg	**TOTAL**	**352**	**523**	**8%**	**12%**	**4,273**
OVERALL TOTAL		***1,736***	***2,696***	**10%**	***16%***	***17,211***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	27	30	3	10%	37	41	4	10%
	Through	79	88	9	11%	172	275	103	60%
	Right	105	166	61	58%	133	146	13	10%
	NB Total	211	284	73	34%	342	462	120	35%
SOUTH BOUND	Left	39	286	247	633%	36	134	98	272%
	Through	89	137	48	54%	83	99	16	19%
	Right	25	57	32	128%	21	41	20	95%
	SB Total	153	480	327	214%	140	274	134	96%
EAST BOUND	Left	34	41	7	21%	69	134	65	94%
	Through	468	809	341	73%	588	664	76	13%
	Right	20	22	2	10%	22	24	2	10%
	EB Total	522	872	350	67%	679	822	143	21%
WEST BOUND	Left	69	76	7	10%	127	140	13	10%
	Through	362	429	67	19%	408	651	243	60%
	Right	23	61	38	165%	52	271	219	421%
	WB Total	454	566	112	25%	587	1,062	475	81%
TOTAL ENTERING VOLUME		1,340	2,202	861.6	64%	1,748	2,620	872	50%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	480	274			
North Leg	Outbound	190	680			
North Leg	**TOTAL**	**670**	**954**	**6%**	**9%**	**10,585**
South Leg	Inbound	284	462			
South Leg	Outbound	235	263			
South Leg	**TOTAL**	**519**	**725**	**16%**	**22%**	**3,286**
East Leg	Inbound	566	1,062			
East Leg	Outbound	1,261	944			
East Leg	**TOTAL**	**1,827**	**2,006**	**7%**	**8%**	**26,082**
West Leg	Inbound	872	822			
West Leg	Outbound	516	733			
West Leg	**TOTAL**	**1,388**	**1,555**	**8%**	**8%**	**18,406**
OVERALL TOTAL		***4,403***	***5,240***	***8%***	***9%***	***58,359***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Garner Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	2	14	12	600%
	Through	67	290	223	333%	138	530	392	284%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	67	290	223	333%	140	544	404	289%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	57	256	199	349%	87	277	190	218%
	Right	1	1	0	10%	4	49	45	1125%
	SB Total	58	257	199	343%	91	326	235	258%
EAST BOUND	Left	0	0	0	#DIV/0!	6	23	17	283%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	3	14	11	367%	4	7	3	75%
	EB Total	3	14	11	367%	10	30	20	200%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		128	561	433.1	338%	241	900	659	273%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	257	326			
North Leg	Outbound	290	553			
North Leg	**TOTAL**	**547**	**879**	**7%**	**11%**	**8,171**
South Leg	Inbound	290	544			
South Leg	Outbound	270	284			
South Leg	**TOTAL**	**560**	**828**	**6%**	**9%**	**9,427**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**0%**	**0%**	**259**
West Leg	Inbound	14	30			
West Leg	Outbound	1	63			
West Leg	**TOTAL**	**15**	**93**	**0%**	**1%**	**8,791**
OVERALL TOTAL		***1,122***	***1,800***	**4%**	***7%***	***26,648***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	5	7	2	40%	10	58	48	480%
	Through	3	32	29	967%	0	0	0	#DIV/0!
	Right	55	245	190	345%	140	292	152	109%
	NB Total	63	284	221	351%	150	350	200	133%
SOUTH BOUND	Left	1	36	35	3500%	10	45	35	350%
	Through	3	77	74	2467%	4	103	99	2475%
	Right	3	35	32	1067%	1	12	11	1100%
	SB Total	7	148	141	2014%	15	160	145	967%
EAST BOUND	Left	6	17	11	183%	0	0	0	#DIV/0!
	Through	90	103	13	14%	244	268	24	10%
	Right	2	2	0	0%	14	78	64	457%
	EB Total	98	122	24	24%	258	346	88	34%
WEST BOUND	Left	58	103	45	78%	60	137	77	128%
	Through	150	165	15	10%	80	88	8	10%
	Right	7	42	35	500%	3	233	230	7667%
	WB Total	215	310	95	44%	143	458	315	220%
TOTAL ENTERING VOLUME		383	864	481	126%	566	1,314	748	132%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	148	160			
North Leg	Outbound	91	233			
North Leg	**TOTAL**	**239**	**393**	**5%**	**9%**	**4,399**
South Leg	Inbound	284	350			
South Leg	Outbound	182	318			
South Leg	**TOTAL**	**466**	**668**	**6%**	**8%**	**8,171**
East Leg	Inbound	310	458			
East Leg	Outbound	384	605			
East Leg	**TOTAL**	**694**	**1,063**	**6%**	**10%**	**11,099**
West Leg	Inbound	122	346			
West Leg	Outbound	207	158			
West Leg	**TOTAL**	**329**	**504**	**7%**	**11%**	**4,783**
OVERALL TOTAL		***1,728***	***2,629***	**6%**	***9%***	***28,452***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 1 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Rivera St./Market St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	1	3	2	200%	1	5	4	400%
	Through	0	0	0	#DIV/0!	4	7	3	75%
	Right	5	7	2	40%	22	24	2	10%
	NB Total	6	10	4	67%	27	36	9	34%
SOUTH BOUND	Left	283	311	28	10%	243	267	24	10%
	Through	1	1	0	0%	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	284	312	28	10%	243	267	24	10%
EAST BOUND	Left	42	84	42	100%	87	297	210	241%
	Through	624	1,111	487	78%	729	1,002	273	37%
	Right	3	7	4	133%	1	4	3	300%
	EB Total	669	1,202	533	80%	817	1,303	486	59%
WEST BOUND	Left	11	12	1	9%	10	11	1	10%
	Through	511	699	188	37%	606	1,247	641	106%
	Right	325	358	33	10%	273	300	27	10%
	WB Total	847	1,069	222	26%	889	1,558	669	75%
TOTAL ENTERING VOLUME		1,806	2,593	786.8	44%	1,976	3,165	1189	60%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	312	267			
North Leg	Outbound	442	604			
North Leg	**TOTAL**	**754**	**872**	**10%**	**12%**	**7,566**
South Leg	Inbound	10	36			
South Leg	Outbound	20	15			
South Leg	**TOTAL**	**30**	**51**	**7%**	**12%**	**442**
East Leg	Inbound	1,069	1,558			
East Leg	Outbound	1,429	1,294			
East Leg	**TOTAL**	**2,498**	**2,852**	**8%**	**9%**	**31,722**
West Leg	Inbound	1,202	1,303			
West Leg	Outbound	702	1,252			
West Leg	**TOTAL**	**1,904**	**2,555**	**6%**	**9%**	**29,948**
OVERALL TOTAL		***5,186***	***6,330***	***7%***	***9%***	***69,678***

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO WITHOUT ORANGE STREET EXTENSION

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Stephens Av. / West Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	66	89	23	35%	85	112	27	32%
	Through	2	3	1	35%	4	5	1	32%
	Right	87	117	30	35%	85	112	27	32%
	NB Total	155	209	54	35%	174	230	56	32%
SOUTH BOUND	Left	16	22	6	35%	7	9	2	32%
	Through	13	18	5	35%	4	5	1	32%
	Right	3	4	1	35%	2	3	1	32%
	SB Total	32	43	11	35%	13	17	4	32%
EAST BOUND	Left	0	0	0	#DIV/0!	1	1	0	32%
	Through	146	197	51	35%	260	343	83	32%
	Right	72	97	25	35%	154	203	49	32%
	EB Total	218	294	76	35%	415	548	133	32%
WEST BOUND	Left	316	427	111	35%	233	308	75	32%
	Through	160	216	56	35%	144	190	46	32%
	Right	11	15	4	35%	8	11	3	32%
	WB Total	487	657	170	35%	385	508	123	32%
TOTAL ENTERING VOLUME		892	1,204	312.2	35%	987	1,303	316	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	43	17			
North Leg	Outbound	18	17			
North Leg	**TOTAL**	**61**	**34**	**16%**	**9%**	**390**
South Leg	Inbound	209	230			
South Leg	Outbound	541	516			
South Leg	**TOTAL**	**751**	**746**	**9%**	**9%**	**8,488**
East Leg	Inbound	657	508			
East Leg	Outbound	336	465			
East Leg	**TOTAL**	**994**	**973**	**9%**	**9%**	**11,072**
West Leg	Inbound	294	548			
West Leg	Outbound	309	305			
West Leg	**TOTAL**	**603**	**853**	**8%**	**11%**	**7,830**
OVERALL TOTAL		***2,408***	***2,606***	**9%**	***9%***	***27,780***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: West La Cadena Dr./I-215 SB Ramps/Stephens Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	31	42	11	35%	41	54	13	32%
	Through	64	86	22	35%	224	296	72	32%
	Right	21	28	7	35%	7	9	2	32%
	NB Total	116	157	41	35%	272	359	87	32%
SOUTH BOUND	Left	103	139	36	35%	108	143	35	32%
	Through	270	365	95	35%	354	467	113	32%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	373	504	131	35%	462	610	148	32%
EAST BOUND	Left	1	1	0	35%	1	1	0	32%
	Through	312	421	109	35%	244	322	78	32%
	Right	60	81	21	35%	80	106	26	32%
	EB Total	373	504	131	35%	325	429	104	32%
WEST BOUND	Left	47	63	16	35%	44	58	14	32%
	Through	94	127	33	35%	93	123	30	32%
	Right	4	5	1	35%	7	9	2	32%
	WB Total	145	196	51	35%	144	190	46	32%
TOTAL ENTERING VOLUME		1,007	1,359	352.45	35%	1,203	1,588	385	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	504	610			
North Leg	Outbound	93	306			
North Leg	**TOTAL**	**597**	**916**	**6%**	**9%**	**10,660**
South Leg	Inbound	157	359			
South Leg	Outbound	509	631			
South Leg	**TOTAL**	**666**	**990**	**6%**	**9%**	**11,520**
East Leg	Inbound	196	190			
East Leg	Outbound	589	474			
East Leg	**TOTAL**	**784**	**664**	**10%**	**9%**	**7,726**
West Leg	Inbound	504	429			
West Leg	Outbound	169	177			
West Leg	**TOTAL**	**672**	**606**	**10%**	**9%**	**7,050**
OVERALL TOTAL		***2,719***	***3,176***	***7%***	***9%***	***36,956***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr./I-215 NB Ramps/Highgrove Pl.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	33	45	12	35%	91	120	29	32%
	Right	43	58	15	35%	80	106	26	32%
	NB Total	76	103	27	35%	171	226	55	32%
SOUTH BOUND	Left	1	1	0	35%	0	0	0	#DIV/0!
	Through	70	95	25	35%	77	102	25	32%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	71	96	25	35%	77	102	25	32%
EAST BOUND	Left	28	38	10	35%	37	49	12	32%
	Through	169	228	59	35%	224	296	72	32%
	Right	43	58	15	35%	12	16	4	32%
	EB Total	240	324	84	35%	273	360	87	32%
WEST BOUND	Left	26	35	9	35%	30	40	10	32%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	6	8	2	32%
	WB Total	26	35	9	35%	36	48	12	32%
TOTAL ENTERING VOLUME		413	558	144.55	35%	557	735	178	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	96	102			
North Leg	Outbound	82	177			
North Leg	**TOTAL**	**178**	**279**	**5%**	**9%**	**3,241**
South Leg	Inbound	103	226			
South Leg	Outbound	188	157			
South Leg	**TOTAL**	**290**	**383**	**7%**	**9%**	**4,454**
East Leg	Inbound	35	48			
East Leg	Outbound	288	401			
East Leg	**TOTAL**	**323**	**449**	**6%**	**9%**	**5,222**
West Leg	Inbound	324	360			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**324**	**360**	**8%**	**9%**	**4,193**
OVERALL TOTAL		***1,115***	***1,470***	***7%***	***9%***	***17,111***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Highgrove Pl. / West Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	54	73	19	35%	54	71	17	32%
	Through	1	1	0	35%	0	0	0	#DIV/0!
	Right	158	213	55	35%	250	330	80	32%
	NB Total	213	288	75	35%	304	401	97	32%
SOUTH BOUND	Left	3	4	1	35%	6	8	2	32%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	20	27	7	35%	32	42	10	32%
	SB Total	23	31	8	35%	38	50	12	32%
EAST BOUND	Left	0	0	0	#DIV/0!	2	3	1	32%
	Through	238	321	83	35%	324	428	104	32%
	Right	11	15	4	35%	26	34	8	32%
	EB Total	249	336	87	35%	352	465	113	32%
WEST BOUND	Left	15	20	5	35%	10	13	3	32%
	Through	413	558	145	35%	299	395	96	32%
	Right	4	5	1	35%	3	4	1	32%
	WB Total	432	583	151	35%	312	412	100	32%
TOTAL ENTERING VOLUME		917	1,238	320.95	35%	1,006	1,328	322	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	31	50			
North Leg	Outbound	7	7			
North Leg	**TOTAL**	**38**	**57**	**5%**	**7%**	**768**
South Leg	Inbound	288	401			
South Leg	Outbound	35	48			
South Leg	**TOTAL**	**323**	**449**	**6%**	**9%**	**5,222**
East Leg	Inbound	583	412			
East Leg	Outbound	539	766			
East Leg	**TOTAL**	**1,122**	**1,177**	**8%**	**9%**	**13,701**
West Leg	Inbound	336	465			
West Leg	Outbound	657	508			
West Leg	**TOTAL**	**994**	**973**	**9%**	**9%**	**11,320**
OVERALL TOTAL		***2,476***	***2,656***	***8%***	***9%***	***31,012***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Primer St. / Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	275	371	96	35%	267	352	388	32%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	103	139	36	35%	154	203	224	32%
	SB Total	378	510	132	35%	421	556	135	32%
EAST BOUND	Left	155	209	54	35%	164	216	238	32%
	Through	500	675	175	35%	670	884	214	32%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	655	884	229	35%	834	1,101	267	32%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	362	489	127	35%	498	657	159	32%
	Right	357	482	125	35%	571	754	829	32%
	WB Total	719	971	252	35%	1,069	1,411	342	32%
TOTAL ENTERING VOLUME		1,752	2,365	613.2	35%	2,324	3,068	744	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	510	556			
North Leg	Outbound	691	970			
North Leg	**TOTAL**	**1,202**	**1,526**	**10%**	**13%**	**12,174**
South Leg	Inbound	0	0			
South Leg	Outbound	0	0			
South Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
East Leg	Inbound	971	1,411			
East Leg	Outbound	1,046	1,237			
East Leg	**TOTAL**	**2,017**	**2,648**	**9%**	**11%**	**23,670**
West Leg	Inbound	884	1,101			
West Leg	Outbound	628	861			
West Leg	**TOTAL**	**1,512**	**1,962**	**10%**	**13%**	**15,649**
OVERALL TOTAL		***4,730***	***6,135***	**9%**	***12%***	***51,493***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: West La Cadena Dr. / I-215 SB Ramps / Interchange Dr.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	11	15	4	35%	20	26	6	32%
	Through	252	340	88	35%	182	240	58	32%
	Right	2	3	1	35%	6	8	2	32%
	NB Total	265	358	93	35%	208	275	67	32%
SOUTH BOUND	Left	88	119	31	35%	115	152	37	32%
	Through	417	563	146	35%	613	809	196	32%
	Right	5	7	2	35%	7	9	2	32%
	SB Total	510	689	179	35%	735	970	235	32%
EAST BOUND	Left	5	7	2	35%	2	3	1	32%
	Through	22	30	8	35%	164	216	52	32%
	Right	13	18	5	35%	9	12	3	32%
	EB Total	40	54	14	35%	175	231	56	32%
WEST BOUND	Left	246	332	86	35%	250	330	80	32%
	Through	31	42	11	35%	61	81	20	32%
	Right	149	201	52	35%	174	230	56	32%
	WB Total	426	575	149	35%	485	640	155	32%
TOTAL ENTERING VOLUME		1,241	1,675	434.35	35%	1,603	2,116	513	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	689	970			
North Leg	Outbound	548	473			
North Leg	**TOTAL**	**1,237**	**1,443**	**17%**	**20%**	**7,194**
South Leg	Inbound	358	275			
South Leg	Outbound	913	1,151			
South Leg	**TOTAL**	**1,270**	**1,426**	**52%**	**58%**	**2,458**
East Leg	Inbound	575	640			
East Leg	Outbound	151	376			
East Leg	**TOTAL**	**726**	**1,016**	**7%**	**10%**	**10,090**
West Leg	Inbound	54	231			
West Leg	Outbound	63	116			
West Leg	**TOTAL**	**117**	**347**	**1%**	**3%**	**10,211**
OVERALL TOTAL		***3,351***	***4,232***	**11%**	***14%***	***29,952***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 2 - Without Connection\[06 La Cadena 215 SB.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr. / I-215 NB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	370	500	130	35%	589	777	188	32%
	Through	82	111	29	35%	119	157	38	32%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	452	610	158	35%	708	935	227	32%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	128	173	45	35%	233	308	75	32%
	Right	17	23	6	35%	53	70	17	32%
	SB Total	145	196	51	35%	286	378	92	32%
EAST BOUND	Left	153	207	54	35%	59	78	19	32%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	542	732	190	35%	242	319	77	32%
	EB Total	695	938	243	35%	301	397	96	32%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,292	1,744	452.2	35%	1,295	1,709	414	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	196	378			
North Leg	Outbound	317	235			
North Leg	**TOTAL**	**513**	**612**	**71%**	**84%**	**727**
South Leg	Inbound	610	935			
South Leg	Outbound	905	627			
South Leg	**TOTAL**	**1,515**	**1,562**	**8%**	**9%**	**18,171**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	938	397			
West Leg	Outbound	522	847			
West Leg	**TOTAL**	**1,461**	**1,245**	**10%**	**9%**	**14,484**
OVERALL TOTAL		***3,488***	***3,419***	**10%**	***10%***	***33,382***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 2 - Without Connection\[07 La Cadena_215NB.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	22	30	8	35%	27	36	9	32%
	Through	42	57	15	35%	86	114	28	32%
	Right	42	57	15	35%	22	29	7	32%
	NB Total	106	143	37	35%	135	178	43	32%
SOUTH BOUND	Left	392	529	137	35%	175	231	56	32%
	Through	22	30	8	35%	64	84	20	32%
	Right	256	346	90	35%	236	312	76	32%
	SB Total	670	905	235	35%	475	627	152	32%
EAST BOUND	Left	125	169	44	35%	186	246	60	32%
	Through	628	848	220	35%	710	937	227	32%
	Right	22	30	8	35%	41	54	13	32%
	EB Total	775	1,046	271	35%	937	1,237	300	32%
WEST BOUND	Left	20	27	7	35%	35	46	11	32%
	Through	441	595	154	35%	806	1,064	258	32%
	Right	285	385	100	35%	436	576	140	32%
	WB Total	746	1,007	261	35%	1,277	1,686	409	32%
TOTAL ENTERING VOLUME		2,297	3,101	803.95	35%	2,824	3,728	904	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	905	627			
North Leg	Outbound	610	935			
North Leg	**TOTAL**	**1,515**	**1,562**	**8%**	**9%**	**18,171**
South Leg	Inbound	143	178			
South Leg	Outbound	86	185			
South Leg	**TOTAL**	**230**	**363**	**5%**	**9%**	**4,224**
East Leg	Inbound	1,007	1,686			
East Leg	Outbound	1,434	1,197			
East Leg	**TOTAL**	**2,441**	**2,883**	**7%**	**9%**	**33,546**
West Leg	Inbound	1,046	1,237			
West Leg	Outbound	971	1,411			
West Leg	**TOTAL**	**2,017**	**2,648**	**7%**	**9%**	**30,812**
OVERALL TOTAL		***6,202***	***7,455***	**7%**	***9%***	***86,753***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St. / Placentia Ln.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	2	2	0	0%	2	2	0	10%
	Through	498	548	50	10%	749	842	93	12%
	Right	39	47	8	21%	88	108	20	23%
	NB Total	539	597	58	11%	839	952	113	13%
SOUTH BOUND	Left	71	93	22	31%	174	186	12	7%
	Through	719	812	93	13%	923	1,015	92	10%
	Right	5	6	1	20%	0	0	0	#DIV/0!
	SB Total	795	911	116	15%	1,097	1,201	104	10%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	1	1	0	10%
	Right	0	0	0	#DIV/0!	1	1	0	10%
	EB Total	0	0	0	#DIV/0!	2	2	0	10%
WEST BOUND	Left	46	54	8	17%	29	48	19	66%
	Through	1	1	0	0%	1	1	0	10%
	Right	114	125	11	10%	98	162	64	65%
	WB Total	161	180	19	12%	128	211	83	65%
TOTAL ENTERING VOLUME		1,495	1,688	192.8	13%	2,066	2,367	301	15%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	911	1,201			
North Leg	Outbound	673	1,004			
North Leg	**TOTAL**	**1,584**	**2,205**	**6%**	**9%**	**24,809**
South Leg	Inbound	597	952			
South Leg	Outbound	866	1,064			
South Leg	**TOTAL**	**1,463**	**2,017**	**7%**	**9%**	**22,138**
East Leg	Inbound	180	211			
East Leg	Outbound	140	295			
East Leg	**TOTAL**	**320**	**506**	**7%**	**10%**	**4,861**
West Leg	Inbound	0	2			
West Leg	Outbound	9	3			
West Leg	**TOTAL**	**9**	**6**	**16%**	**10%**	**55**
OVERALL TOTAL		***3,376***	***4,734***	**7%**	***9%***	***51,863***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Garner Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	58	67	9	16%	7	8	1	10%
	Through	825	908	83	10%	812	940	128	16%
	Right	17	37	20	118%	4	13	9	225%
	NB Total	900	1,012	112	12%	823	961	138	17%
SOUTH BOUND	Left	28	41	13	46%	8	18	10	125%
	Through	715	869	154	22%	1,017	1,019	2	0%
	Right	30	33	3	10%	7	8	1	10%
	SB Total	773	943	170	22%	1,032	1,045	13	1%
EAST BOUND	Left	6	7	1	10%	31	34	3	10%
	Through	1	2	1	100%	0	0	0	#DIV/0!
	Right	19	26	7	37%	58	63	5	9%
	EB Total	26	35	9	33%	89	97	8	9%
WEST BOUND	Left	3	16	13	433%	7	14	7	100%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	9	26	17	189%	4	6	2	50%
	WB Total	12	42	30	250%	11	20	9	82%
TOTAL ENTERING VOLUME		1,711	2,031	320.1	19%	1,955	2,123	168	9%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	943	1,045			
North Leg	Outbound	940	980			
North Leg	**TOTAL**	**1,883**	**2,025**	**9%**	**9%**	**22,138**
South Leg	Inbound	1,012	961			
South Leg	Outbound	911	1,096			
South Leg	**TOTAL**	**1,923**	**2,057**	**8%**	**8%**	**25,282**
East Leg	Inbound	42	20			
East Leg	Outbound	80	31			
East Leg	**TOTAL**	**122**	**51**	**3%**	**1%**	**3,626**
West Leg	Inbound	35	97			
West Leg	Outbound	100	15			
West Leg	**TOTAL**	**135**	**113**	**12%**	**10%**	**1,089**
OVERALL TOTAL		***4,062***	***4,245***	***8%***	***8%***	***52,135***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	14	16	2	14%	41	53	12	29%
	Through	731	804	73	10%	616	685	69	11%
	Right	132	185	53	40%	145	176	31	21%
	NB Total	877	1,005	128	15%	802	914	112	14%
SOUTH BOUND	Left	219	363	144	66%	443	502	59	13%
	Through	590	646	56	9%	776	854	78	10%
	Right	7	10	3	43%	21	25	4	19%
	SB Total	816	1,019	203	25%	1,240	1,381	141	11%
EAST BOUND	Left	16	21	5	31%	18	23	5	28%
	Through	122	243	121	99%	110	152	42	38%
	Right	60	79	19	32%	32	36	4	13%
	EB Total	198	343	145	73%	160	211	51	32%
WEST BOUND	Left	108	125	17	16%	144	197	53	37%
	Through	50	74	24	48%	91	162	71	78%
	Right	224	264	40	18%	138	213	75	54%
	WB Total	382	463	81	21%	373	572	199	53%
TOTAL ENTERING VOLUME		2,273	2,830	557.1	25%	2,575	3,078	503	20%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,019	1,381			
North Leg	Outbound	1,089	921			
North Leg	**TOTAL**	**2,108**	**2,302**	**8%**	**9%**	**25,282**
South Leg	Inbound	1,005	914			
South Leg	Outbound	850	1,087			
South Leg	**TOTAL**	**1,855**	**2,001**	**8%**	**9%**	**22,494**
East Leg	Inbound	463	572			
East Leg	Outbound	791	830			
East Leg	**TOTAL**	**1,254**	**1,402**	**7%**	**8%**	**18,665**
West Leg	Inbound	343	211			
West Leg	Outbound	100	240			
West Leg	**TOTAL**	**443**	**451**	**6%**	**6%**	**7,983**
OVERALL TOTAL		***5,660***	***6,155***	***8%***	***8%***	***74,424***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Strong St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	19	21	2	10%	32	41	9	28%
	Through	678	685	7	1%	837	975	138	16%
	Right	54	100	46	85%	74	126	52	70%
	NB Total	751	806	55	7%	943	1,142	199	21%
SOUTH BOUND	Left	18	44	26	144%	43	55	12	28%
	Through	716	825	109	15%	817	899	82	10%
	Right	67	81	14	21%	53	58	5	10%
	SB Total	801	950	149	19%	913	1,012	99	11%
EAST BOUND	Left	76	84	8	10%	91	100	9	10%
	Through	54	86	32	59%	154	218	64	42%
	Right	54	59	5	10%	50	55	5	10%
	EB Total	184	229	45	24%	295	373	78	26%
WEST BOUND	Left	15	17	2	10%	31	36	5	16%
	Through	51	52	1	2%	52	58	6	12%
	Right	17	19	2	12%	36	37	1	3%
	WB Total	83	88	5	5%	119	131	12	10%
TOTAL ENTERING VOLUME		1,819	2,072	253.4	14%	2,270	2,658	388	17%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	950	1,012			
North Leg	Outbound	788	1,112			
North Leg	**TOTAL**	**1,738**	**2,124**	**8%**	**9%**	**22,494**
South Leg	Inbound	806	1,142			
South Leg	Outbound	901	990			
South Leg	**TOTAL**	**1,707**	**2,132**	**8%**	**10%**	**21,157**
East Leg	Inbound	88	131			
East Leg	Outbound	230	399			
East Leg	**TOTAL**	**318**	**530**	**8%**	**13%**	**4,115**
West Leg	Inbound	229	373			
West Leg	Outbound	154	157			
West Leg	**TOTAL**	**383**	**530**	**11%**	**15%**	**3,598**
OVERALL TOTAL		***4,145***	***5,316***	***8%***	***10%***	***51,364***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Oakley Av./SR-60 WB On Ramp
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	126	248	122	97%	244	437	193	79%
	Through	423	477	54	13%	626	939	313	50%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	549	725	176	32%	870	1,376	506	58%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	781	882	101	13%	766	786	20	3%
	Right	121	137	16	13%	189	208	19	10%
	SB Total	902	1,019	117	13%	955	994	39	4%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	52	82	30	58%	65	79	14	22%
	Through	75	118	43	57%	150	167	17	11%
	Right	463	417	-46	-10%	380	418	38	10%
	WB Total	590	617	27	5%	595	664	69	12%
TOTAL ENTERING VOLUME		2,041	2,361	320	16%	2,420	3,034	614	25%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,019	994			
North Leg	Outbound	894	1,357			
North Leg	**TOTAL**	**1,913**	**2,351**	**9%**	**11%**	**21,532**
South Leg	Inbound	725	1,376			
South Leg	Outbound	964	865			
South Leg	**TOTAL**	**1,689**	**2,241**	**8%**	**10%**	**22,186**
East Leg	Inbound	617	664			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**617**	**664**	**17%**	**18%**	**3,655**
West Leg	Inbound	0	0			
West Leg	Outbound	503	812			
West Leg	**TOTAL**	**503**	**812**	**6%**	**10%**	**7,966**
OVERALL TOTAL		***4,722***	***6,068***	**9%**	***11%***	***55,339***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./SR-60 EB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	396	494	98	25%	762	1,211	449	59%
	Right	202	213	11	5%	172	181	9	5%
	NB Total	598	707	109	18%	934	1,392	458	49%
SOUTH BOUND	Left	420	477	57	14%	328	361	33	10%
	Through	413	492	79	19%	503	549	46	9%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	833	969	136	16%	831	910	79	9%
EAST BOUND	Left	153	236	83	54%	108	169	61	56%
	Through	0	0	0	#DIV/0!	9	9	0	0%
	Right	151	208	57	38%	182	211	29	16%
	EB Total	304	444	140	46%	299	389	90	30%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,735	2,120	385	22%	2,064	2,691	627	30%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	969	910			
North Leg	Outbound	730	1,380			
North Leg	**TOTAL**	**1,699**	**2,290**	**8%**	**10%**	**22,187**
South Leg	Inbound	707	1,392			
South Leg	Outbound	700	760			
South Leg	**TOTAL**	**1,407**	**2,152**	**9%**	**14%**	**15,726**
East Leg	Inbound	0	0			
East Leg	Outbound	690	551			
East Leg	**TOTAL**	**690**	**551**	**15%**	**12%**	**4,516**
West Leg	Inbound	444	389			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**444**	**389**	**11%**	**10%**	**4,078**
OVERALL TOTAL		***4,240***	***5,382***	**9%**	***12%***	***46,507***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Spruce St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	4	4	0	10%	3	3	0	10%
	Through	370	407	37	10%	565	748	183	32%
	Right	11	12	1	10%	33	36	3	10%
	NB Total	385	424	39	10%	601	788	187	31%
SOUTH BOUND	Left	104	188	84	81%	107	180	73	68%
	Through	392	440	48	12%	410	451	41	10%
	Right	12	13	1	10%	12	16	4	33%
	SB Total	508	641	133	26%	529	647	118	22%
EAST BOUND	Left	20	23	3	15%	51	70	19	37%
	Through	47	85	38	81%	156	172	16	10%
	Right	20	23	3	15%	24	26	2	10%
	EB Total	87	131	44	51%	231	268	37	16%
WEST BOUND	Left	44	87	43	98%	48	53	5	10%
	Through	53	60	7	13%	28	42	14	50%
	Right	85	175	90	106%	81	212	131	162%
	WB Total	182	322	140	77%	157	307	150	95%
TOTAL ENTERING VOLUME		1,162	1,518	355.7	31%	1,518	2,009	491	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	641	647			
North Leg	Outbound	605	1,030			
North Leg	**TOTAL**	**1,246**	**1,677**	**9%**	**13%**	**13,333**
South Leg	Inbound	424	788			
South Leg	Outbound	550	530			
South Leg	**TOTAL**	**974**	**1,318**	**7%**	**9%**	**14,103**
East Leg	Inbound	322	307			
East Leg	Outbound	285	388			
East Leg	**TOTAL**	**607**	**695**	**7%**	**8%**	**8,769**
West Leg	Inbound	131	268			
West Leg	Outbound	78	61			
West Leg	**TOTAL**	**209**	**329**	**8%**	**12%**	**2,719**
OVERALL TOTAL		***3,035***	***4,019***	***8%***	***10%***	***38,924***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Oakley Av./SR-60 WB Off Ramp
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	37	41	4	10%	89	88	-1	-1%
	Through	185	204	19	10%	248	272	24	10%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	222	244	22	10%	337	360	23	7%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	275	314	39	14%	304	334	30	10%
	Right	118	143	25	21%	92	101	9	10%
	SB Total	393	457	64	16%	396	436	40	10%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	88	97	9	10%	71	74	3	4%
	Through	450	469	19	4%	440	445	5	1%
	Right	62	64	2	3%	241	271	30	12%
	WB Total	600	630	30	5%	752	790	38	5%
TOTAL ENTERING VOLUME		1,215	1,331	116	10%	1,485	1,586	101	7%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	457	436			
North Leg	Outbound	268	543			
North Leg	**TOTAL**	**725**	**979**	**14%**	**19%**	**5,209**
South Leg	Inbound	244	360			
South Leg	Outbound	411	408			
South Leg	**TOTAL**	**655**	**768**	**16%**	**18%**	**4,190**
East Leg	Inbound	630	790			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**630**	**790**	**14%**	**18%**	**4,425**
West Leg	Inbound	0	0			
West Leg	Outbound	653	634			
West Leg	**TOTAL**	**653**	**634**	**18%**	**17%**	**3,655**
OVERALL TOTAL		***2,662***	***3,171***	**15%**	***18%***	***17,479***

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Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Strong St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	30	33	3	10%	60	66	6	10%
	Through	107	118	11	10%	267	330	63	24%
	Right	34	37	3	10%	115	127	12	10%
	NB Total	171	188	17	10%	442	523	81	18%
SOUTH BOUND	Left	4	4	0	0%	5	6	1	20%
	Through	207	259	52	25%	202	222	20	10%
	Right	29	37	8	28%	16	19	3	19%
	SB Total	240	300	60	25%	223	247	24	11%
EAST BOUND	Left	55	100	45	82%	94	177	83	88%
	Through	22	32	10	45%	89	132	43	48%
	Right	55	98	43	78%	67	74	7	10%
	EB Total	132	230	98	74%	250	383	133	53%
WEST BOUND	Left	63	69	6	10%	67	74	7	10%
	Through	28	31	3	10%	37	44	7	19%
	Right	6	6	0	0%	2	3	1	50%
	WB Total	97	106	9	9%	106	121	15	14%
TOTAL ENTERING VOLUME		640	824	184.2	29%	1,021	1,273	252	25%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	300	247			
North Leg	Outbound	224	510			
North Leg	**TOTAL**	**524**	**757**	**11%**	**16%**	**4,632**
South Leg	Inbound	188	523			
South Leg	Outbound	426	370			
South Leg	**TOTAL**	**614**	**892**	**12%**	**17%**	**5,209**
East Leg	Inbound	106	121			
East Leg	Outbound	73	265			
East Leg	**TOTAL**	**180**	**385**	**9%**	**19%**	**2,024**
West Leg	Inbound	230	383			
West Leg	Outbound	101	129			
West Leg	**TOTAL**	**331**	**512**	**8%**	**12%**	**4,115**
OVERALL TOTAL		***1,648***	***2,546***	**10%**	***16%***	***15,980***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	27	30	3	10%	37	41	4	10%
	Through	79	87	8	10%	172	197	25	15%
	Right	105	151	46	44%	133	146	13	10%
	NB Total	211	268	57	27%	342	384	42	12%
SOUTH BOUND	Left	39	130	91	233%	36	52	16	44%
	Through	89	106	17	19%	83	91	8	10%
	Right	25	42	17	68%	21	24	3	14%
	SB Total	153	278	125	82%	140	167	27	20%
EAST BOUND	Left	34	37	3	10%	69	101	32	46%
	Through	468	829	361	77%	588	712	124	21%
	Right	20	22	2	10%	22	24	2	10%
	EB Total	522	888	366	70%	679	837	158	23%
WEST BOUND	Left	69	76	7	10%	127	140	13	10%
	Through	362	449	87	24%	408	678	270	66%
	Right	23	35	12	52%	52	132	80	154%
	WB Total	454	560	106	23%	587	950	363	62%
TOTAL ENTERING VOLUME		1,340	1,994	653.9	49%	1,748	2,338	590	34%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	278	167			
North Leg	Outbound	159	430			
North Leg	**TOTAL**	**437**	**597**	**8%**	**10%**	**5,773**
South Leg	Inbound	268	384			
South Leg	Outbound	204	255			
South Leg	**TOTAL**	**472**	**639**	**15%**	**21%**	**3,106**
East Leg	Inbound	560	950			
East Leg	Outbound	1,110	910			
East Leg	**TOTAL**	**1,670**	**1,860**	**7%**	**8%**	**22,788**
West Leg	Inbound	888	837			
West Leg	Outbound	521	743			
West Leg	**TOTAL**	**1,409**	**1,580**	**8%**	**8%**	**18,665**
OVERALL TOTAL		***3,988***	***4,676***	***8%***	***9%***	***50,332***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Garner Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	2	19	17	850%
	Through	67	140	73	109%	138	253	115	83%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	67	140	73	109%	140	272	132	94%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	57	123	66	116%	87	134	47	54%
	Right	1	0	-1	-100%	4	13	9	225%
	SB Total	58	123	65	112%	91	147	56	62%
EAST BOUND	Left	0	0	0	#DIV/0!	6	8	2	33%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	3	18	15	500%	4	13	9	225%
	EB Total	3	18	15	500%	10	21	11	110%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		128	281	153	120%	241	440	199	83%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	123	147			
North Leg	Outbound	140	261			
North Leg	**TOTAL**	**263**	**408**	**8%**	**13%**	**3,212**
South Leg	Inbound	140	272			
South Leg	Outbound	141	147			
South Leg	**TOTAL**	**281**	**419**	**6%**	**9%**	**4,615**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	18	21			
West Leg	Outbound	0	32			
West Leg	**TOTAL**	**18**	**53**	**0%**	**1%**	**3,744**
OVERALL TOTAL		***562***	***880***	**5%**	***8%***	***11,571***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	5	6	1	10%	10	11	1	10%
	Through	3	3	0	10%	0	0	0	#DIV/0!
	Right	55	165	110	200%	140	211	71	51%
	NB Total	63	174	111	176%	150	222	72	48%
SOUTH BOUND	Left	1	1	0	10%	10	25	15	150%
	Through	3	3	0	10%	4	4	0	10%
	Right	3	3	0	10%	1	1	0	10%
	SB Total	7	8	1	10%	15	31	16	103%
EAST BOUND	Left	6	7	1	10%	0	0	0	#DIV/0!
	Through	90	166	76	84%	244	361	117	48%
	Right	2	2	0	10%	14	15	1	10%
	EB Total	98	175	77	78%	258	376	118	46%
WEST BOUND	Left	58	74	16	28%	60	121	61	102%
	Through	150	191	41	27%	80	162	82	103%
	Right	7	20	13	186%	3	3	0	10%
	WB Total	215	285	70	33%	143	286	143	100%
TOTAL ENTERING VOLUME		383	641	258.3	67%	566	915	349	62%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	8	31			
North Leg	Outbound	30	3			
North Leg	**TOTAL**	**38**	**34**	**18%**	**16%**	**205**
South Leg	Inbound	174	222			
South Leg	Outbound	80	141			
South Leg	**TOTAL**	**253**	**363**	**8%**	**11%**	**3,212**
East Leg	Inbound	285	286			
East Leg	Outbound	332	597			
East Leg	**TOTAL**	**617**	**883**	**7%**	**10%**	**8,578**
West Leg	Inbound	175	376			
West Leg	Outbound	200	174			
West Leg	**TOTAL**	**375**	**551**	**8%**	**11%**	**4,861**
OVERALL TOTAL		***1,283***	***1,830***	***8%***	***11%***	***16,856***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) With Project - Scenario 2	Analyst:	RV
		Date:	08/12/19

LOCATION: Rivera St./Market St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	1	3	2	200%	1	4	3	300%
	Through	0	0	0	#DIV/0!	4	6	2	50%
	Right	5	7	2	40%	22	24	2	10%
	NB Total	6	10	4	67%	27	34	7	27%
SOUTH BOUND	Left	283	311	28	10%	243	267	24	10%
	Through	1	1	0	0%	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	284	312	28	10%	243	267	24	10%
EAST BOUND	Left	42	86	44	105%	87	209	122	140%
	Through	624	1,057	433	69%	729	1,092	363	50%
	Right	3	7	4	133%	1	2	1	100%
	EB Total	669	1,150	481	72%	817	1,303	486	59%
WEST BOUND	Left	11	12	1	9%	10	11	1	10%
	Through	511	681	170	33%	606	1,160	554	91%
	Right	325	358	33	10%	273	300	27	10%
	WB Total	847	1,051	204	24%	889	1,471	582	66%
TOTAL ENTERING VOLUME		1,806	2,523	716.8	40%	1,976	3,076	1100	56%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	312	267			
North Leg	Outbound	444	515			
North Leg	**TOTAL**	**756**	**783**	**10%**	**10%**	**7,566**
South Leg	Inbound	10	34			
South Leg	Outbound	20	13			
South Leg	**TOTAL**	**30**	**47**	**7%**	**11%**	**442**
East Leg	Inbound	1,051	1,471			
East Leg	Outbound	1,375	1,384			
East Leg	**TOTAL**	**2,426**	**2,855**	**8%**	**9%**	**30,614**
West Leg	Inbound	1,150	1,303			
West Leg	Outbound	684	1,164			
West Leg	**TOTAL**	**1,834**	**2,467**	**6%**	**8%**	**29,027**
OVERALL TOTAL		***5,046***	***6,152***	***7%***	***9%***	***67,649***

HORIZON YEAR 2040 SPECIFIC PLAN SCENARIO TWO WITH ORANGE STREET EXTENSION

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Stephens Av. / West Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	66	100	34	52%	85	126	41	48%
	Through	2	3	1	52%	4	6	2	48%
	Right	87	132	45	52%	85	126	41	48%
	NB Total	155	236	81	52%	174	258	84	48%
SOUTH BOUND	Left	16	24	8	52%	7	10	3	48%
	Through	13	20	7	52%	4	6	2	48%
	Right	3	5	2	52%	2	3	1	48%
	SB Total	32	49	17	52%	13	19	6	48%
EAST BOUND	Left	0	0	0	#DIV/0!	1	1	0	48%
	Through	146	222	76	52%	260	385	125	48%
	Right	72	109	37	52%	154	228	74	48%
	EB Total	218	331	113	52%	415	614	199	48%
WEST BOUND	Left	316	480	164	52%	233	345	112	48%
	Through	160	243	83	52%	144	213	69	48%
	Right	11	17	6	52%	8	12	4	48%
	WB Total	487	740	253	52%	385	570	185	48%
TOTAL ENTERING VOLUME		892	1,356	463.84	52%	987	1,461	474	48%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	49	19			
North Leg	Outbound	20	19			
North Leg	**TOTAL**	**68**	**38**	**15%**	**8%**	**461**
South Leg	Inbound	236	258			
South Leg	Outbound	610	579			
South Leg	**TOTAL**	**845**	**836**	**8%**	**8%**	**10,013**
East Leg	Inbound	740	570			
East Leg	Outbound	378	521			
East Leg	**TOTAL**	**1,119**	**1,091**	**9%**	**8%**	**13,062**
West Leg	Inbound	331	614			
West Leg	Outbound	348	342			
West Leg	**TOTAL**	**679**	**956**	**7%**	**10%**	**9,237**
OVERALL TOTAL		***2,712***	***2,922***	**8%**	***9%***	***32,772***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: West La Cadena Dr./I-215 SB Ramps/Stephens Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	31	47	16	52%	41	61	20	48%
	Through	64	97	33	52%	224	332	108	48%
	Right	21	32	11	52%	7	10	3	48%
	NB Total	116	176	60	52%	272	403	131	48%
SOUTH BOUND	Left	103	157	54	52%	108	160	52	48%
	Through	270	410	140	52%	354	524	170	48%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	373	567	194	52%	462	684	222	48%
EAST BOUND	Left	1	2	1	52%	1	1	0	48%
	Through	312	474	162	52%	244	361	117	48%
	Right	60	91	31	52%	80	118	38	48%
	EB Total	373	567	194	52%	325	481	156	48%
WEST BOUND	Left	47	71	24	52%	44	65	21	48%
	Through	94	143	49	52%	93	138	45	48%
	Right	4	6	2	52%	7	10	3	48%
	WB Total	145	220	75	52%	144	213	69	48%
TOTAL ENTERING VOLUME		1,007	1,531	523.64	52%	1,203	1,780	577	48%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	567	684			
North Leg	Outbound	105	343			
North Leg	**TOTAL**	**672**	**1,027**	**5%**	**8%**	**12,575**
South Leg	Inbound	176	403			
South Leg	Outbound	573	707			
South Leg	**TOTAL**	**749**	**1,110**	**6%**	**8%**	**13,590**
East Leg	Inbound	220	213			
East Leg	Outbound	663	531			
East Leg	**TOTAL**	**883**	**744**	**10%**	**8%**	**9,114**
West Leg	Inbound	567	481			
West Leg	Outbound	190	198			
West Leg	**TOTAL**	**757**	**679**	**9%**	**8%**	**8,317**
OVERALL TOTAL		***3,061***	***3,561***	***7%***	***8%***	***43,597***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr./I-215 NB Ramps/Highgrove Pl.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	33	50	17	52%	91	135	44	48%
	Right	43	65	22	52%	80	118	38	48%
	NB Total	76	116	40	52%	171	253	82	48%
SOUTH BOUND	Left	1	2	1	52%	0	0	0	#DIV/0!
	Through	70	106	36	52%	77	114	37	48%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	71	108	37	52%	77	114	37	48%
EAST BOUND	Left	28	43	15	52%	37	55	18	48%
	Through	169	257	88	52%	224	332	108	48%
	Right	43	65	22	52%	12	18	6	48%
	EB Total	240	365	125	52%	273	404	131	48%
WEST BOUND	Left	26	40	14	52%	30	44	14	48%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	6	9	3	48%
	WB Total	26	40	14	52%	36	53	17	48%
TOTAL ENTERING VOLUME		413	628	214.76	52%	557	824	267	48%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	108	114			
North Leg	Outbound	93	198			
North Leg	**TOTAL**	**201**	**312**	**5%**	**8%**	**3,823**
South Leg	Inbound	116	253			
South Leg	Outbound	211	176			
South Leg	**TOTAL**	**327**	**429**	**6%**	**8%**	**5,255**
East Leg	Inbound	40	53			
East Leg	Outbound	324	450			
East Leg	**TOTAL**	**363**	**503**	**6%**	**8%**	**6,161**
West Leg	Inbound	365	404			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**365**	**404**	**7%**	**8%**	**4,947**
OVERALL TOTAL		***1,256***	***1,649***	**6%**	***8%***	***20,186***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Highgrove Pl. / West Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	54	82	28	52%	54	80	26	48%
	Through	1	2	1	52%	0	0	0	#DIV/0!
	Right	158	240	82	52%	250	370	120	48%
	NB Total	213	324	111	52%	304	450	146	48%
SOUTH BOUND	Left	3	5	2	52%	6	9	3	48%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	20	30	10	52%	32	47	15	48%
	SB Total	23	35	12	52%	38	56	18	48%
EAST BOUND	Left	0	0	0	#DIV/0!	2	3	1	48%
	Through	238	362	124	52%	324	480	156	48%
	Right	11	17	6	52%	26	38	12	48%
	EB Total	249	378	129	52%	352	521	169	48%
WEST BOUND	Left	15	23	8	52%	10	15	5	48%
	Through	413	628	215	52%	299	443	144	48%
	Right	4	6	2	52%	3	4	1	48%
	WB Total	432	657	225	52%	312	462	150	48%
TOTAL ENTERING VOLUME		917	1,394	476.84	52%	1,006	1,489	483	48%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	35	56			
North Leg	Outbound	8	7			
North Leg	**TOTAL**	**43**	**64**	**5%**	**7%**	**906**
South Leg	Inbound	324	450			
South Leg	Outbound	40	53			
South Leg	**TOTAL**	**363**	**503**	**6%**	**8%**	**6,161**
East Leg	Inbound	657	462			
East Leg	Outbound	606	858			
East Leg	**TOTAL**	**1,263**	**1,320**	**8%**	**8%**	**16,163**
West Leg	Inbound	378	521			
West Leg	Outbound	740	570			
West Leg	**TOTAL**	**1,119**	**1,091**	**8%**	**8%**	**13,354**
OVERALL TOTAL		***2,788***	***2,978***	***8%***	***8%***	***36,584***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Primer St. / Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	275	418	143	52%	267	395	435	48%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	103	157	54	52%	154	228	251	48%
	SB Total	378	575	197	52%	421	623	202	48%
EAST BOUND	Left	155	236	81	52%	164	243	267	48%
	Through	500	760	260	52%	670	992	322	48%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	655	996	341	52%	834	1,234	400	48%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	362	550	188	52%	498	737	239	48%
	Right	357	543	186	52%	571	845	930	48%
	WB Total	719	1,093	374	52%	1,069	1,582	513	48%
TOTAL ENTERING VOLUME		1,752	2,663	911.04	52%	2,324	3,440	1116	48%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	575	623			
North Leg	Outbound	778	1,088			
North Leg	**TOTAL**	**1,353**	**1,711**	**9%**	**12%**	**14,362**
South Leg	Inbound	0	0			
South Leg	Outbound	0	0			
South Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
East Leg	Inbound	1,093	1,582			
East Leg	Outbound	1,178	1,387			
East Leg	**TOTAL**	**2,271**	**2,969**	**8%**	**11%**	**27,923**
West Leg	Inbound	996	1,234			
West Leg	Outbound	707	965			
West Leg	**TOTAL**	**1,702**	**2,199**	**9%**	**12%**	**18,461**
OVERALL TOTAL		***5,326***	***6,879***	**9%**	***11%***	***60,746***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: West La Cadena Dr. / I-215 SB Ramps / Interchange Dr.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	11	17	6	52%	20	30	10	48%
	Through	252	383	131	52%	182	269	87	48%
	Right	2	3	1	52%	6	9	3	48%
	NB Total	265	403	138	52%	208	308	100	48%
SOUTH BOUND	Left	88	134	46	52%	115	170	55	48%
	Through	417	634	217	52%	613	907	294	48%
	Right	5	8	3	52%	7	10	3	48%
	SB Total	510	775	265	52%	735	1,088	353	48%
EAST BOUND	Left	5	8	3	52%	2	3	1	48%
	Through	22	33	11	52%	164	243	79	48%
	Right	13	20	7	52%	9	13	4	48%
	EB Total	40	61	21	52%	175	259	84	48%
WEST BOUND	Left	246	374	128	52%	250	370	120	48%
	Through	31	47	16	52%	61	90	29	48%
	Right	149	226	77	52%	174	258	84	48%
	WB Total	426	648	222	52%	485	718	233	48%
TOTAL ENTERING VOLUME		1,241	1,886	645.32	52%	1,603	2,372	769	48%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	775	1,088			
North Leg	Outbound	617	530			
North Leg	**TOTAL**	**1,392**	**1,618**	**16%**	**19%**	**8,486**
South Leg	Inbound	403	308			
South Leg	Outbound	1,028	1,291			
South Leg	**TOTAL**	**1,430**	**1,598**	**49%**	**55%**	**2,899**
East Leg	Inbound	648	718			
East Leg	Outbound	170	422			
East Leg	**TOTAL**	**818**	**1,140**	**7%**	**10%**	**11,903**
West Leg	Inbound	61	259			
West Leg	Outbound	71	130			
West Leg	**TOTAL**	**132**	**389**	**1%**	**3%**	**12,045**
OVERALL TOTAL		***3,773***	***4,745***	**11%**	***13%***	***35,334***

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Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: East La Cadena Dr. / I-215 NB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	370	562	192	52%	589	872	283	48%
	Through	82	125	43	52%	119	176	57	48%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	452	687	235	52%	708	1,048	340	48%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	128	195	67	52%	233	345	112	48%
	Right	17	26	9	52%	53	78	25	48%
	SB Total	145	220	75	52%	286	423	137	48%
EAST BOUND	Left	153	233	80	52%	59	87	28	48%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	542	824	282	52%	242	358	116	48%
	EB Total	695	1,056	361	52%	301	445	144	48%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,292	1,964	671.84	52%	1,295	1,917	622	48%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	220	423			
North Leg	Outbound	357	263			
North Leg	**TOTAL**	**578**	**687**	**67%**	**80%**	**858**
South Leg	Inbound	687	1,048			
South Leg	Outbound	1,018	703			
South Leg	**TOTAL**	**1,705**	**1,751**	**8%**	**8%**	**21,436**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	1,056	445			
West Leg	Outbound	588	950			
West Leg	**TOTAL**	**1,645**	**1,396**	**10%**	**8%**	**17,087**
OVERALL TOTAL		***3,928***	***3,833***	**10%**	***10%***	***39,381***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 2 - With Connection\[07 La Cadena_215NB.xls]Output (3)

Project:	Northside Specific Plan		Job #:	10322	
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection		Analyst:	RV	
			Date:	08/12/19	

LOCATION: East La Cadena Dr./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	22	33	11	52%	27	40	13	48%
	Through	42	64	22	52%	86	127	41	48%
	Right	42	64	22	52%	22	33	11	48%
	NB Total	106	161	55	52%	135	200	65	48%
SOUTH BOUND	Left	392	596	204	52%	175	259	84	48%
	Through	22	33	11	52%	64	95	31	48%
	Right	256	389	133	52%	236	349	113	48%
	SB Total	670	1,018	348	52%	475	703	228	48%
EAST BOUND	Left	125	190	65	52%	186	275	89	48%
	Through	628	955	327	52%	710	1,051	341	48%
	Right	22	33	11	52%	41	61	20	48%
	EB Total	775	1,178	403	52%	937	1,387	450	48%
WEST BOUND	Left	20	30	10	52%	35	52	17	48%
	Through	441	670	229	52%	806	1,193	387	48%
	Right	285	433	148	52%	436	645	209	48%
	WB Total	746	1,134	388	52%	1,277	1,890	613	48%
TOTAL ENTERING VOLUME		2,297	3,491	1194.44	52%	2,824	4,180	1356	48%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,018	703			
North Leg	Outbound	687	1,048			
North Leg	**TOTAL**	**1,705**	**1,751**	**8%**	**8%**	**21,436**
South Leg	Inbound	161	200			
South Leg	Outbound	97	207			
South Leg	**TOTAL**	**258**	**407**	**5%**	**8%**	**4,983**
East Leg	Inbound	1,134	1,890			
East Leg	Outbound	1,614	1,342			
East Leg	**TOTAL**	**2,748**	**3,232**	**7%**	**8%**	**39,574**
West Leg	Inbound	1,178	1,387			
West Leg	Outbound	1,093	1,582			
West Leg	**TOTAL**	**2,271**	**2,969**	**6%**	**8%**	**36,349**
OVERALL TOTAL		***6,983***	***8,359***	***7%***	***8%***	***102,342***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St. / Placentia Ln.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	2	2	0	0%	2	2	0	10%
	Through	498	548	50	10%	749	856	107	14%
	Right	39	43	4	10%	88	104	16	18%
	NB Total	539	593	54	10%	839	962	123	15%
SOUTH BOUND	Left	71	87	16	23%	174	180	6	3%
	Through	719	823	104	14%	923	1,015	92	10%
	Right	5	7	2	40%	0	0	0	#DIV/0!
	SB Total	795	917	122	15%	1,097	1,195	98	9%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	1	1	0	10%
	Right	0	0	0	#DIV/0!	1	1	0	10%
	EB Total	0	0	0	#DIV/0!	2	2	0	10%
WEST BOUND	Left	46	47	1	2%	29	43	14	48%
	Through	1	1	0	0%	1	1	0	10%
	Right	114	125	11	10%	98	147	49	50%
	WB Total	161	173	12	8%	128	191	63	49%
TOTAL ENTERING VOLUME		1,495	1,683	188.2	13%	2,066	2,351	285	14%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	917	1,195			
North Leg	Outbound	673	1,003			
North Leg	**TOTAL**	**1,590**	**2,198**	**6%**	**9%**	**25,234**
South Leg	Inbound	593	962			
South Leg	Outbound	870	1,059			
South Leg	**TOTAL**	**1,463**	**2,022**	**6%**	**9%**	**22,968**
East Leg	Inbound	173	191			
East Leg	Outbound	130	285			
East Leg	**TOTAL**	**303**	**476**	**7%**	**11%**	**4,456**
West Leg	Inbound	0	2			
West Leg	Outbound	10	3			
West Leg	**TOTAL**	**10**	**6**	**18%**	**10%**	**55**
OVERALL TOTAL		***3,366***	***4,702***	**6%**	***9%***	***52,713***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Garner Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	58	67	9	16%	7	8	1	10%
	Through	825	908	83	10%	812	956	144	18%
	Right	17	38	21	124%	4	13	9	225%
	NB Total	900	1,013	113	13%	823	977	154	19%
SOUTH BOUND	Left	28	40	12	43%	8	17	9	113%
	Through	715	877	162	23%	1,017	1,023	6	1%
	Right	30	33	3	10%	7	8	1	10%
	SB Total	773	950	177	23%	1,032	1,048	16	2%
EAST BOUND	Left	6	7	1	10%	31	34	3	10%
	Through	1	2	1	100%	0	0	0	#DIV/0!
	Right	19	26	7	37%	58	64	6	10%
	EB Total	26	35	9	33%	89	98	9	10%
WEST BOUND	Left	3	16	13	433%	7	14	7	100%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	9	25	16	178%	4	6	2	50%
	WB Total	12	41	29	242%	11	20	9	82%
TOTAL ENTERING VOLUME		1,711	2,038	327.1	19%	1,955	2,143	188	10%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	950	1,048			
North Leg	Outbound	939	996			
North Leg	**TOTAL**	**1,889**	**2,044**	**8%**	**9%**	**22,968**
South Leg	Inbound	1,013	977			
South Leg	Outbound	919	1,101			
South Leg	**TOTAL**	**1,932**	**2,078**	**7%**	**8%**	**26,200**
East Leg	Inbound	41	20			
East Leg	Outbound	80	30			
East Leg	**TOTAL**	**121**	**50**	**3%**	**1%**	**3,731**
West Leg	Inbound	35	98			
West Leg	Outbound	100	15			
West Leg	**TOTAL**	**135**	**114**	**12%**	**10%**	**1,089**
OVERALL TOTAL		***4,076***	***4,285***	***8%***	***8%***	***53,988***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	14	16	2	14%	41	52	11	27%
	Through	731	804	73	10%	616	698	82	13%
	Right	132	181	49	37%	145	180	35	24%
	NB Total	877	1,001	124	14%	802	930	128	16%
SOUTH BOUND	Left	219	362	143	65%	443	493	50	11%
	Through	590	662	72	12%	776	854	78	10%
	Right	7	10	3	43%	21	24	3	14%
	SB Total	816	1,034	218	27%	1,240	1,371	131	11%
EAST BOUND	Left	16	22	6	38%	18	24	6	33%
	Through	122	247	125	102%	110	158	48	44%
	Right	60	82	22	37%	32	38	6	19%
	EB Total	198	351	153	77%	160	220	60	38%
WEST BOUND	Left	108	125	17	16%	144	202	58	40%
	Through	50	74	24	48%	91	157	66	73%
	Right	224	263	39	17%	138	211	73	53%
	WB Total	382	462	80	21%	373	570	197	53%
TOTAL ENTERING VOLUME		2,273	2,848	575.1	25%	2,575	3,091	516	20%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,034	1,371			
North Leg	Outbound	1,089	933			
North Leg	**TOTAL**	**2,123**	**2,304**	**8%**	**9%**	**26,200**
South Leg	Inbound	1,001	930			
South Leg	Outbound	869	1,094			
South Leg	**TOTAL**	**1,870**	**2,024**	**9%**	**10%**	**20,523**
East Leg	Inbound	462	570			
East Leg	Outbound	790	831			
East Leg	**TOTAL**	**1,252**	**1,401**	**7%**	**8%**	**18,433**
West Leg	Inbound	351	220			
West Leg	Outbound	100	233			
West Leg	**TOTAL**	**451**	**453**	**6%**	**6%**	**8,047**
OVERALL TOTAL		***5,696***	***6,181***	***8%***	***8%***	***73,203***

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Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Strong St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	19	21	2	10%	32	42	10	31%
	Through	678	684	6	1%	837	995	158	19%
	Right	54	99	45	83%	74	135	61	82%
	NB Total	751	804	53	7%	943	1,172	229	24%
SOUTH BOUND	Left	18	46	28	156%	43	57	14	33%
	Through	716	827	111	16%	817	899	82	10%
	Right	67	82	15	22%	53	58	5	10%
	SB Total	801	955	154	19%	913	1,014	101	11%
EAST BOUND	Left	76	84	8	10%	91	100	9	10%
	Through	54	86	32	59%	154	228	74	48%
	Right	54	59	5	10%	50	55	5	10%
	EB Total	184	229	45	24%	295	383	88	30%
WEST BOUND	Left	15	17	2	10%	31	36	5	16%
	Through	51	51	0	0%	52	58	6	12%
	Right	17	19	2	12%	36	37	1	3%
	WB Total	83	87	4	4%	119	131	12	10%
TOTAL ENTERING VOLUME		1,819	2,074	255.4	14%	2,270	2,700	430	19%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	955	1,014			
North Leg	Outbound	787	1,132			
North Leg	**TOTAL**	**1,742**	**2,146**	**8%**	**10%**	**20,523**
South Leg	Inbound	804	1,172			
South Leg	Outbound	903	990			
South Leg	**TOTAL**	**1,707**	**2,162**	**8%**	**10%**	**22,033**
East Leg	Inbound	87	131			
East Leg	Outbound	231	420			
East Leg	**TOTAL**	**318**	**551**	**7%**	**13%**	**4,239**
West Leg	Inbound	229	383			
West Leg	Outbound	154	158			
West Leg	**TOTAL**	**383**	**541**	**11%**	**15%**	**3,626**
OVERALL TOTAL		***4,149***	***5,400***	***8%***	***11%***	***50,421***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Oakley Av./SR-60 WB On Ramp
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	126	267	141	112%	244	423	179	73%
	Through	423	468	45	11%	626	944	318	51%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	549	735	186	34%	870	1,367	497	57%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	781	886	105	13%	766	783	17	2%
	Right	121	143	22	18%	189	208	19	10%
	SB Total	902	1,029	127	14%	955	991	36	4%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	52	88	36	69%	65	76	11	17%
	Through	75	132	57	76%	150	163	13	9%
	Right	463	509	46	10%	380	418	38	10%
	WB Total	590	729	139	24%	595	657	62	10%
TOTAL ENTERING VOLUME		2,041	2,493	452.3	22%	2,420	3,015	595	25%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,029	991			
North Leg	Outbound	977	1,362			
North Leg	**TOTAL**	**2,006**	**2,353**	**9%**	**11%**	**22,408**
South Leg	Inbound	735	1,367			
South Leg	Outbound	974	859			
South Leg	**TOTAL**	**1,709**	**2,226**	**7%**	**10%**	**22,870**
East Leg	Inbound	729	657			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**729**	**657**	**20%**	**18%**	**3,655**
West Leg	Inbound	0	0			
West Leg	Outbound	542	794			
West Leg	**TOTAL**	**542**	**794**	**7%**	**10%**	**8,265**
OVERALL TOTAL		***4,987***	***6,030***	**9%**	***11%***	***57,198***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 2 - With Connection\[13 Main_Oakley_60 WB.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./SR-60 EB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	396	488	92	23%	762	1,202	440	58%
	Right	202	209	7	3%	172	180	8	5%
	NB Total	598	697	99	17%	934	1,382	448	48%
SOUTH BOUND	Left	420	491	71	17%	328	361	33	10%
	Through	413	488	75	18%	503	542	39	8%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	833	979	146	18%	831	903	72	9%
EAST BOUND	Left	153	252	99	65%	108	168	60	56%
	Through	0	0	0	#DIV/0!	9	9	0	0%
	Right	151	212	61	40%	182	208	26	14%
	EB Total	304	464	160	53%	299	385	86	29%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,735	2,140	405	23%	2,064	2,670	606	29%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	979	903			
North Leg	Outbound	740	1,370			
North Leg	**TOTAL**	**1,719**	**2,273**	**8%**	**10%**	**22,871**
South Leg	Inbound	697	1,382			
South Leg	Outbound	700	750			
South Leg	**TOTAL**	**1,397**	**2,132**	**9%**	**14%**	**15,778**
East Leg	Inbound	0	0			
East Leg	Outbound	700	550			
East Leg	**TOTAL**	**700**	**550**	**15%**	**12%**	**4,698**
West Leg	Inbound	464	385			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**464**	**385**	**10%**	**9%**	**4,425**
OVERALL TOTAL		***4,280***	***5,340***	**9%**	***11%***	***47,772***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Main St./Spruce St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	4	4	0	10%	3	3	0	0%
	Through	370	370	0	0%	565	760	195	35%
	Right	11	18	7	64%	33	40	7	21%
	NB Total	385	392	7	2%	601	803	202	34%
SOUTH BOUND	Left	104	185	81	78%	107	184	77	72%
	Through	392	444	52	13%	410	451	41	10%
	Right	12	22	10	83%	12	14	2	17%
	SB Total	508	651	143	28%	529	649	120	23%
EAST BOUND	Left	20	22	2	10%	51	60	9	18%
	Through	47	86	39	83%	156	166	10	6%
	Right	20	23	3	15%	24	26	2	10%
	EB Total	87	131	44	51%	231	252	21	9%
WEST BOUND	Left	44	93	49	111%	48	62	14	29%
	Through	53	60	7	13%	28	43	15	54%
	Right	85	168	83	98%	81	200	119	147%
	WB Total	182	321	139	76%	157	305	148	94%
TOTAL ENTERING VOLUME		1,162	1,495	333.4	29%	1,518	2,009	491	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	651	649			
North Leg	Outbound	560	1,020			
North Leg	**TOTAL**	**1,211**	**1,669**	**9%**	**12%**	**13,385**
South Leg	Inbound	392	803			
South Leg	Outbound	560	539			
South Leg	**TOTAL**	**952**	**1,342**	**7%**	**10%**	**14,103**
East Leg	Inbound	321	305			
East Leg	Outbound	289	390			
East Leg	**TOTAL**	**610**	**695**	**7%**	**8%**	**9,123**
West Leg	Inbound	131	252			
West Leg	Outbound	86	60			
West Leg	**TOTAL**	**217**	**312**	**8%**	**11%**	**2,723**
OVERALL TOTAL		***2,991***	***4,019***	***8%***	***10%***	***39,334***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Oakley Av./SR-60 WB Off Ramp
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	37	37	0	0%	89	94	5	6%
	Through	185	185	0	0%	248	319	71	29%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	222	222	0	0%	337	413	76	23%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	275	348	73	27%	304	309	5	2%
	Right	118	166	48	41%	92	93	1	1%
	SB Total	393	514	121	31%	396	402	6	2%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	88	97	9	10%	71	71	0	0%
	Through	450	467	17	4%	440	484	44	10%
	Right	62	65	3	5%	241	291	50	21%
	WB Total	600	629	29	5%	752	846	94	13%
TOTAL ENTERING VOLUME		1,215	1,365	149.8	12%	1,485	1,661	176	12%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	514	402			
North Leg	Outbound	250	610			
North Leg	**TOTAL**	**764**	**1,012**	**15%**	**19%**	**5,191**
South Leg	Inbound	222	413			
South Leg	Outbound	445	380			
South Leg	**TOTAL**	**667**	**793**	**16%**	**19%**	**4,190**
East Leg	Inbound	629	846			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**629**	**846**	**14%**	**19%**	**4,425**
West Leg	Inbound	0	0			
West Leg	Outbound	670	671			
West Leg	**TOTAL**	**670**	**671**	**18%**	**18%**	**3,655**
OVERALL TOTAL		***2,730***	***3,322***	**16%**	***19%***	***17,462***

U:\UcJobs_10100-10500_10300\10322\Post Processing\2040 WP - Scenario 2 - With Connection\[16 Orange_Oakley_60 WB.xls]Output (3)

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Strong St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	30	33	3	10%	60	61	1	2%
	Through	107	119	12	11%	267	363	96	36%
	Right	34	37	3	10%	115	138	23	20%
	NB Total	171	189	18	11%	442	562	120	27%
SOUTH BOUND	Left	4	5	1	25%	5	7	2	40%
	Through	207	313	106	51%	202	222	20	10%
	Right	29	41	12	41%	16	18	2	13%
	SB Total	240	359	119	50%	223	247	24	11%
EAST BOUND	Left	55	111	56	102%	94	174	80	85%
	Through	22	31	9	41%	89	146	57	64%
	Right	55	88	33	60%	67	80	13	19%
	EB Total	132	230	98	74%	250	400	150	60%
WEST BOUND	Left	63	65	2	3%	67	74	7	10%
	Through	28	31	3	10%	37	41	4	11%
	Right	6	8	2	33%	2	3	1	50%
	WB Total	97	104	7	7%	106	118	12	11%
TOTAL ENTERING VOLUME		640	882	242.2	38%	1,021	1,327	306	30%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	359	247			
North Leg	Outbound	238	540			
North Leg	**TOTAL**	**597**	**787**	**11%**	**14%**	**5,658**
South Leg	Inbound	189	562			
South Leg	Outbound	466	376			
South Leg	**TOTAL**	**655**	**938**	**13%**	**18%**	**5,191**
East Leg	Inbound	104	118			
East Leg	Outbound	73	291			
East Leg	**TOTAL**	**177**	**409**	**8%**	**18%**	**2,239**
West Leg	Inbound	230	400			
West Leg	Outbound	105	120			
West Leg	**TOTAL**	**335**	**520**	**8%**	**12%**	**4,239**
OVERALL TOTAL		***1,764***	***2,654***	**10%**	***15%***	***17,327***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Columbia Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	27	30	3	10%	37	41	4	10%
	Through	79	81	2	3%	172	257	85	49%
	Right	105	164	59	56%	133	146	13	10%
	NB Total	211	275	64	30%	342	444	102	30%
SOUTH BOUND	Left	39	192	153	392%	36	100	64	178%
	Through	89	146	57	64%	83	93	10	12%
	Right	25	54	29	116%	21	38	17	81%
	SB Total	153	392	239	156%	140	231	91	65%
EAST BOUND	Left	34	38	4	12%	69	127	58	84%
	Through	468	804	336	72%	588	676	88	15%
	Right	20	22	2	10%	22	24	2	10%
	EB Total	522	864	342	66%	679	827	148	22%
WEST BOUND	Left	69	76	7	10%	127	140	13	10%
	Through	362	428	66	18%	408	659	251	62%
	Right	23	41	18	78%	52	205	153	294%
	WB Total	454	545	91	20%	587	1,004	417	71%
TOTAL ENTERING VOLUME		1,340	2,076	735.6	55%	1,748	2,506	758	43%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	392	231			
North Leg	Outbound	160	589			
North Leg	**TOTAL**	**552**	**820**	**6%**	**9%**	**8,722**
South Leg	Inbound	275	444			
South Leg	Outbound	244	257			
South Leg	**TOTAL**	**519**	**701**	**15%**	**21%**	**3,393**
East Leg	Inbound	545	1,004			
East Leg	Outbound	1,160	922			
East Leg	**TOTAL**	**1,705**	**1,926**	**7%**	**8%**	**24,205**
West Leg	Inbound	864	827			
West Leg	Outbound	512	738			
West Leg	**TOTAL**	**1,376**	**1,565**	**7%**	**8%**	**18,433**
OVERALL TOTAL		***4,151***	***5,012***	***8%***	***9%***	***54,753***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Garner Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	2	4	2	100%
	Through	67	190	123	184%	138	464	326	236%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	67	190	123	184%	140	468	328	234%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	57	210	153	268%	87	198	111	128%
	Right	1	1	0	10%	4	23	19	475%
	SB Total	58	211	153	264%	91	221	130	143%
EAST BOUND	Left	0	0	0	#DIV/0!	6	18	12	200%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	3	10	7	233%	4	4	0	10%
	EB Total	3	10	7	233%	10	22	12	124%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		128	411	283.1	221%	241	711	470	195%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	211	221			
North Leg	Outbound	190	482			
North Leg	**TOTAL**	**401**	**703**	**6%**	**10%**	**6,932**
South Leg	Inbound	190	468			
South Leg	Outbound	220	202			
South Leg	**TOTAL**	**410**	**670**	**5%**	**9%**	**7,564**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**0%**	**0%**	**108**
West Leg	Inbound	10	22			
West Leg	Outbound	1	27			
West Leg	**TOTAL**	**11**	**49**	**0%**	**1%**	**3,851**
OVERALL TOTAL		***822***	***1,423***	***4%***	***8%***	***18,455***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Orange St./Center St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	5	5	0	0%	10	89	79	790%
	Through	3	26	23	767%	0	0	0	#DIV/0!
	Right	55	156	101	184%	140	263	123	88%
	NB Total	63	187	124	197%	150	352	202	135%
SOUTH BOUND	Left	1	52	51	5100%	10	42	32	320%
	Through	3	122	119	3967%	4	114	110	2750%
	Right	3	51	48	1600%	1	20	19	1900%
	SB Total	7	225	218	3114%	15	176	161	1073%
EAST BOUND	Left	6	20	14	233%	0	0	0	#DIV/0!
	Through	90	102	12	13%	244	268	24	10%
	Right	2	2	0	0%	14	75	61	436%
	EB Total	98	124	26	27%	258	343	85	33%
WEST BOUND	Left	58	96	38	66%	60	66	6	10%
	Through	150	165	15	10%	80	88	8	10%
	Right	7	44	37	529%	3	311	308	10267%
	WB Total	215	305	90	42%	143	465	322	225%
TOTAL ENTERING VOLUME		383	841	458	120%	566	1,336	770	136%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	225	176			
North Leg	Outbound	90	311			
North Leg	**TOTAL**	**315**	**487**	**6%**	**9%**	**5,253**
South Leg	Inbound	187	352			
South Leg	Outbound	220	255			
South Leg	**TOTAL**	**407**	**607**	**6%**	**9%**	**6,932**
East Leg	Inbound	305	465			
East Leg	Outbound	310	573			
East Leg	**TOTAL**	**615**	**1,038**	**7%**	**11%**	**9,298**
West Leg	Inbound	124	343			
West Leg	Outbound	221	197			
West Leg	**TOTAL**	**345**	**540**	**8%**	**12%**	**4,456**
OVERALL TOTAL		***1,682***	***2,673***	**6%**	***10%***	***25,939***

Project:	Northside Specific Plan	Job #:	10322
Scenario:	Horizon Year (2040) WP - Scen. 2 - W Connection	Analyst:	RV
		Date:	08/12/19

LOCATION: Rivera St./Market St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	1	3	2	200%	1	4	3	300%
	Through	0	0	0	#DIV/0!	4	6	2	50%
	Right	5	7	2	40%	22	24	2	10%
	NB Total	6	10	4	67%	27	34	7	27%
SOUTH BOUND	Left	283	311	28	10%	243	267	24	10%
	Through	1	1	0	0%	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	284	312	28	10%	243	267	24	10%
EAST BOUND	Left	42	86	44	105%	87	223	136	156%
	Through	624	1,057	433	69%	729	1,078	349	48%
	Right	3	7	4	133%	1	3	2	200%
	EB Total	669	1,150	481	72%	817	1,304	487	60%
WEST BOUND	Left	11	12	1	9%	10	11	1	10%
	Through	511	681	170	33%	606	1,146	540	89%
	Right	325	358	33	10%	273	300	27	10%
	WB Total	847	1,051	204	24%	889	1,457	568	64%
TOTAL ENTERING VOLUME		1,806	2,523	716.8	40%	1,976	3,063	1087	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	312	267			
North Leg	Outbound	444	529			
North Leg	**TOTAL**	**756**	**797**	**10%**	**11%**	**7,566**
South Leg	Inbound	10	34			
South Leg	Outbound	20	14			
South Leg	**TOTAL**	**30**	**48**	**7%**	**11%**	**442**
East Leg	Inbound	1,051	1,457			
East Leg	Outbound	1,375	1,370			
East Leg	**TOTAL**	**2,426**	**2,827**	**8%**	**9%**	**30,524**
West Leg	Inbound	1,150	1,304			
West Leg	Outbound	684	1,150			
West Leg	**TOTAL**	**1,834**	**2,454**	**6%**	**9%**	**28,808**
OVERALL TOTAL		***5,046***	***6,126***	***7%***	***9%***	***67,340***

APPENDIX F

RIVTAM MODEL TRIP GENERATION DATA

TAZ Trip Generation Summary

TAZ	Scenario	ADT	AM			PM		
			In	Out	Total	In	Out	Total
3486	2040 Without Project	5,794	236	151	387	233	319	552
	2040 With Project - Scenario 1	3,342	79	180	259	199	121	320
	2040 With Project - Scenario 2	3,333	79	179	258	198	121	319
3488	2040 Without Project	21,638	793	779	1,572	1,006	1,018	2,024
	2040 With Project - Scenario 1	21,720	821	762	1,583	993	1,036	2,029
	2040 With Project - Scenario 2	21,458	815	756	1,571	982	1,024	2,006
3498	2040 Without Project	7,920	290	282	572	366	378	744
	2040 With Project - Scenario 1	7,012	208	334	542	377	281	658
	2040 With Project - Scenario 2	6,995	208	333	541	376	281	657
3508	2040 Without Project	8,297	310	306	616	383	387	770
	2040 With Project - Scenario 1	10,785	248	619	867	652	340	992
	2040 With Project - Scenario 2	10,651	244	614	858	645	460	1,105
3515	2040 Without Project	7,770	288	246	534	342	393	735
	2040 With Project - Scenario 1	21,583	347	1,290	1,637	1,375	610	1,985
	2040 With Project - Scenario 2	11,155	206	646	852	692	340	1,032
3527	2040 Without Project	4,380	120	207	327	235	176	411
	2040 With Project - Scenario 1	5,358	114	310	424	326	174	500
	2040 With Project - Scenario 2	5,344	113	310	423	325	173	498
3531	2040 Without Project	6,361	194	281	475	328	271	599
	2040 With Project - Scenario 1	4,783	108	267	375	286	165	451
	2040 With Project - Scenario 2	4,657	104	263	367	280	159	439
5175	2040 Without Project	22,644	848	916	1,764	1,065	1,041	2,106
	2040 With Project - Scenario 1	34,149	1,184	1,072	2,256	1,482	1,683	3,165
	2040 With Project - Scenario 2	22,482	834	913	1,747	1,061	1,029	2,090
5182	2040 Without Project	12,807	430	513	943	626	574	1,200
	2040 With Project - Scenario 1	18,210	374	1,037	1,411	1,110	575	1,685
	2040 With Project - Scenario 2	21,130	369	1,297	1,666	1,349	597	1,946

APPENDIX G

CUMULATIVE PROJECTS LISTS AND MAPS

Table F-2 Errata Table of Additions, Corrections, and Revisions

PAGE(S)	SECTION	ADDITIONS, CORRECTIONS, AND REVISIONS
		021-21, and Portions of 1167-011-01 and 1167-021-01, City of Colton, San Bernardino County, California. Dated October 13, 2014. LAI. 2015b. *Phase I Environmental Site Assessment, Roquet Ranch, 9-Acre Parcel North of Center Street and Orange Street, APNs 1167-021-23 and a Portion of 1167-021-22, City of Colton, San Bernardino County, California*. Dated June 18, 2015.

Additionally, Table 4.0-1 has been updated to include additional details regarding cumulative projects that were considered in the cumulative project analyses for each issue area throughout the DEIR. While additional details regarding each cumulative project have been provided to clarify the location and nature of the project, no new cumulative projects were added to Table 4.0-1. The replacement Table 4.0-1 is provided below.

Table 4.0-1 Cumulative Projects List

#	Project/Location	Land Use	Quantity	Units
		CITY OF COLTON		
COL1	CUSM Campus (300 N. Pepper Av.) File No.: DAP-001-233	Medical College	150	STU
COL2	City Hub Center (1601 W. Valley Blvd.) 7.26 acres File No.: DAP-	Hotel	NA	RM
		Gas Station	NA	VFP
COL3	Howard Industries (1600 Agua Mansa Road) 42.67 acres File No.: DAP-001-390	Warehouse	805.500	TSF
COL4	Cal-Med Surgery Center (1281 W. C St.) 2.18 acres File No.: DAP-001-240	Medical Office	NA	TSF
COL5	Valley Orange Ent. Chevron Redevelopment (1600 W. Valley Blvd.) 1.82 acres File No.: DAP-001-362	Service Station	8	VFP
COL6	Ostoich Diesel Service, Diesel injection (1610 Fairway Dr.) 1.9 acres File No.: DAP-001-268	Auto Shop	1.350	TSF
COL7	New Juan Colorado Family Restaurant (195 W. Valley Bl.) 27,050 s.f. File No.: DAP-001-428	Restaurant	NA	TSF
COL8	Commercial building (1175 S. Mt. Vernon Av.) 104,000 s.f. building	Commercial	104.000	TSF
COL9	Used car lot (495 W. Valley Bl.) 6,500 s.f. File No.: DAP-001-165	Church	NA	Seats
COL10	Smart & Final Extra (1023 N. Mt. Vernon) 27,870 s.f. File No.: DAP-001-249	Discount Super Store	27.870	TSF
		Fast Food w/ Drive-Thru	4.400	TSF
COL11	Assisted Living Extension (839 Fairway Dr.) 61,400 s.f. File No.: DAP-001-413	Assisted Living and Memory Care Facility	103	Beds
COL12	Cap Rock Partners warehouse with office space (1601 Fairway Dr.) 178,980 s.f. File No.: DAP-001-262	Industrial	178.980	TSF
COL13	Medical Office (1550 E. Washington St.) 9,000 s.f.	Church	120	Seats
COL14	Warehouse, Office and Manufacturing facility (1559 Steel Rd.) 4.09 acres File No.: DAP-001-297	Industrial	60.000	TSF
COL15	Steel Road Industrial Building (1603 Steel Rd.) 4.09 acres File No.: DAP 001-188	Industrial	159.271	TSF

Table 4.0-1 Cumulative Projects List

#	Project/Location	Land Use	Quantity	Units
COL16	Recycling facility (785 E. M Street)	Metal Building	20.600	TSF
COL17	Colton Iron Metal (790 E. M St.) 3.63 acres File No.: DAP-000-881 and DAP-001-023	Recycling Center	3.630	AC
COL18	Single family residential (644-660 Laurel Lane) approximately 5 homes	SFDR	5	DU
COL19	CF Equipment (1200 Jefferson Ln.) 71,891 s.f. File No.: DAP-001-234	Office	NA	TSF
COL20	Southwest Regional Operations Center (602 Agua Mansa Rd.) 19,913 s.f. File No.: DAP-001-230	Trucking Facility	19.919	TSF
COL21	Tire store (1395 Washington St.)	Tire Store	NA	TSF
	COUNTY OF RIVERSIDE			
RIVCO1	TR28957 8.86 acres to be divided into 37 dwelling units with a minimum lot size of 7,200 s.f.	Single-Family Residential	37	DU
RIVCO2	TR32989 10.01 acres to be divided into 27 dwelling units with a minimum lot size of 7,200 s.f.	Single-Family Residential	27	DU
RIVCO3	TR32291 27.13 acres to be divided into 69 dwelling units with a minimum lot size of 7,200 s.f.	SFDR	69	DU
RIVCO4	CUP03718 40,611 s.f. industrial building containing offices shop space, parts and storage area.	Light Industrial	19.988	TSF
RIVCO5	Economy Melteades, PP24798, 2-story building with retail and offices and laundromat facility.	Retail	2.400	TSF
		Offices	3.405	TSF
		Laundromat	2.961	TSF
RIVCO6	PP25482 Develop 2 general office buildings. Approved November 5, 2015.	General Office	2.632	TSF
RIVCO7	Truck Sales Facility (PP25505) with 1,952 s.f. office, 6,000 s.f. storage area and 900 s.f. display area. Approved April 20, 2015.	Office	1.952	TSF
		Storage	6.000	TSF
RIVCO8	TR36668 (Bixby Highgrove) 65.2 acres to be divided into 200 dwelling units with a minimum lot size of 7,200 s.f. and include three water quality basins, two park sites, and eleven open space lots.	Single-Family Residential	200	DU
RIVCO9	Spring Mountain Ranch (SP 323) (PM36448; TR29597; TR29598; TR29600; TR29741; TR30908; TR30909) 792 acres of mixed use with the following uses: 1,461 dwelling units, school, institutional use, neighborhood commercial, public facilities, and open	Single-Family Residential	1,461	DU
		Elementary School	750	STU
		Day Care Center	4.000	TSF
		Commercial Retail	104.000	TSF
	CITY OF GRAND TERRACE			
GT1	SA-14-03 1 single-family residential property on .36 acres. Approved by the Planning Commission on November 3, 2016.	Single-Family Residential	1	DU
GT2	TT18071 (Karger Pico Tract) 8.26 acres to be divided into 17 single-family lots. Approved June 8, 2006.	Single-Family Residential	17	DU
GT3	SA 13-05 1-acre site to construct 66 parking lot spaces. Approved February 24, 2014.	SFDR	1	DU
GT4	Site and Architectural Review 12-04, .78-acres proposes to construct 12 attached two-story dwelling units. Approved December 18. 2013.	Townhomes	12	DU
GT5	Grand Terrace Town Square Master Plan, 20.83 acres. Approved July 2010.	Commercial Retail	209.611	TSF
	SA-07-07	Retail	65.730	TSF

Table 4.0-1 Cumulative Projects List

#	Project/Location	Land Use	Quantity	Units
GT6	SA 14-05; SA14-07 1 two-story single-family residential property on.626 acres. Approved by the Planning Commission on November 3, 2016.	SFDR	1	DU
	SA 14-06 1 single-family residential property on .36 acres. Approved by the Planning Commission on November 3, 2016.	SFDR	1	DU
GT7	Barton Plaza Commercial Center (Phase 2), 10,581 s.f. grocery store and 5,400 s.f. restaurant and retail building. Approved July 14, 2011.	Commercial Center	16.251	TSF
GT8	SA 15-01, .52-acre project to construct new Starbucks retail store.	Commercial	1.800	TSF
GT9	SA 15-06 ACUP15-07 E15-08 Develop medical office on a 20,000 s.f. lot. Approved June 2, 2016.	Medical Office	2.870	TSF
GT10	SA 15-07 E15-09, 1,800 s.f. Project to remodel a hair salon. Approved November 19, 2015.	Commercial Hair Salon	1.800	TSF
GT11	SA 15-04 E15-07 Establish a pallet business on 3.7 acres with 6,420 s.f. for office space, 2,400 s.f. metal shop, and four work canopies	Office/Shop	8.800	TSF
GT12	SA 15-05; ACUP15-06; V15-02, 4.09-acre Project to develop two 270 s.f. modular office units and one 192 s.f. truck storage trailer. Approved December 17, 2015.	Office	1.400	TSF
GT13	TTM 15-01; SA 15-03; E15-05 Develop 12 single-family residential property. Approved September 3, 2015.	SFDR	12	DU
GT14	SA05-19-A1; E15-06 Develop 35 detached condominiums. Approved on September 17, 2015.	Condo/Townhomes	35	DU
	CITY OF RIALTO			
RIA1	Panattoni I-10 (Cactus Av. & El Rivino Rd.) Develop 2 warehouse building that are 1.26 million and 1.21 million s.f. in size. PPD2642	Warehouse	2,475.745	TSF
RIA2	CapRock III 525,110 s.f. warehouse on 24.37 acres of land.	Warehouse	582.000	TSF
RIA3	Newmark Merrill Companies (Riverside Av.) Shopping center. PPD 2102R and CDP 595-597	Discount Super Store	198.000	TSF
		Tire Store	9.861	TSF
		Retail	25.436	TSF
		Fast Food w/ Drive-Thru	5.484	TSF
RIA4	Kore Infrastructure (Riverside Av. and Aline Ranch Road) PPD2364	Biosolids Facility	288	TPD
	CITY OF RIVERSIDE			
R1	P09-0749 Rezoning of 72 acres with business office park, industrial buildings and single-family residential to Industrial land uses.	Industrial	54.22	AC
R2	TR34908 (P06-0782) Divide 3.38 vacant acres to 14 single-family residential lots.	Single-Family Residential	14	DU
R3	TR33550 (P05-0269; P08-0416) Divide 2.01 vacant acres into 9 single-family residential lots.	Single-Family Residential	9	DU
R4	Adult Day Care Facility (P09-0612) 7.6 acres. Approved December 15, 2009	Adult Day Care	39	STU
R5	Hunter Park Metrolink Station (P11-0329; P11-0330; P11-0332) 408,343s.f. Approved December 11, 2012	Metrolink train station and parking lot	600.00	Spaces
R6	New Car Wash and Service Station (P10-0685; P10-0794) 27,579 s.f. Approved May 24, 2011.	Gas Station & Car Wash	16	VFP
R7	CUP change of use from office to church (P10-0733) 153,177 s.f. Approved March 1, 2011.	Church	598	Seats

Table 4.0-1 Cumulative Projects List

#	Project/Location	Land Use	Quantity	Units
R8	Add store and car wash to gas stations (P09-0419; P10-0476) 33,750 s.f. Approved March 8, 2011.	Gas Station & Car Wash	16	VFP
R9	Apartment complex (P14-0183_ 125 dwelling units on 2.52 acres. Approved January 26, 2015	Apartments	125	DU
R10	Mixed use apartment complex (P06-0028; P06-0029; P06-0031) 95,000 s.f. Approved June 10, 2008.	Condos	205	DU
		Hotel	125	DU
		Commercial	31.600	TSF
R11	6-story building with garage (P09-0835; P10-0002) .82-acres. Approved April 27, 2010.	Office with Parking Structure	132.136	TSF
R12	GPA for public park (P10-0454) 351 acres. Approved May 17, 2011	Public Park	43.64	AC
R13	TR36516 Develop 7 single-family residential lots and a cul-de-sac (P12-0799; P12-0800) 1.26 acres. Approved April 3, 2014.	Single-Family Residential	7	DU
R14	Jacobs Medical Office (P06-1237) 4.2 acres. Approved October 7, 2008.	Medical Office	65.281	TSF
R15	Office building to replace security building (P14-0315; P14-0437) 3,150 s.f. Approved August 26, 2014.	Security Operations Building	3.150	TSF
R16	Bus Storage Yard (P10-0212; P10-0213) 4.38 acres. Approved December 17, 2013	School Bus Storage Yard	4.38	AC
R17	MCUP to convert house into Bed and Breakfast (P13-0650; P13-0651) 9,883 s.f. Approved December 31, 2013.	Bed and Breakfast	3.650	TSF
R18	CUP for material processing center (P14-0132) 2.3 acres. Approved June 19, 2014.	Metal Processing Facility	30.324	TSF
R19	RTA bus storage facility (P09-0530; P09-0531) 129,000s.f. Approved February 2, 2010.	RTA Bus Storage	2.60	AC
R20	CUP for church in BMP zone (P11-0545) 27,878 s.f. Approved November 1, 2011.	Church	80	Seats
R21	Rezoning of 31 properties (P12-0336). Approved October 22, 2013.	Mixed Use Urban	17.80	AC
R22	4-story senior housing (P09-0808; P08-0809) 139,720s.f. Approved June 14, 2011.	Senior Housing	134	Beds
R23	55-unit apartment building (P09-0717; P09-0718) 86,676s.f. Approved April 6, 1020.	Apartments	55	DU
R24	CUP for indoor rock climbing gym (P07-1161) 121,000s.f. Approved January 15, 2008.	Health/Fitness Club	5.580	TSF
R25	Abandon senior facility for low-income apartments (P13-0087; P13-0262) 48,420s.f. Approved May 5, 2015.	Senior Adult Housing - Attached	67	DU
R26	Revised CUP for apartments (P08-0980; P09-0095) 500,000s.f. Approved April 28, 2009.	Apartments	57	DU
R27	CUP to change retail to residential (P08-0960; P09-0025). Approved May 12, 2009.	Apartments	53.5	DU
R28	CUP for doubling up of student apartments (P09-0125). Approved July 28, 2009.	Apartments	11.5	DU
R29	Hotel development (P15-0535) 17,714s.f. Approved April 19, 2016.	Hotel	239	RM
R30	Townhomes (P15-0653). Application withdrawn January 9, 2017.	Townhomes	NA	DU
R31	Construction of 61 residential lots (P15-0812). Application withdrawn on August 30, 2016.	Residential Condo/Townhouse	61	DU
R32	CUP for Planet Fitness (P16-0011) 467,838s.f. Approved May 19, 2016.	Health/Fitness Club	18.000	TSF

Table 4.0-1 Cumulative Projects List

#	Project/Location	Land Use	Quantity	Units
R33	126-room hotel at University Village (P15-0877; P16-0067) .821 acres. Application withdrawn August 10, 2016.	Hotel	144	RM
R34	Subdivide into 4 parcels of single-family parcels (P16-0016). Approved June 26, 2017.	Single Family Detached	5	DU
R35	Subdivide into 3 Industrial Warehouse parcels (P13-0956; P13;0959; P13-0960; P13-0963; P13-0964 P13-0965; P13-0966) 72.5 acres. Approved October 27, 2015.	Industrial Park	1,461.44	TSF
R36	Rezone of 31 properties (P12-0334). Approved October 22, 2013.	Single Family Detached	2.8	AC
R37	Mission Lofts Apartments off University (P14-0045; P14-0046; P14-0047; P14-0048; P14-0049) 4.69 acres. Approved June 7, 2016.	Apartments	208	DU
R38	Industrial building (P14-1033; P14-1034) 15.9 acres. Application incomplete as of January 8, 2015.	Warehousing	308.000	TSF

F.4 NO RECIRCULATION OF THE DRAFT ENVIRONMENTAL IMPACT REPORT REQUIRED

CEQA Guidelines §15088.5 describes the conditions under which a DEIR that was circulated for public review is required to be re-circulated for additional public review and comment. CEQA Guidelines §15088.5 states that new information added to a DEIR is not significant unless the DEIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:

a. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

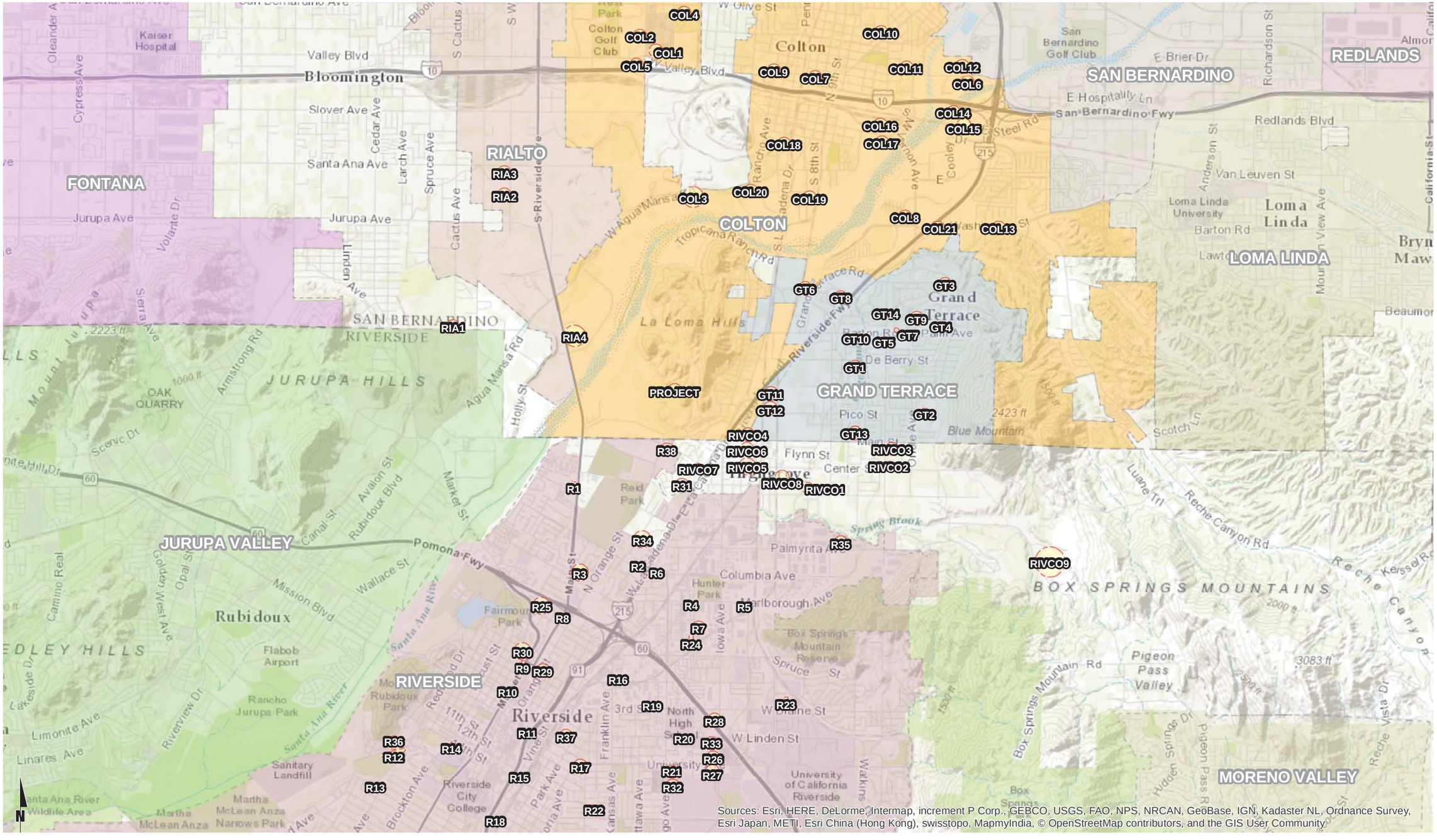
b. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

c. A feasible project alternative or mitigation measure considerably different from the others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.

d. The DEIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

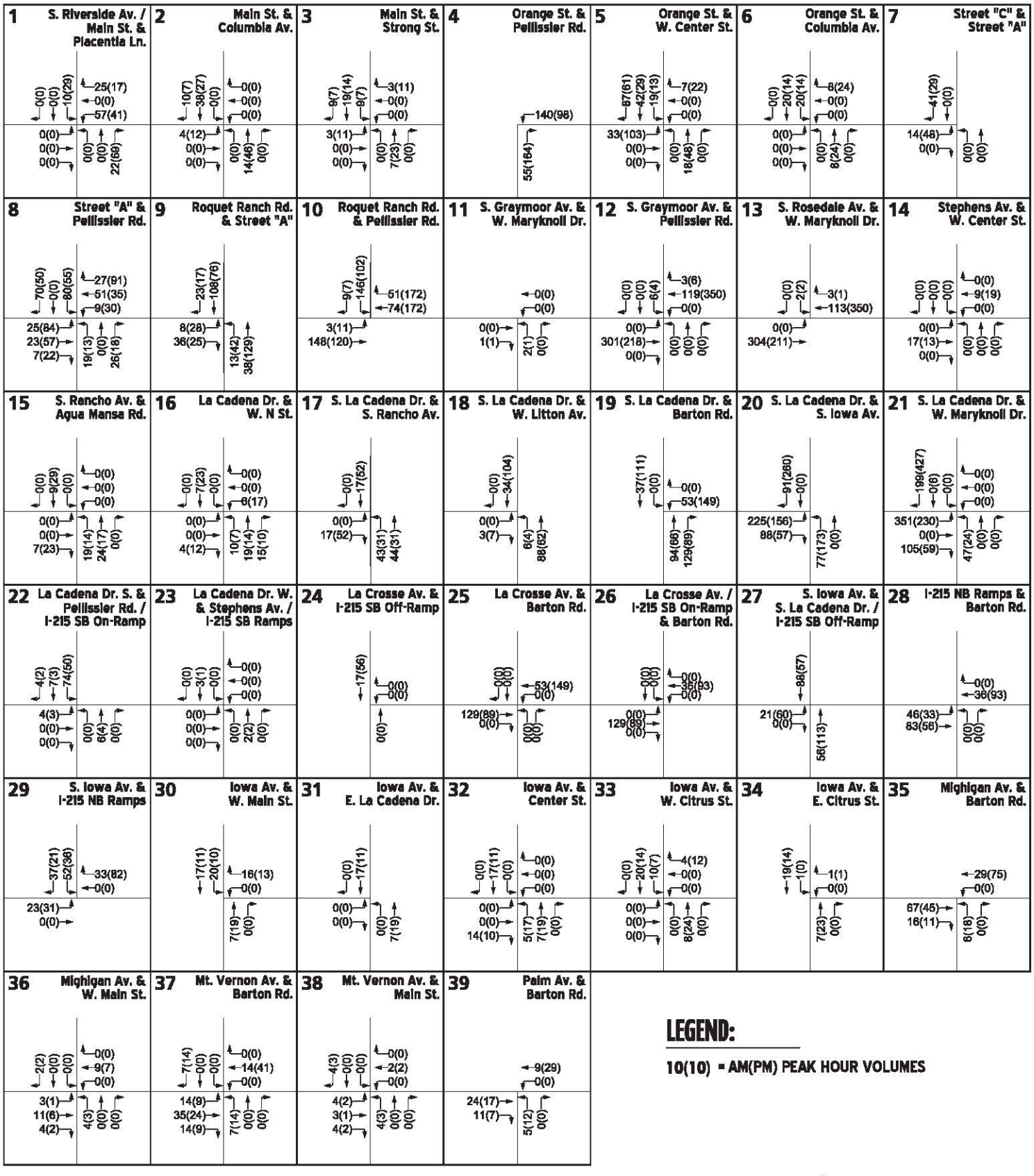
As summarized in Table F-2, Additions, Corrections, and Revisions to the Draft EIR, and based on the comment letters and responses presented in the Responses To Comments (above), there were no public comments or changes to the text or analysis contained in the DEIR that resulted in the identification of any new significant environmental effect or a substantial increase in the severity of an environmental effects that were disclosed in the DEIR. Based on comments received on the DEIR, no revisions to the Project's mitigation measures were necessary. Additionally, the DEIR was fundamentally and

EXHIBIT 4-5: CUMULATIVE DEVELOPMENT PROJECTS LOCATION MAP



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

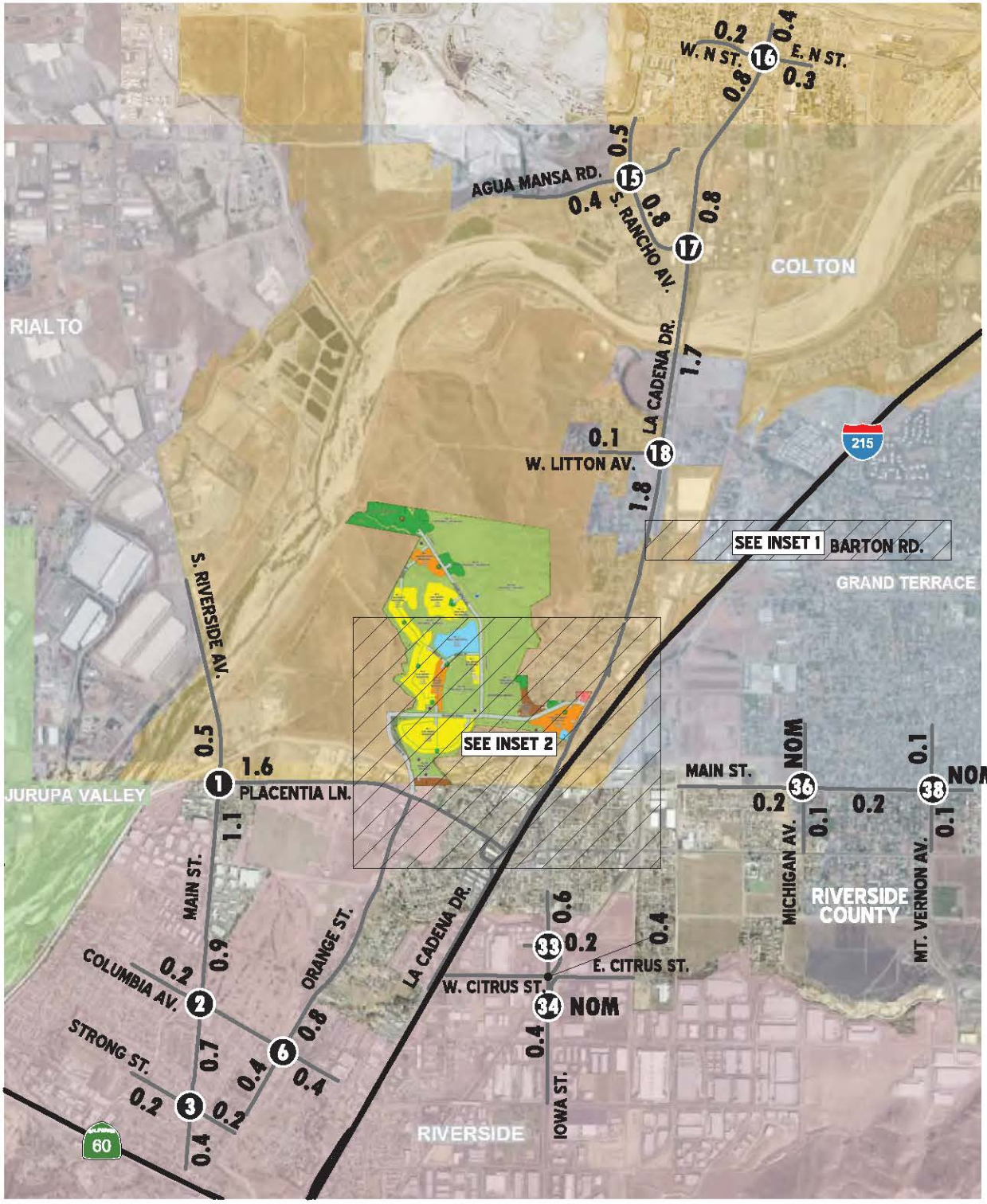
EXHIBIT 4-4: PROJECT TRAFFIC VOLUMES



LEGEND:

10(10) = AM(PM) PEAK HOUR VOLUMES

EXHIBIT 4-3 (1 OF 2): PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

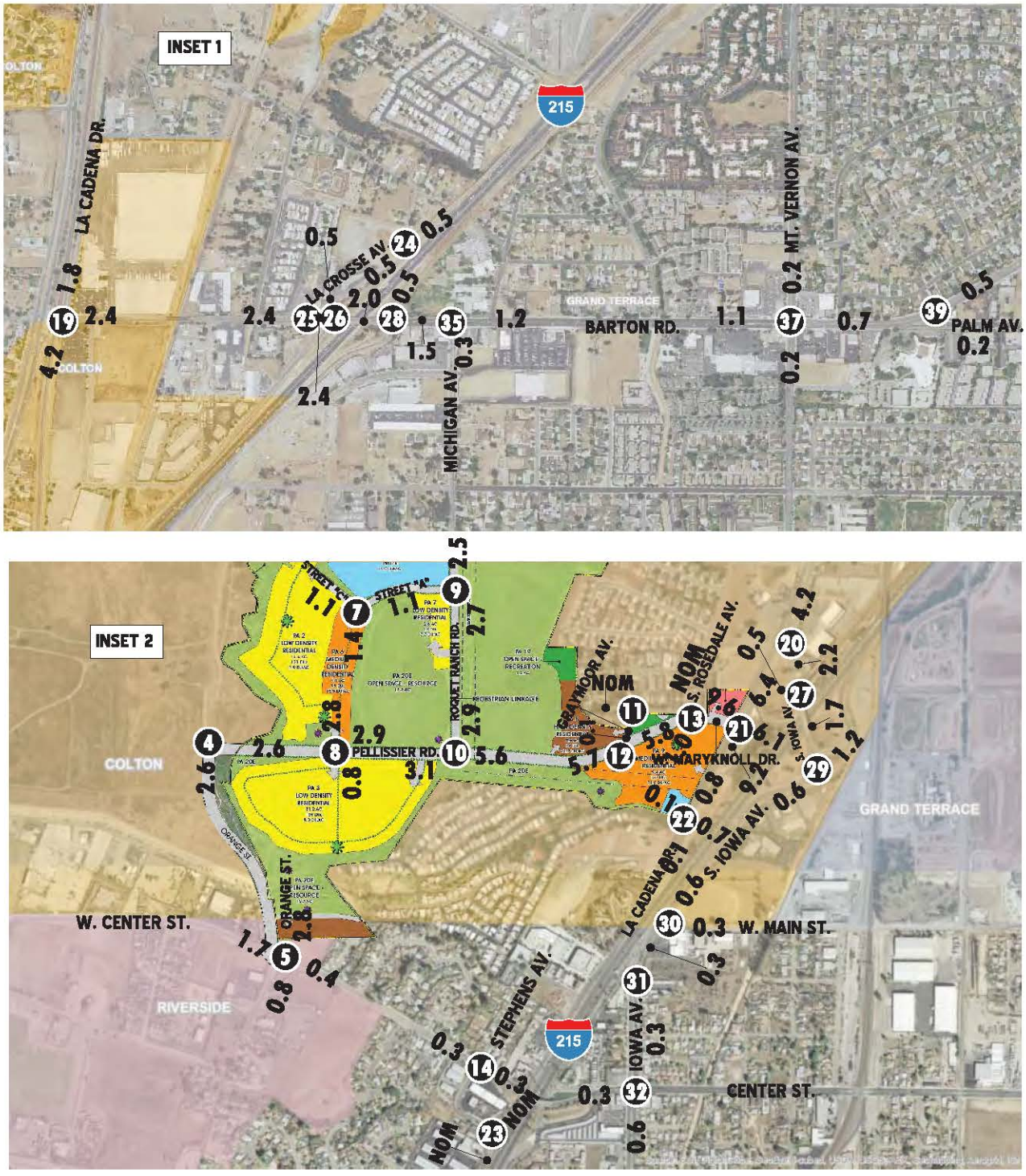
10.0 = ESTIMATED VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

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URBAN CROSSROADS

EXHIBIT 4-3 (2 OF 2): PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = ESTIMATED VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

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FUTURE BASELINE TRAFFIC CONDITIONS

The future baseline traffic conditions without the project were established for the target year of completion for the proposed warehouse buildings (year 2019) and for the long-range future horizon year (year 2040). The two baseline analysis scenarios are presented below.

YEAR 2019 – TARGET YEAR OF PROJECT COMPLETION

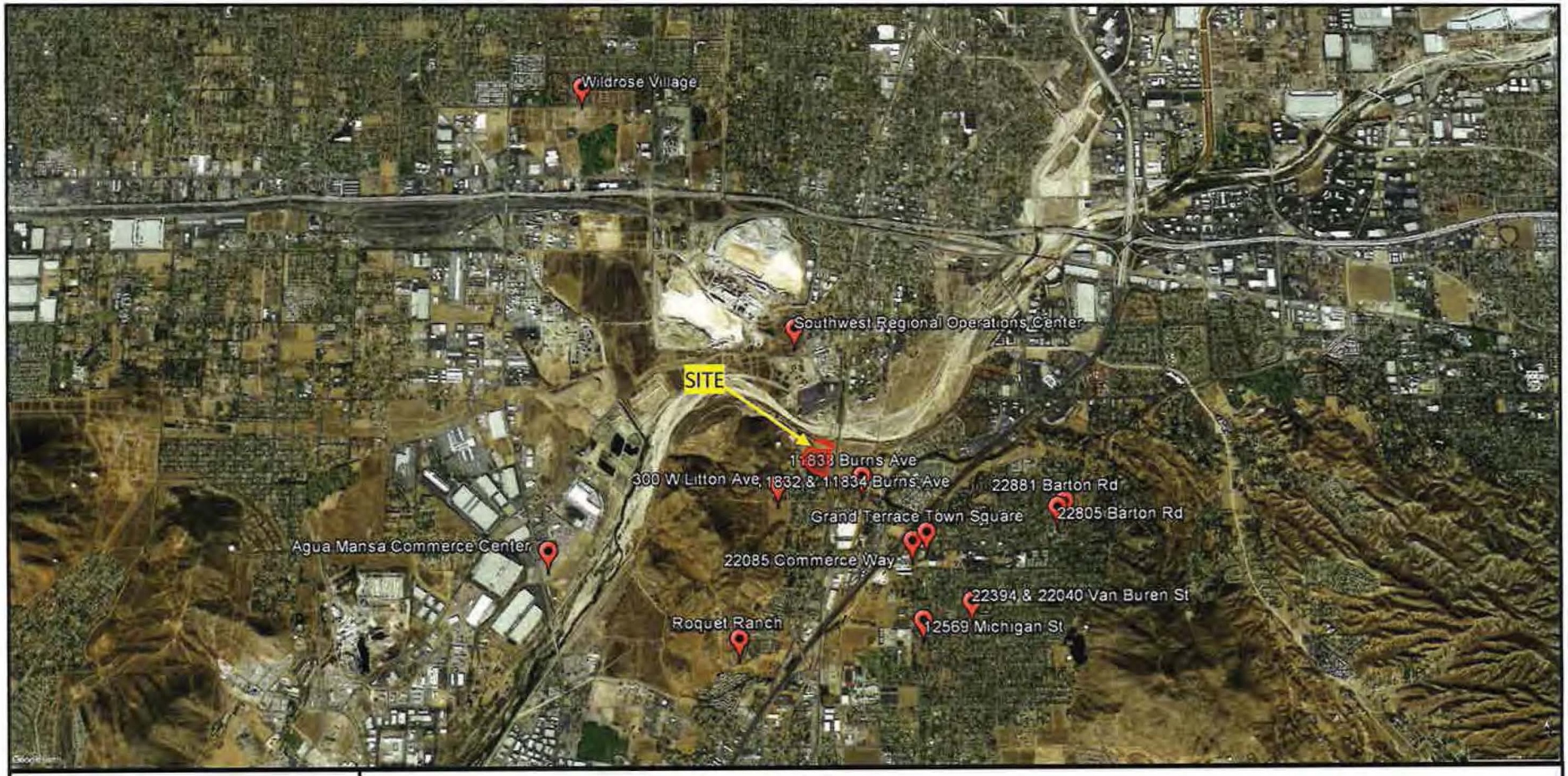
The baseline traffic conditions for the year 2019 were estimated by considering the effects of general ambient regional growth and the cumulative increase in traffic volumes that would be generated by other development projects proposed in the vicinity of the project site. The first step in estimating the future baseline traffic volumes was to expand the existing traffic volumes by a factor of four percent, which represents a growth rate of two percent per year for two years. This growth factor accounts for the traffic increases associated with general regional growth and development projects not in the immediate vicinity of the project site.

The second step in estimating the future baseline traffic volumes was to estimate the increased levels of traffic that would occur at the study area roadways and intersections as a result of the traffic that would be generated by other proposed development projects; i.e., those that are within a two-mile radius of the project site. Traffic that would be generated by projects that are located farther than two miles from the project site is included in the regional ambient growth factor discussed above. The list of development projects was obtained from the City of Colton and the City of Grand Terrace. The development projects that were included in the cumulative traffic analysis are presented in **Table 4**. As shown, there are thirteen other development projects proposed in the vicinity of the project site.

TABLE 4:
DEVELOPMENT PROJECTS FOR CUMULATIVE ANALYSIS

Project	Proposed Use/Description
CITY OF COLTON	
1. Roquet Ranch Specific Plan	Single Family Dwelling Units, Condos, Active Adult, Shopping Center, Coffee Shop, Fast
2. Southwest Regional Operations Center	Office Building, Fuel Island, Truck Wash Service Facility, & Parking Lot
3. Agua Mansa Commerce Center	Warehouse Distribution Center
4. Wildrose Village	85 Residential Dwelling Unit Increase
5. 300 W Litton Ave - Litton Housing	89 Lots for Detached Single Unit Residential Development

ATTACHMENT T: LOCATION OF RELATED PROJECTS



LEGEND

PROJECT SITE
- Tropica Rancho Warehouse Project

LOCATIONS OF RELATED PROJECTS

RELATED PROJECTS:

- Roquet Ranch Specific Plan "Project"
- Southwest Regional Operations Center
- Agua Mansa Commerce Center
- Wildrose Village
- 300 W Litton Ave – Litton Housing
- Grand Terrace Town Square
- 22394 and 22040 Van Buren Street
- 12569 Michigan Street
- 11832 and 11834 Burns Avenue
- 22805 Barton Road
- 22085 Commerce Way
- 11838 Burns Avenue
- 22881 Barton Road

N

CITY OF GRAND TERACE	
6. Grand Terrace Town Square	Shopping Center, Units 3 & 4, Gas Station (Phase II)
7. 22394 and 22040 Van Buren Street	17 Two-Story Residential Homes
8. 12569 Michigan Street	Two, One-Story Residential Homes and Subdivision of a 0.50-acre Parcel into Two Single Family Lots
9. 11832 and 11834 Burns Avenue	Single Family Residence and Secondary Dwelling Unit on a 0.36-acre Lot
10. 22805 Barton Road	Medical Office/Outpatient Surgery Center, Residence, Take-out Coffee Shop
11. 22085 Commerce Way	Animal Clinic, Commercial Units
12. 11838 Burns Avenue	Re-establishment of a Two-story Single-family Residence with Attached Three Car Garage and RV Garage
13. 22881 Barton Road	Coffee Shop with Drive-thru Commercial Units

The estimated volumes of traffic that would be generated by the 13 proposed development projects are shown in **Table 5**. The table shows the daily volumes of traffic that each project would generate and the traffic volumes that would be generated during the peak hours on a typical weekday. For the projects that had a traffic analysis prepared, the traffic volumes were obtained from the traffic report. For the other projects, the traffic volumes were calculated using trip generation rates from the Institute of Transportation Engineers *Trip Generation Manual* (9th Edition, 2012).

TABLE 5:
TRAFFIC GENERATED BY OTHER PROPOSED DEVELOPMENT PROJECTS

Project/ Land Use	Daily Traffic	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
1. Roquet Ranch*	10,020	819	238	581	991	617	374
2. System Transport*	1,130	97	33	64	63	47	16
3. Agua Mansa Ctr*	990	65	46	19	70	24	46
4. Wildrose Village*	830	64	16	48	85	53	32
5. Litton Housing	850	67	17	50	89	56	33
6. Town Square*	2,160	151	83	68	222	107	115
7. Van Buren Street	160	13	3	10	17	11	6
8. Michigan Street	20	2	0	2	2	1	1
9. Burns Avenue	10	1	0	1	1	1	0
10. Barton Road	440	41	22	19	23	11	12
11. Commerce Way	350	30	22	8	35	14	21
12. Burns Avenue	10	1	0	1	1	1	0
13. Barton Road	1,750	203	104	99	96	48	48
TOTAL	18,720	1,554	584	970	1,695	991	704

* Traffic volumes for these developments were taken from the project's traffic study.

APPENDIX H

CONCEPTUAL DESIGN EXHIBITS FOR INTERSECTION MITIGATION MEASURES

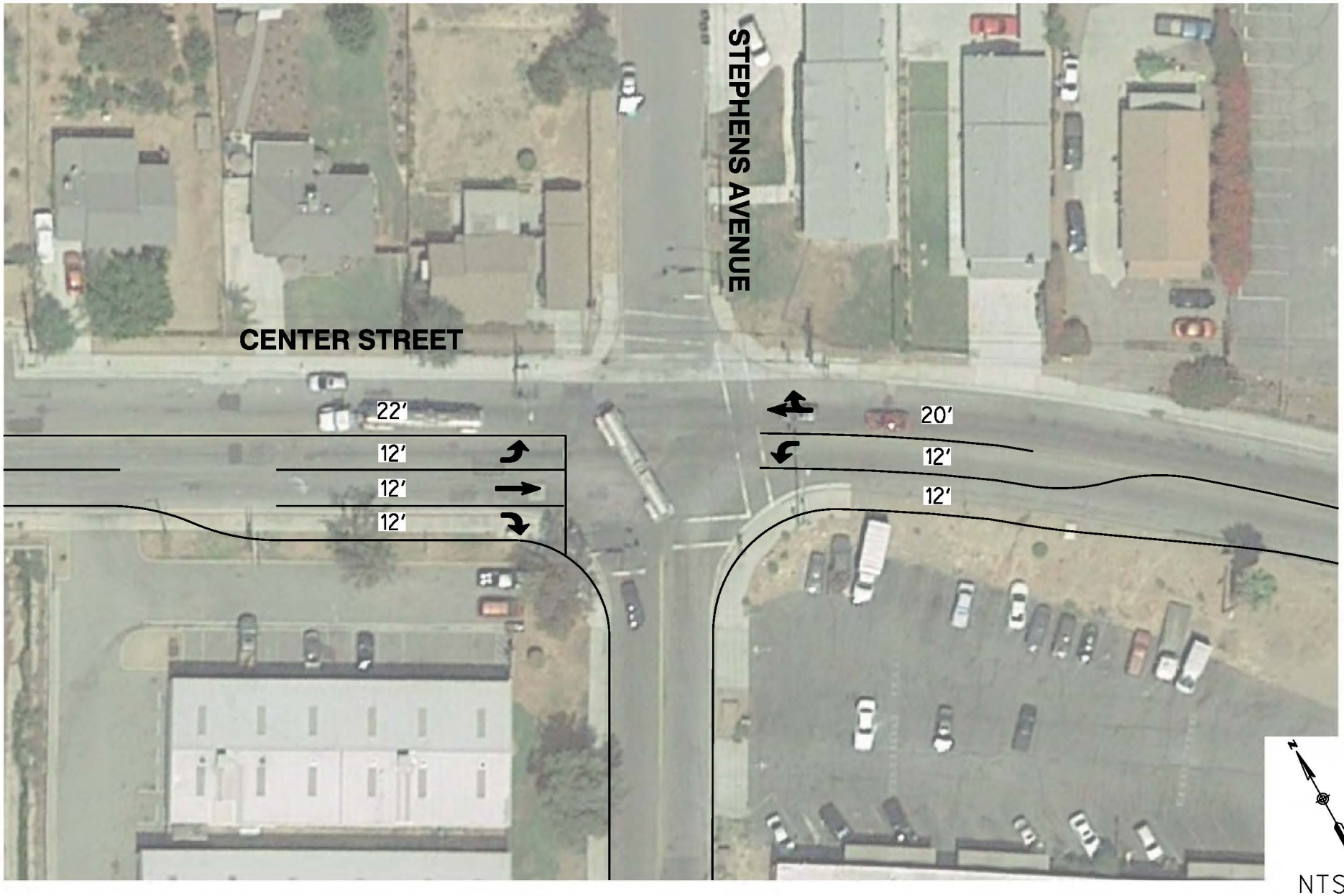


EXHIBIT A

CENTER STREET AND STEPHENS AVENUE

NORTHSIDE SPECIFIC PLAN

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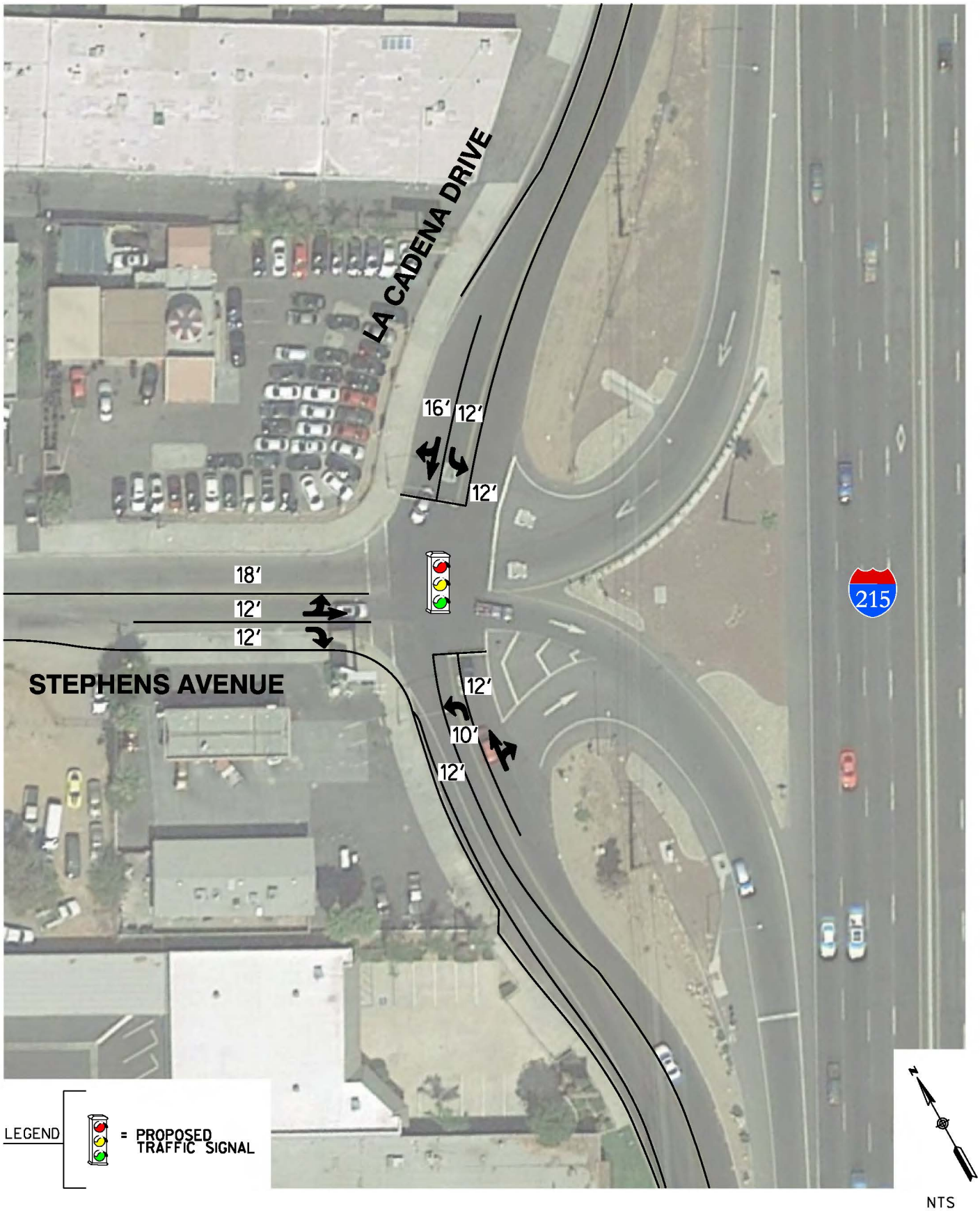


EXHIBIT B

LA CADENA DRIVE AND I-215 SB RAMPS/STEPHENS AVENUE

NORTHSIDE SPECIFIC PLAN

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EXHIBIT C

CENTER STREET AND HIGHGROVE PLACE

NORTHSIDE SPECIFIC PLAN

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EXHIBIT D

LA CADENA DRIVE AND I-215 SB RAMPS/INTERCHANGE DRIVE

NORTHSIDE SPECIFIC PLAN

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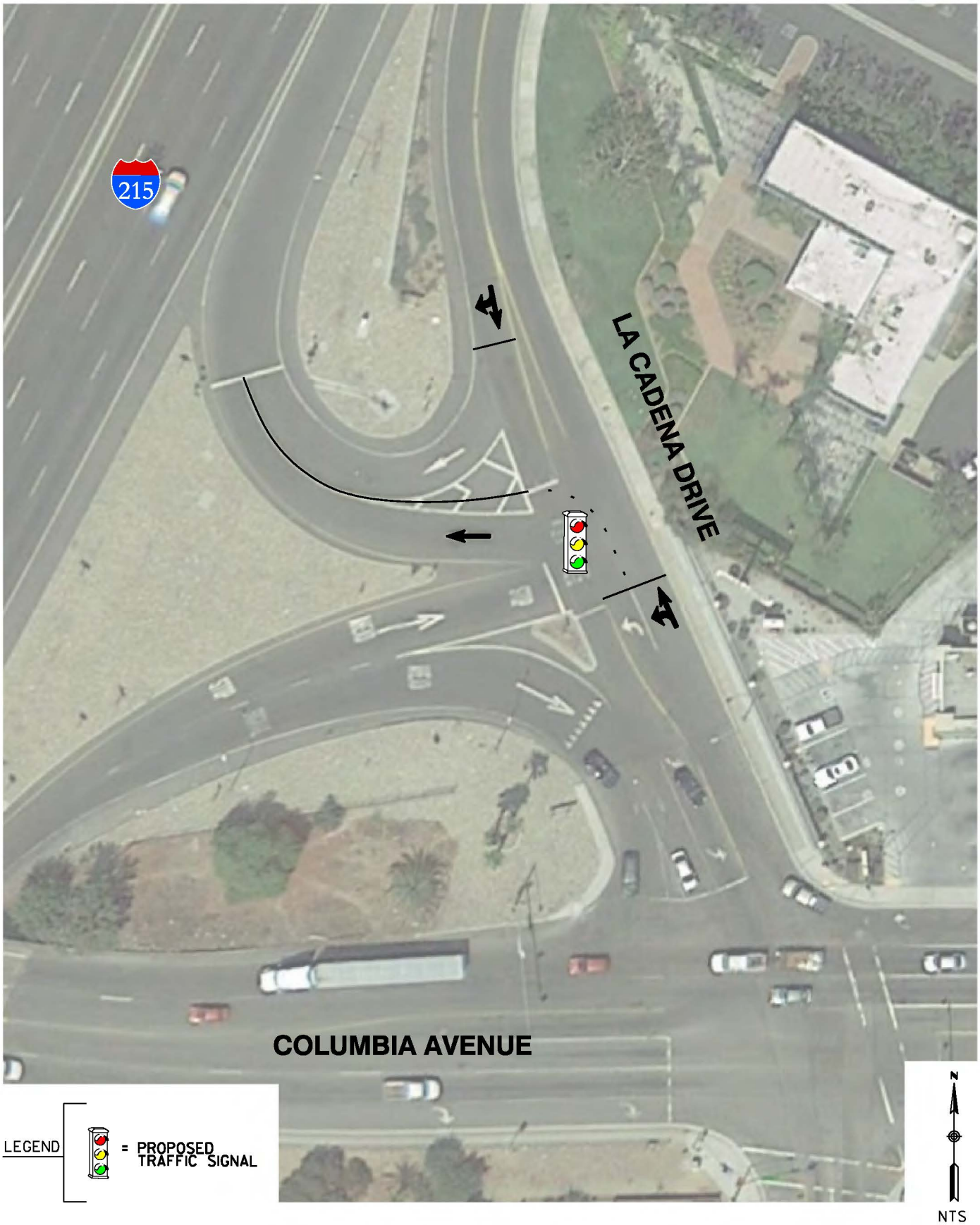


EXHIBIT E

LA CADENA DRIVE AND I-215 NB RAMPS

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EXHIBIT F

COLUMBIA AVENUE AND EAST LA CADENA DRIVE

NORTHSIDE SPECIFIC PLAN

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EXHIBIT G

MAIN STREET AND PLACENTIA LANE/CENTER STREET

NORTHSIDE SPECIFIC PLAN

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EXHIBIT H

MAIN STREET AND STRONG STREET

NORTHSIDE SPECIFIC PLAN

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EXHIBIT I

ORANGE STREET AND STRONG STREET

NORTHSIDE SPECIFIC PLAN

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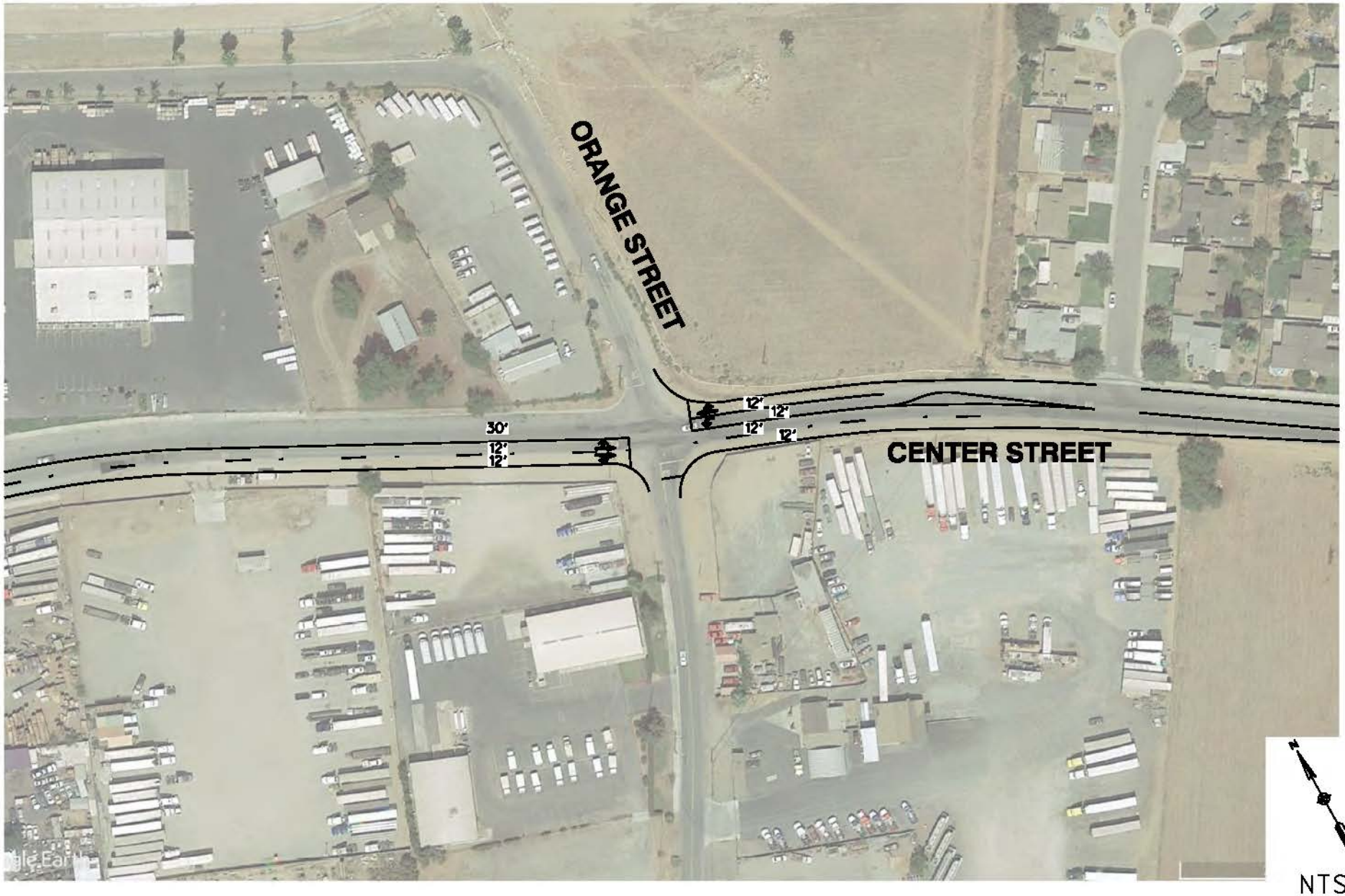


EXHIBIT J

ORANGE STREET AND CENTER STREET

NORTHSIDE SPECIFIC PLAN

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EXHIBIT K

RIVERSIDE AVENUE AND PELLISIER ROAD

NORTHSIDE SPECIFIC PLAN

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APPENDIX I

SIGNAL WARRANT WORKSHEETS

SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	Existing + Project Alt 1	**Total Number of Vehicles Entering:**	1399
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	157
		Minor St approach total delay (veh-hr):	21.6

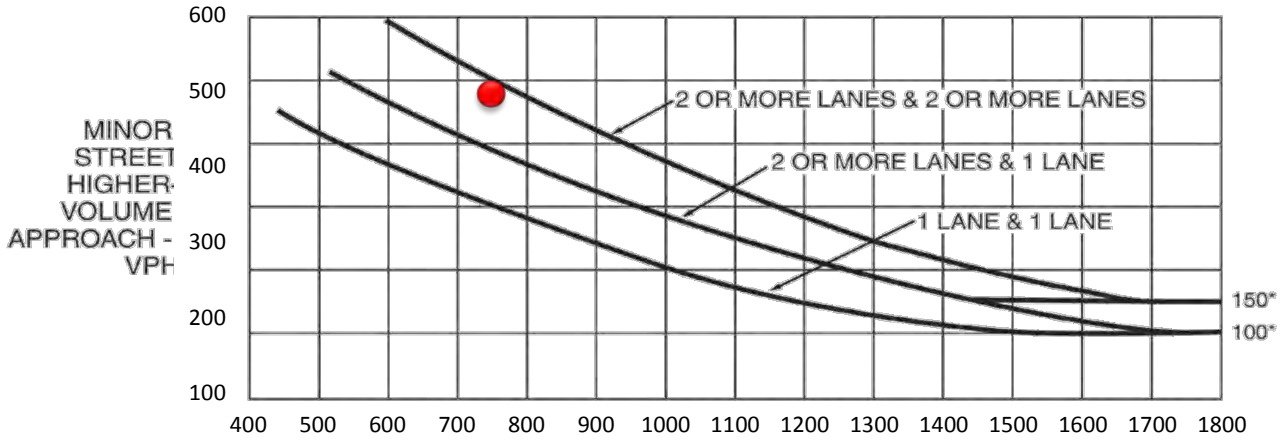
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
749	496

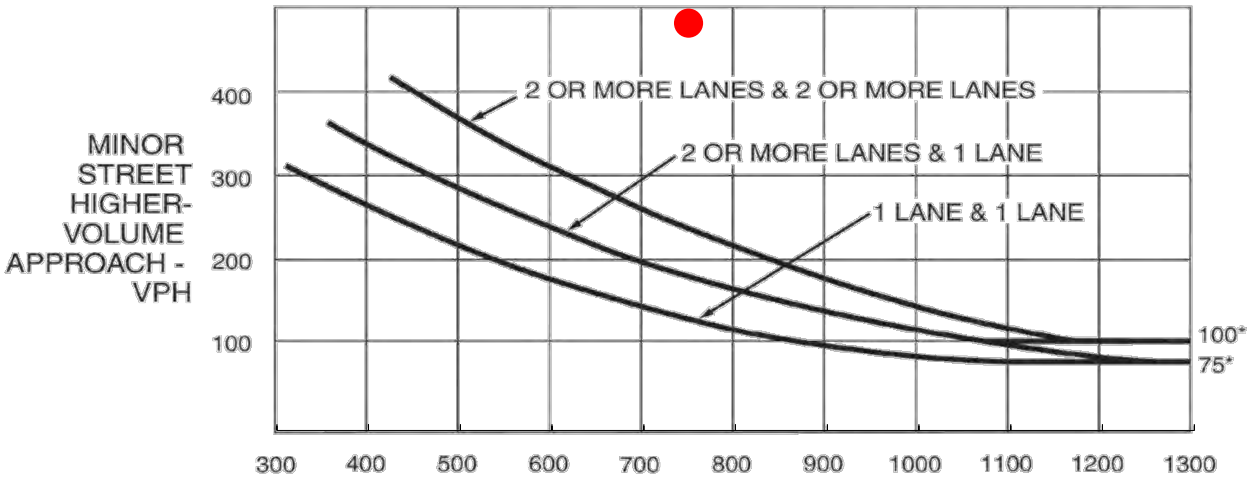
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	Existing + Project Alt 1	**Total Number of Vehicles Entering:**	1596
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	179.3
		Minor St approach total delay (veh-hr):	29.8

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
647	598

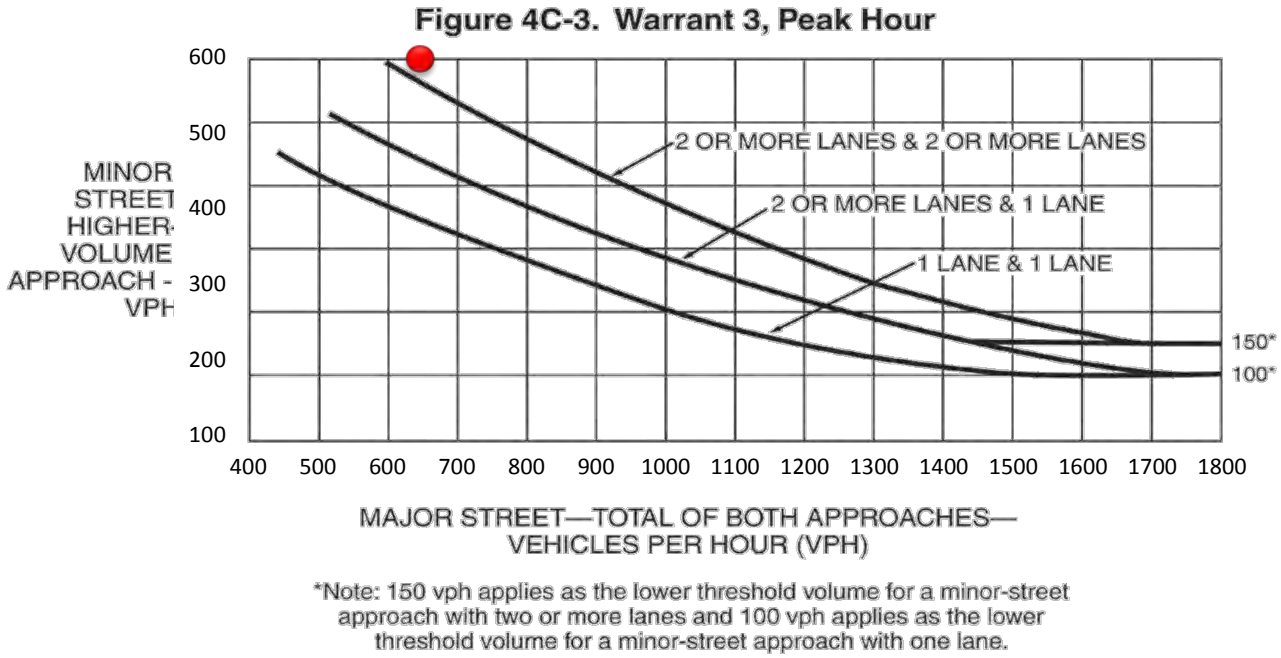
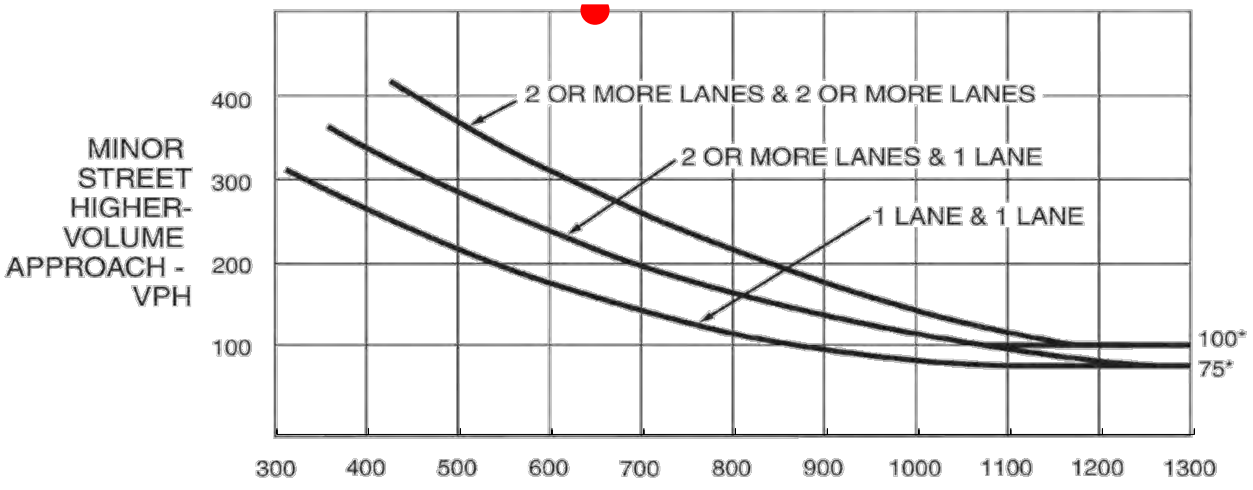


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	Existing + Project Alt 2	**Total Number of Vehicles Entering:**	1268
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	109
		Minor St approach total delay (veh-hr):	13.6

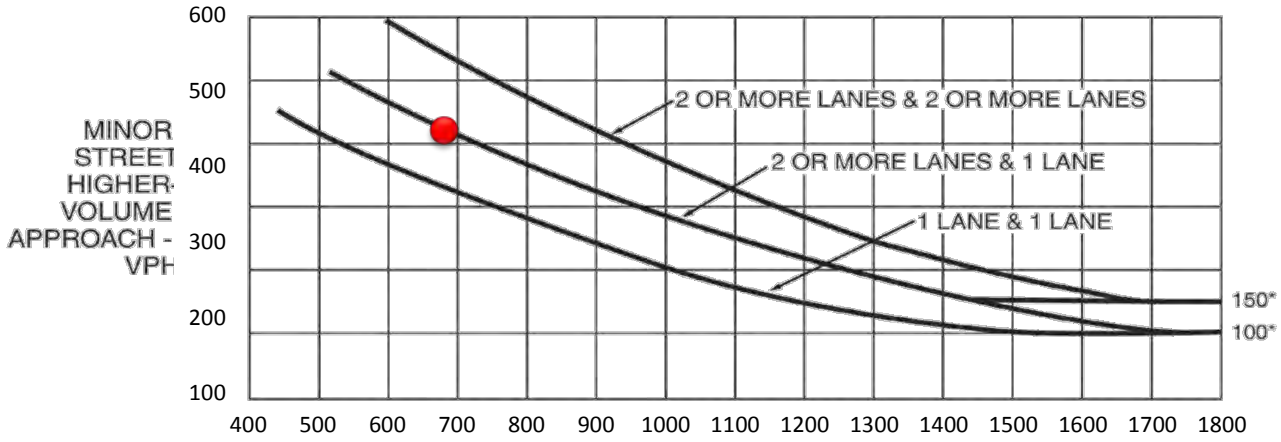
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
681	448

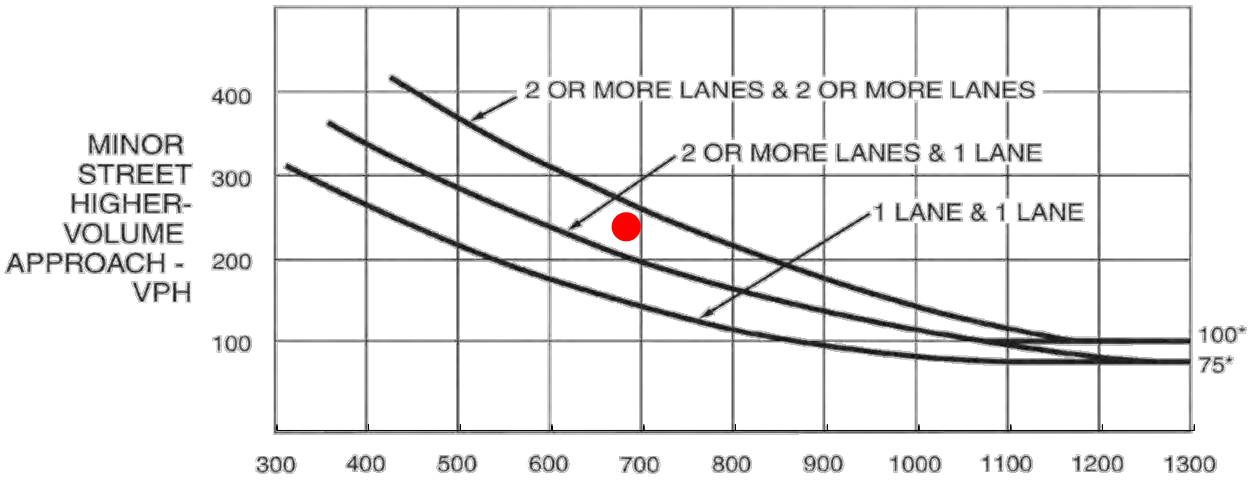
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	Existing + Project Alt 2	**Total Number of Vehicles Entering:**	1465
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	130.4
		Minor St approach total delay (veh-hr):	19.8

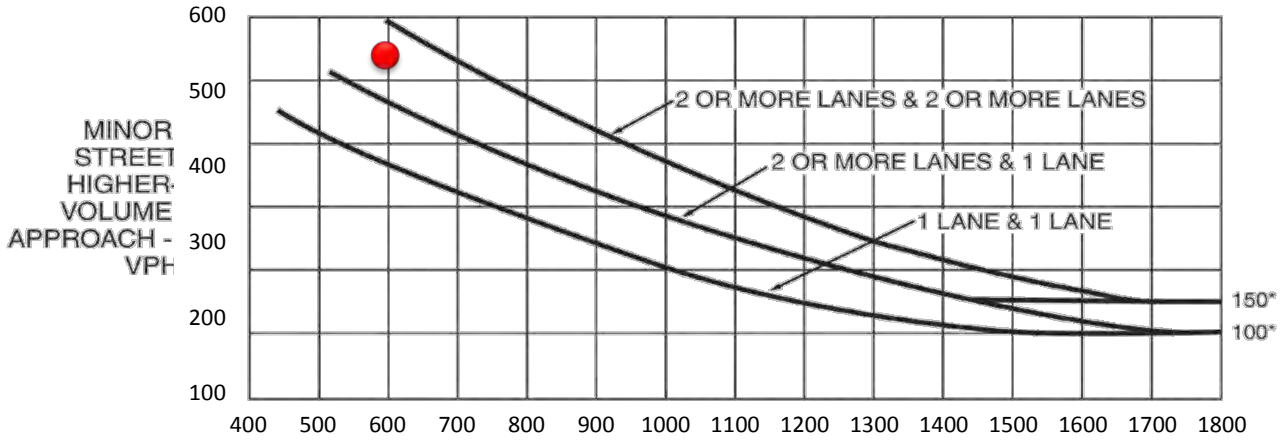
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
597	547

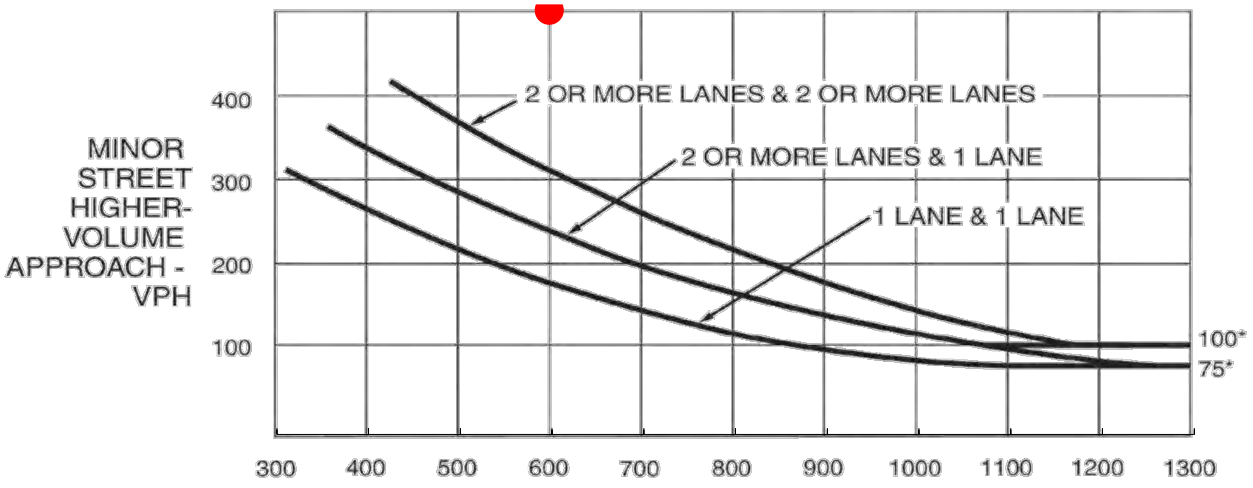
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

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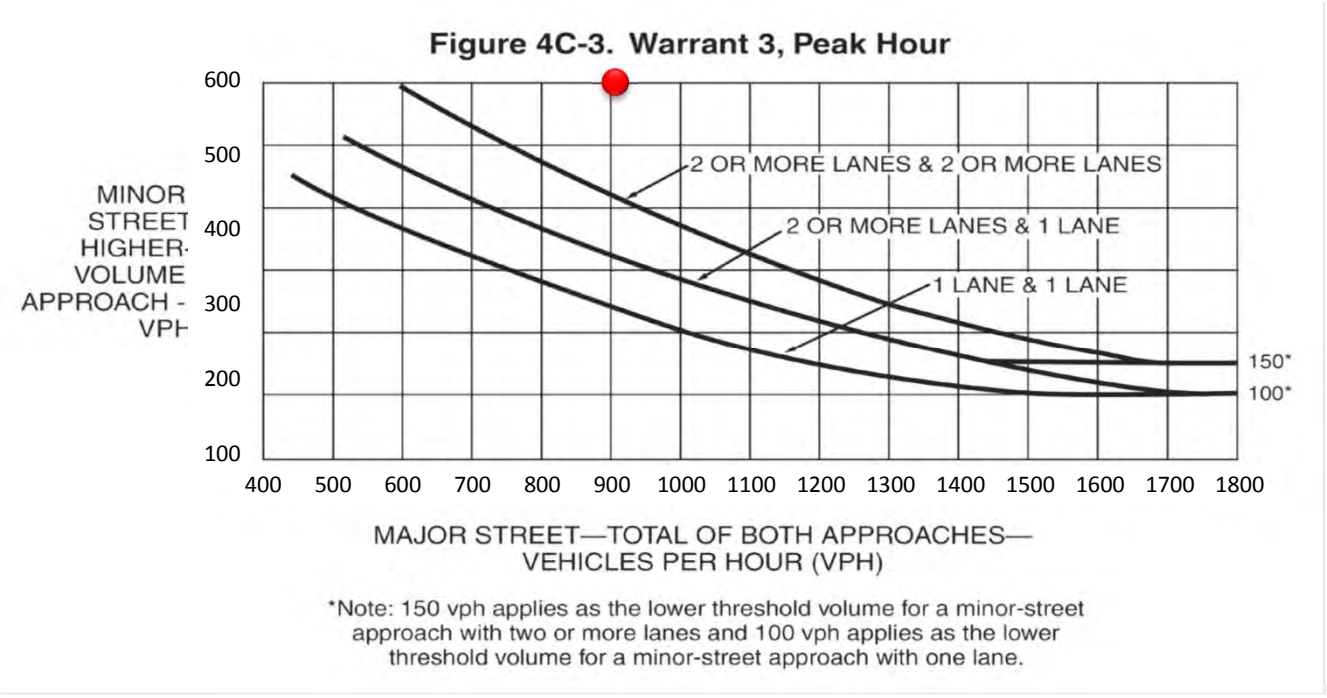
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 With Orange	**Total Number of Vehicles Entering:**	1688
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	275.5
		Minor St approach total delay (veh-hr):	45.7

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

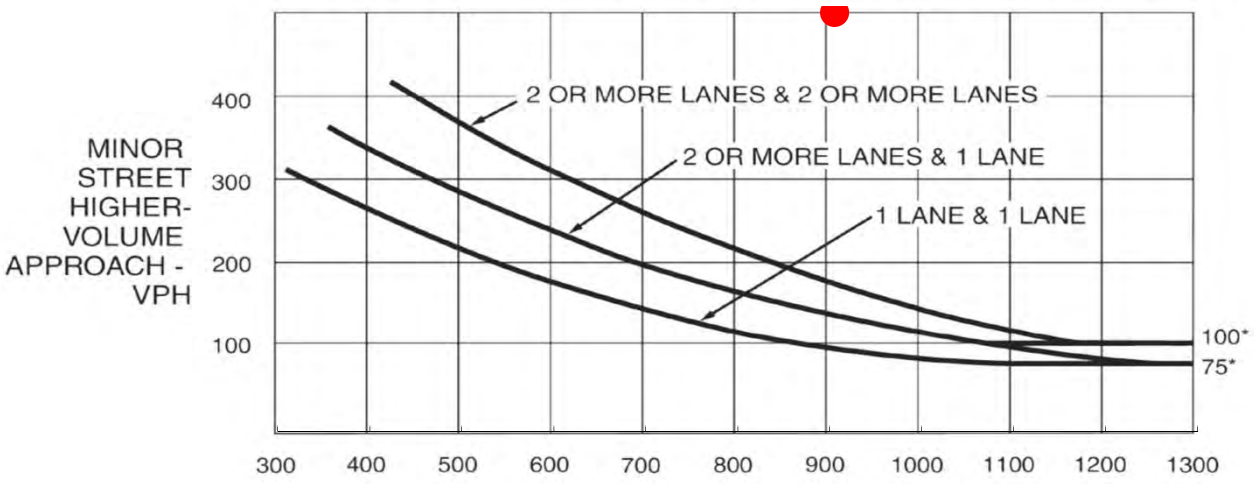
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
905	597



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

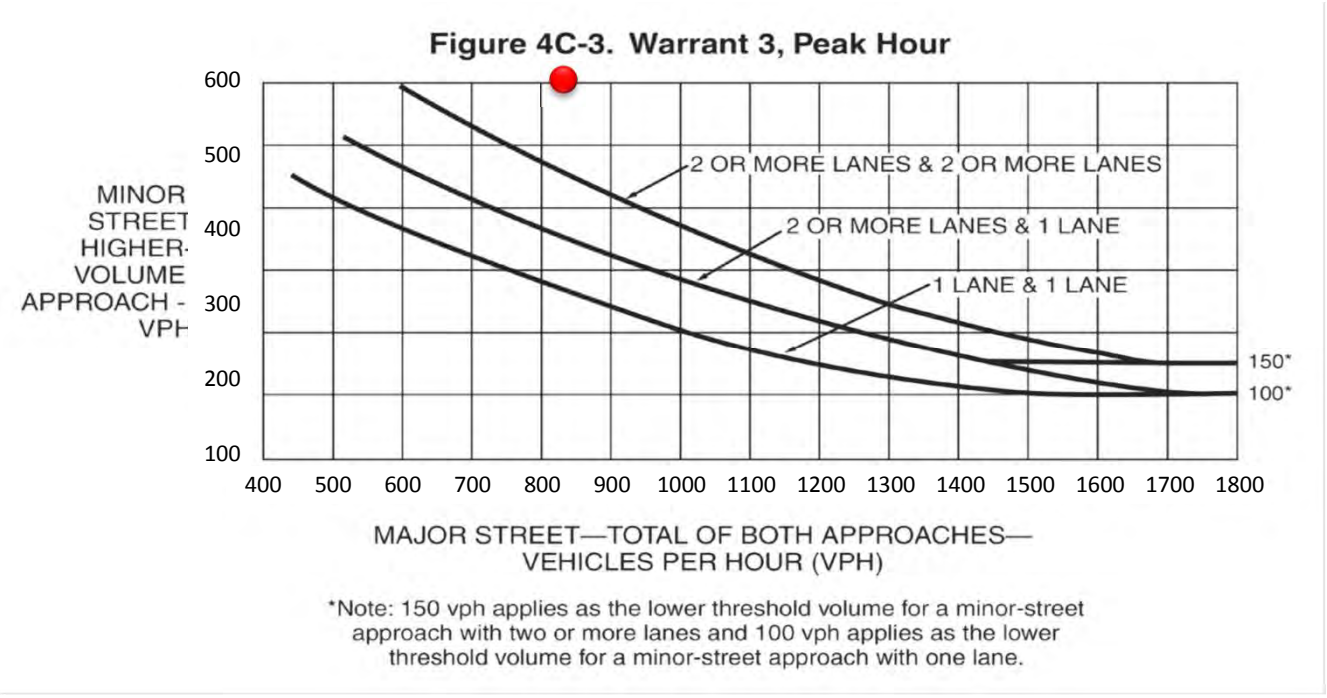
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 With Orange	**Total Number of Vehicles Entering:**	1968
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	324.3
		Minor St approach total delay (veh-hr):	64.5

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

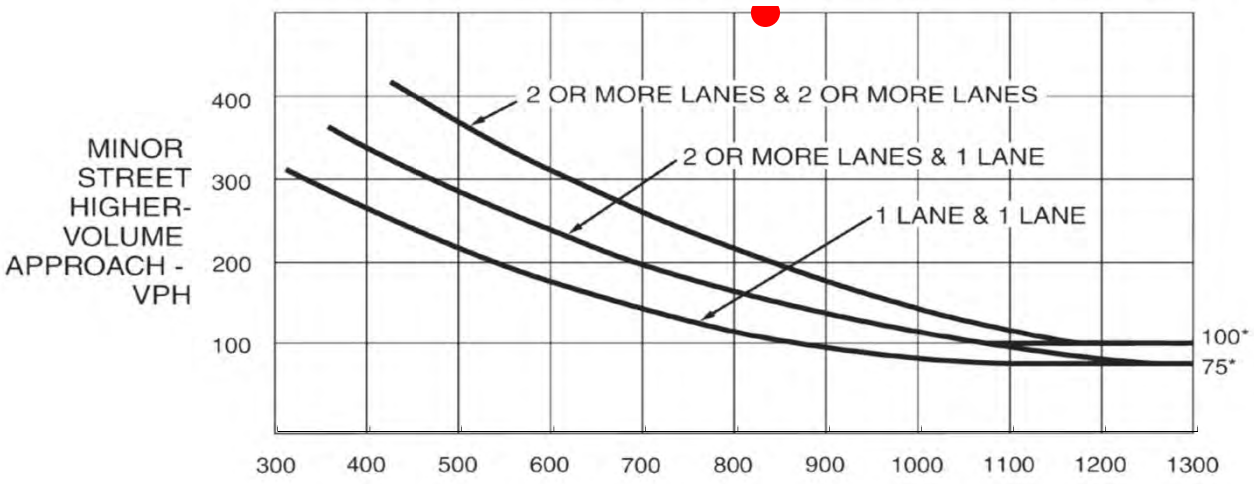
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
830	716



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 Without Orange	**Total Number of Vehicles Entering:**	1530
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	203.6
		Minor St approach total delay (veh-hr):	32.1

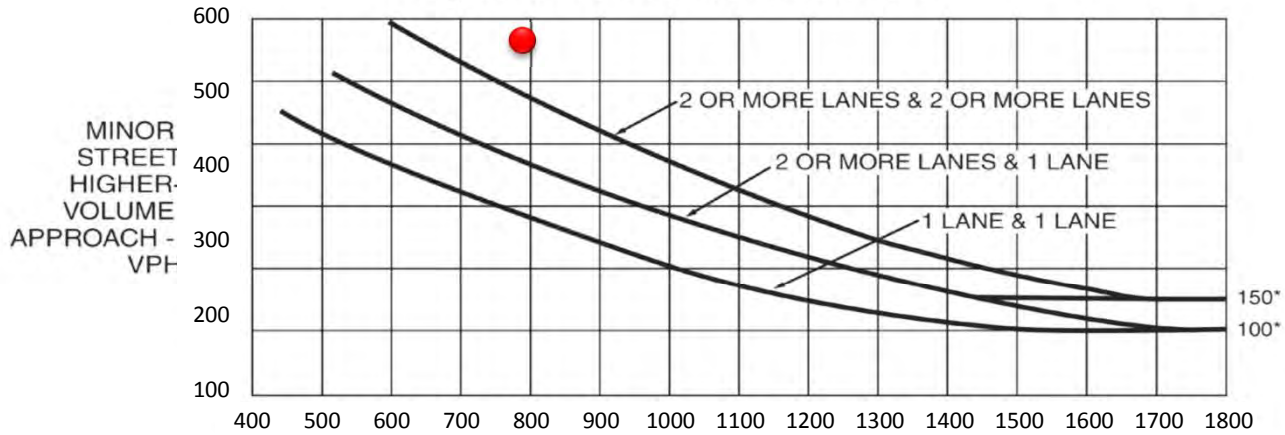
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
787	567

Figure 4C-3. Warrant 3, Peak Hour

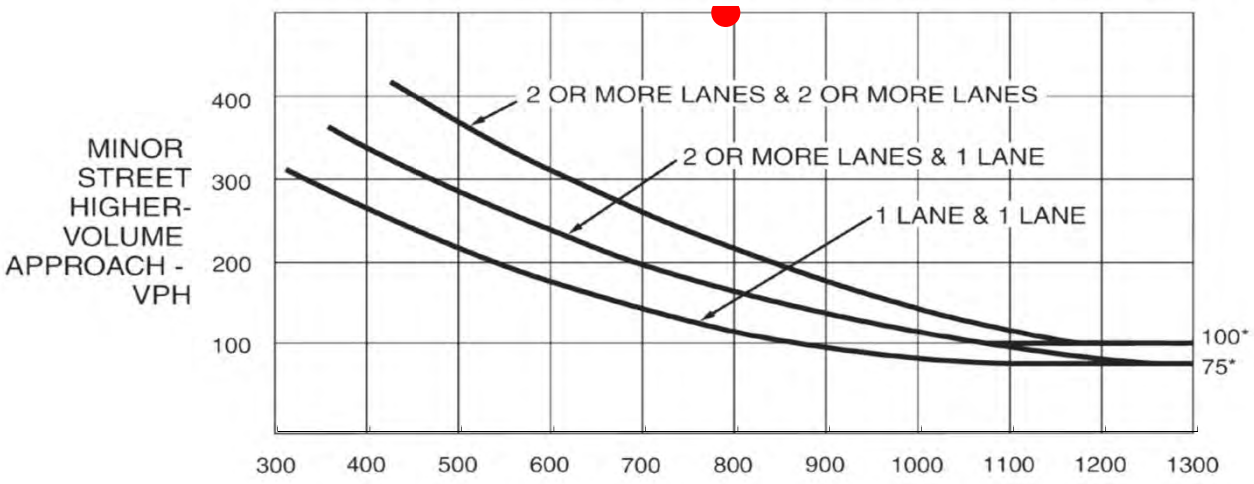


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

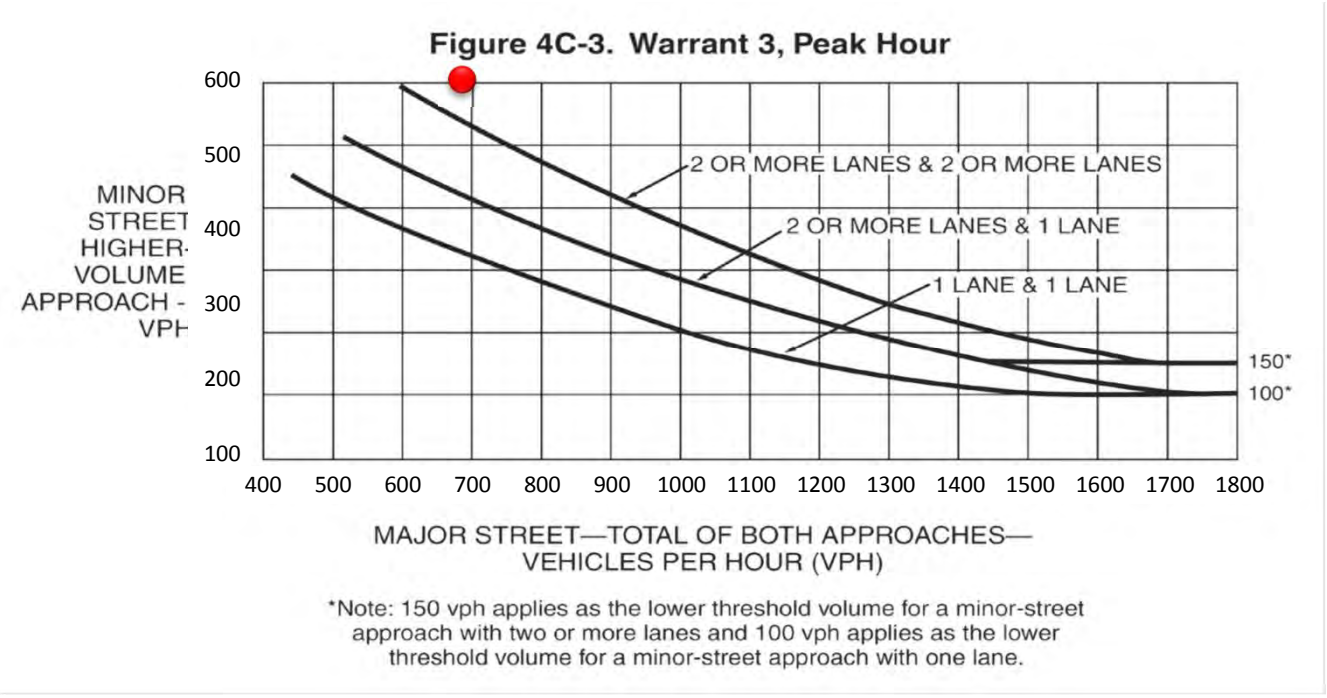
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 Without Orange	**Total Number of Vehicles Entering:**	1756
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	242.1
		Minor St approach total delay (veh-hr):	45.4

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

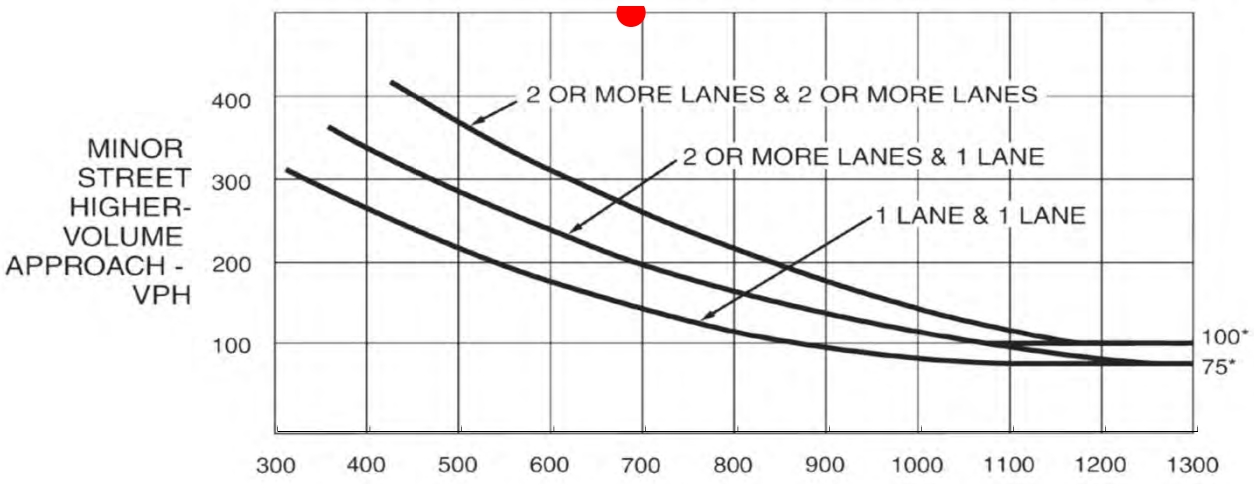
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
684	675



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 With Orange	**Total Number of Vehicles Entering:**	1652
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	263.6
		Minor St approach total delay (veh-hr):	41.5

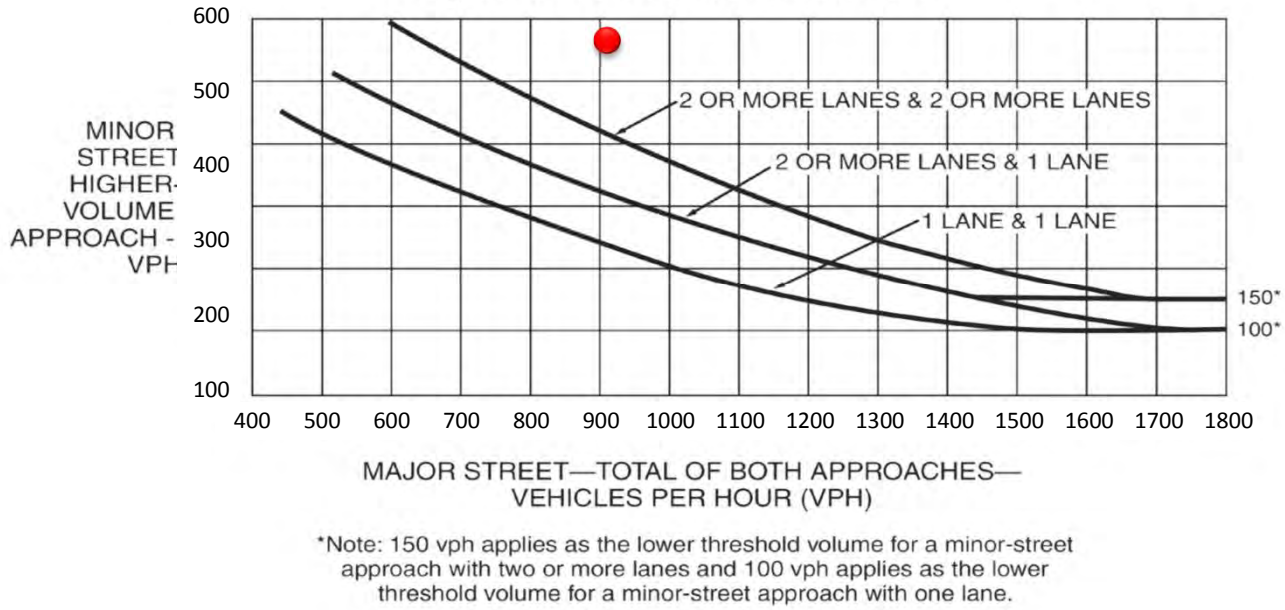
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
909	567

Figure 4C-3. Warrant 3, Peak Hour

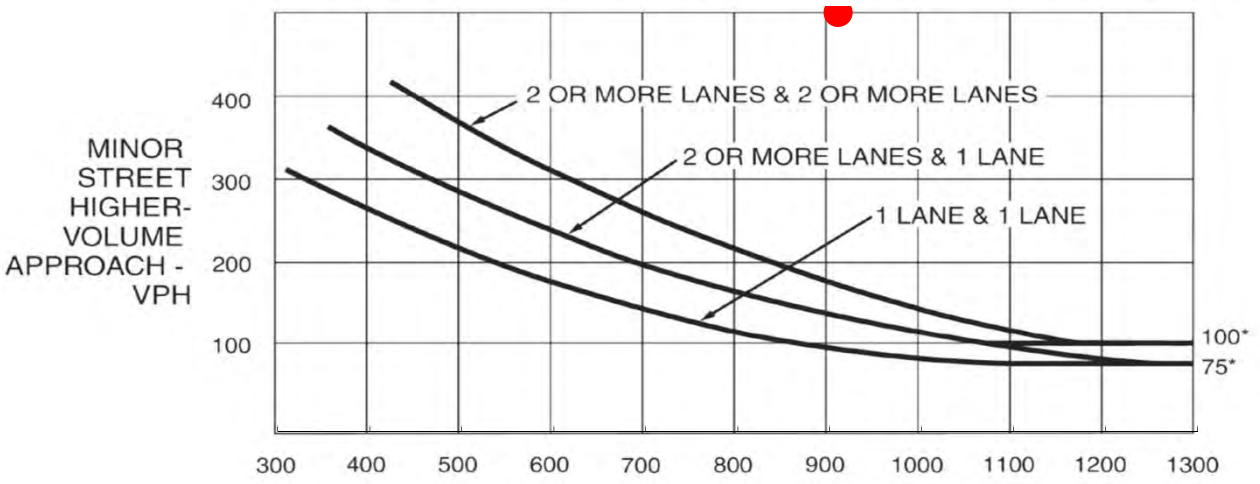


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

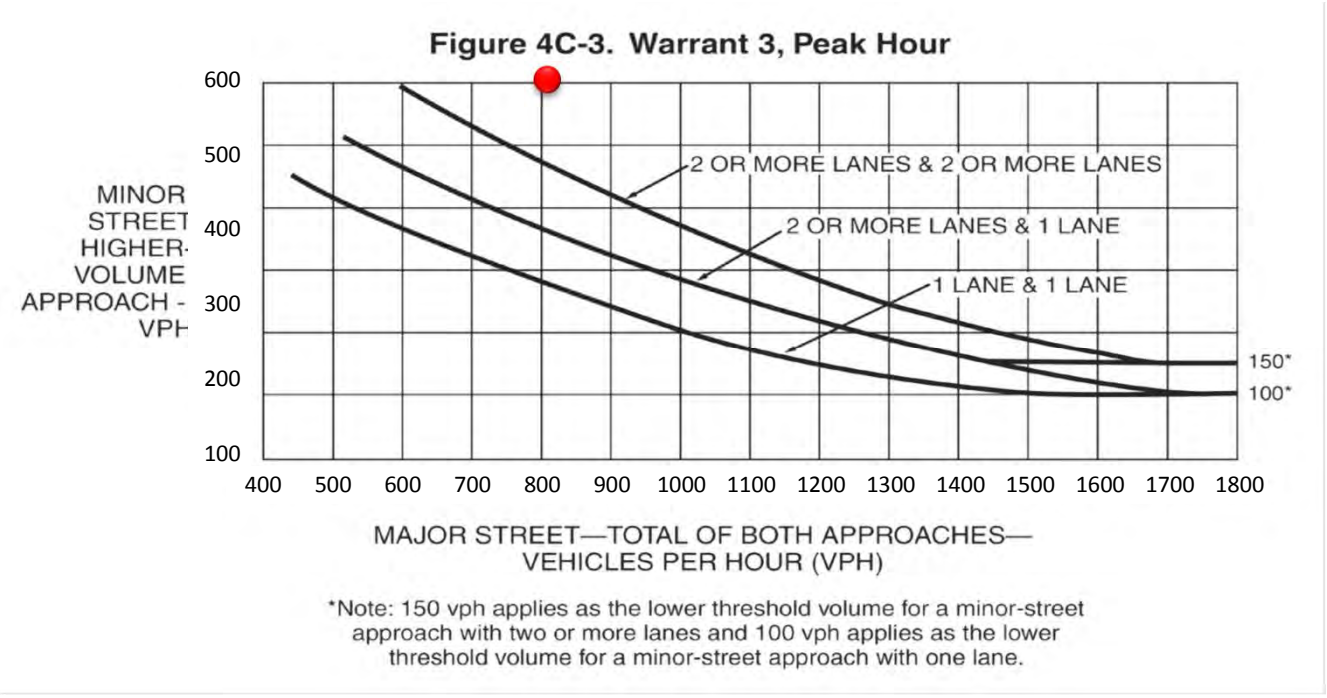
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 With Orange	**Total Number of Vehicles Entering:**	1894
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	295.2
		Minor St approach total delay (veh-hr):	56.1

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

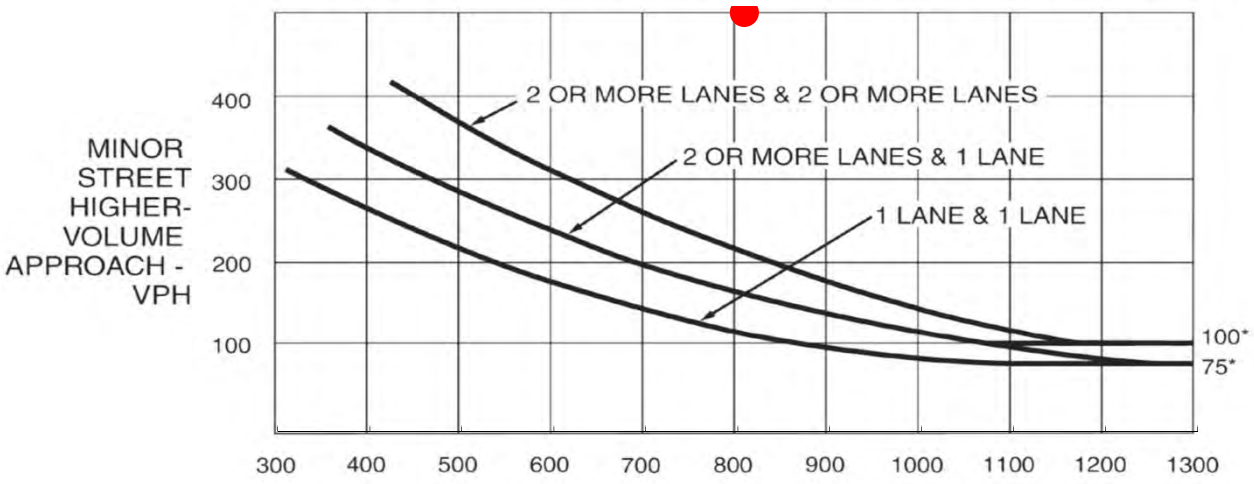
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
807	684



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

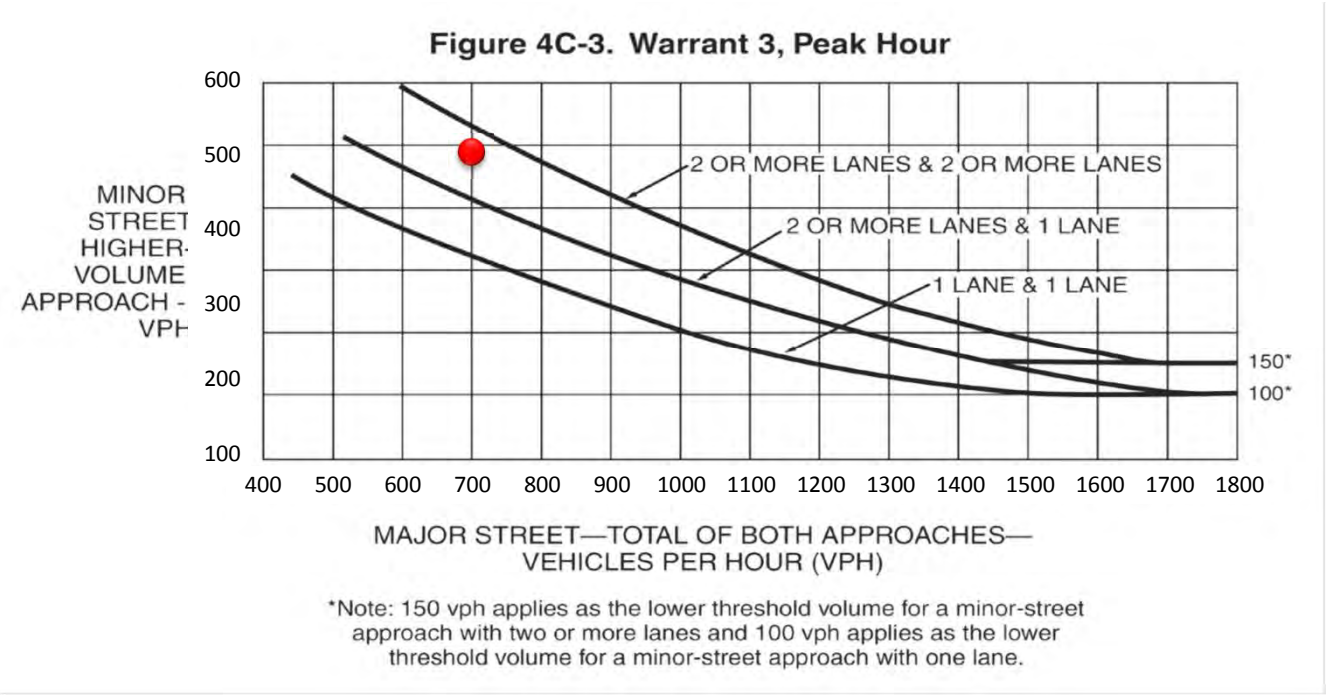
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 Without Orange	**Total Number of Vehicles Entering:**	1358
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	135.4
		Minor St approach total delay (veh-hr):	19.0

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

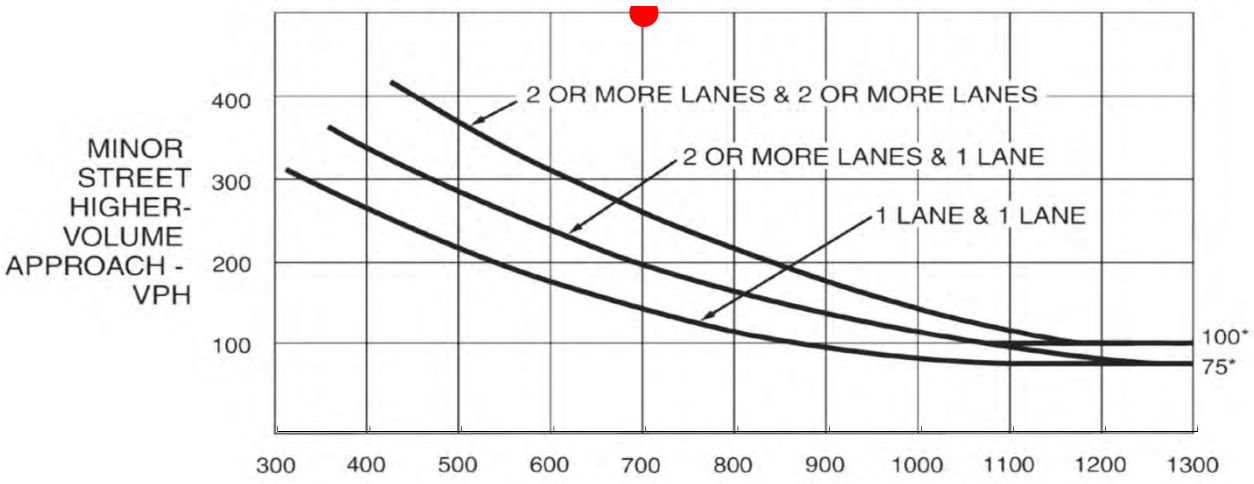
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
698	504



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

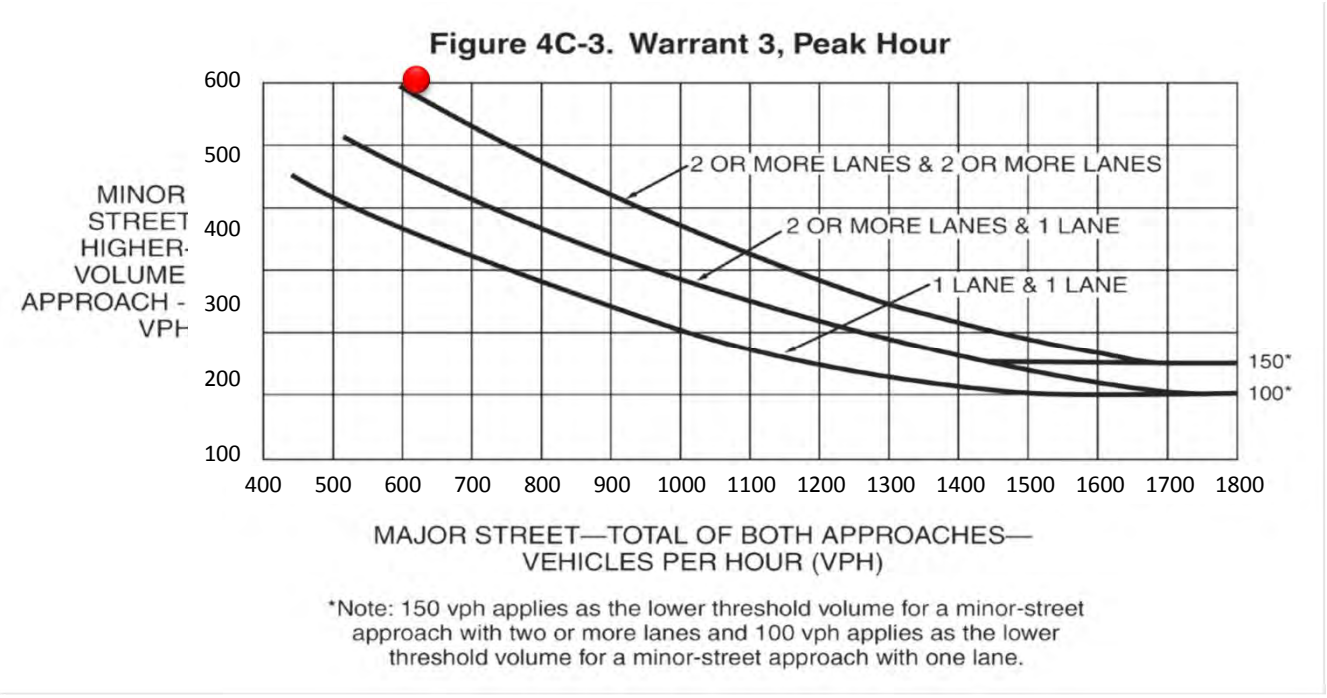
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Stephens Avenue / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 Without Orange	**Total Number of Vehicles Entering:**	1588
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	178.5
		Minor St approach total delay (veh-hr):	30.2

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

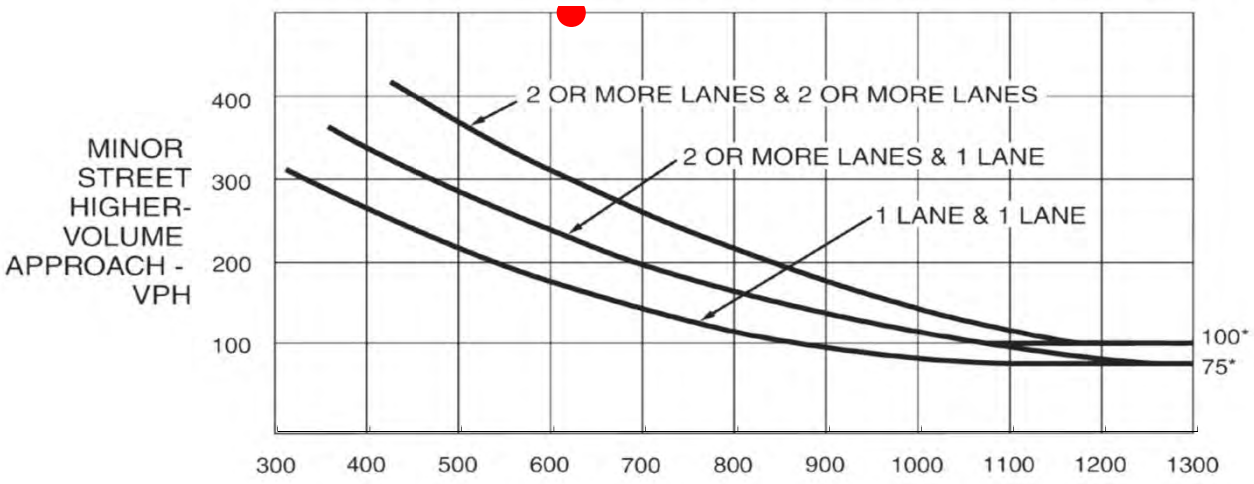
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
619	610



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

SIGNAL WARRANT ANALYSIS

Minor Street:	Highgrove Place	**Number of Lanes on minor street:**	1
Major Street	W Center Street	**Number of Lanes on major street:**	2
Scenario:	Existing + Project Alt 1	**Total Number of Vehicles Entering:**	1317
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	139.8
		Minor St approach total delay (veh-hr):	12.9

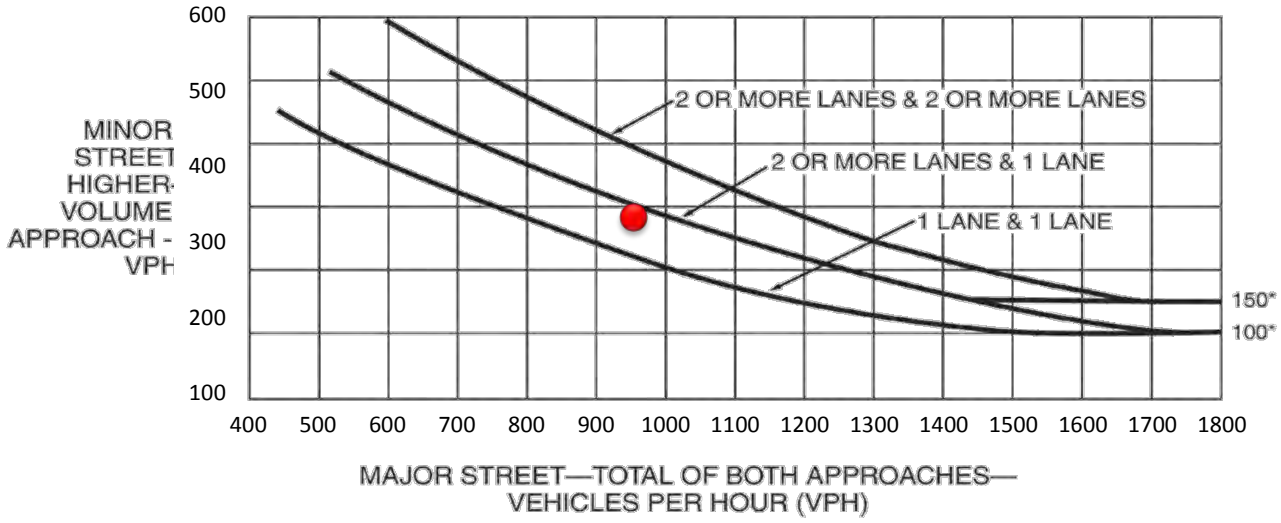
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
954	333

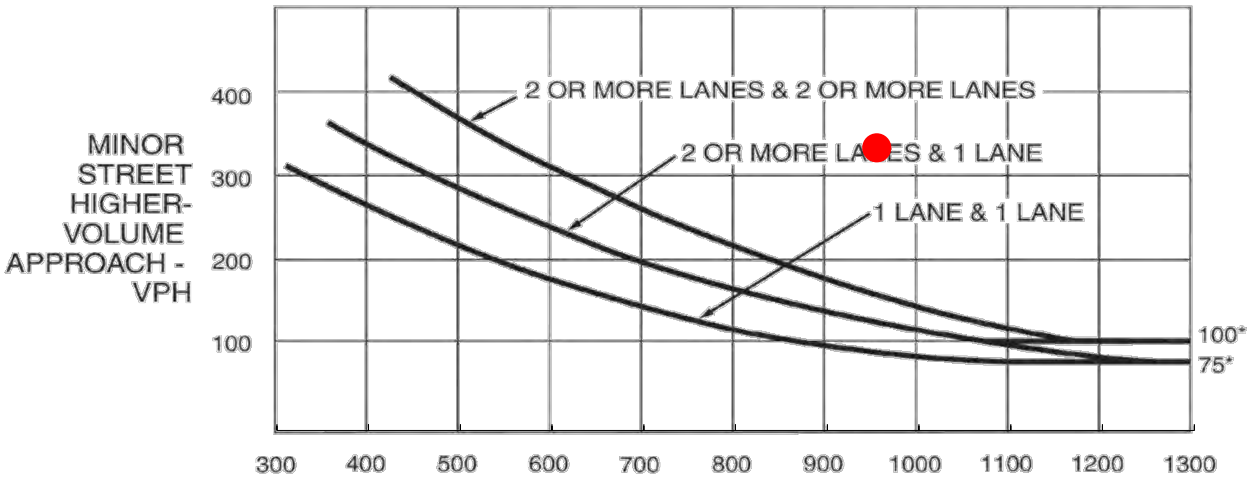
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Highgrove Place	**Number of Lanes on minor street:**	1
Major Street	W Center Street	**Number of Lanes on major street:**	2
Scenario:	Existing + Project Alt 1	**Total Number of Vehicles Entering:**	1399
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	82.4
		Minor St approach total delay (veh-hr):	10.3

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
901	448

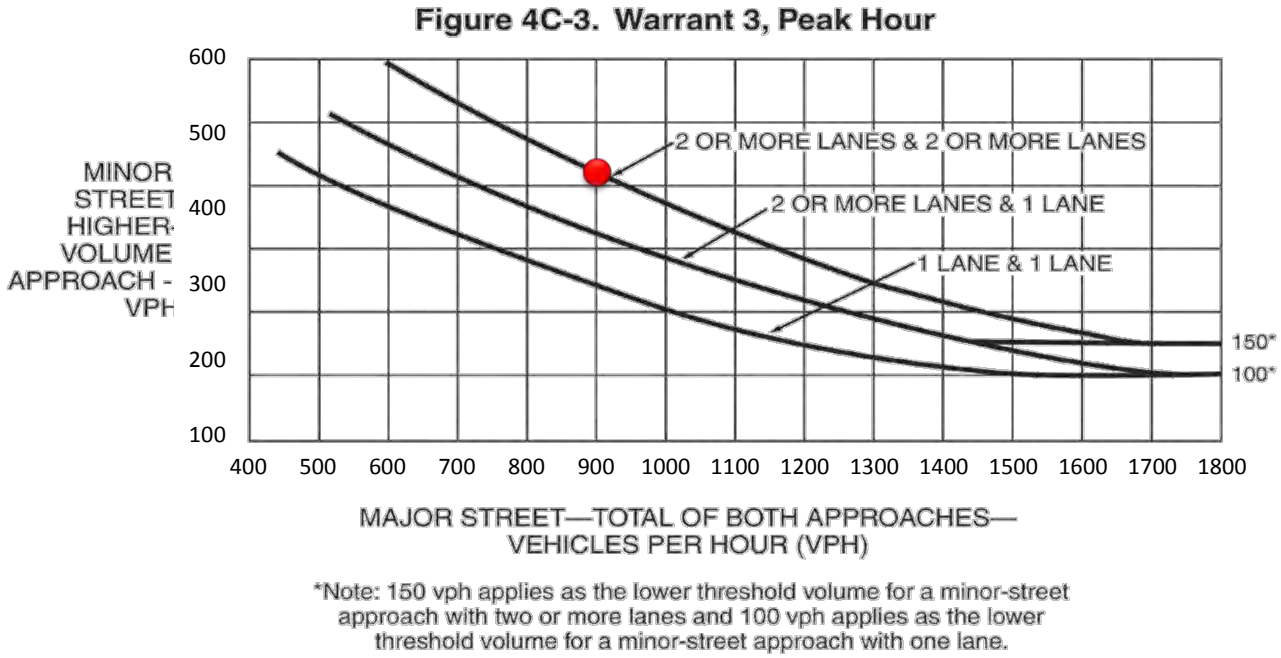
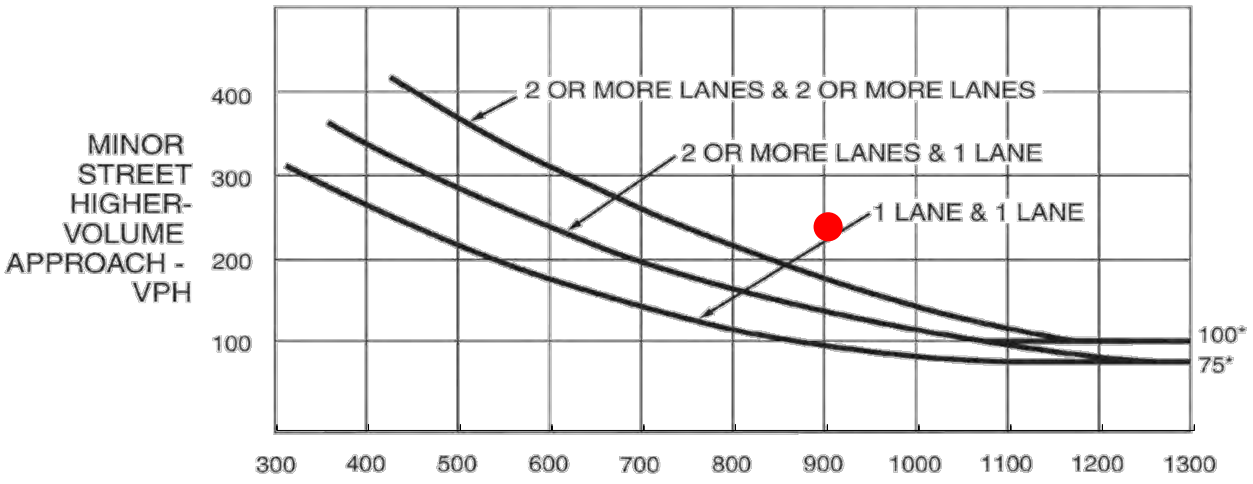


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Highgrove Place	**Number of Lanes on minor street:**	1
Major Street	W Center Street	**Number of Lanes on major street:**	2
Scenario:	Existing + Project Alt 2	**Total Number of Vehicles Entering:**	1196
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	139.8
		Minor St approach total delay (veh-hr):	11.8

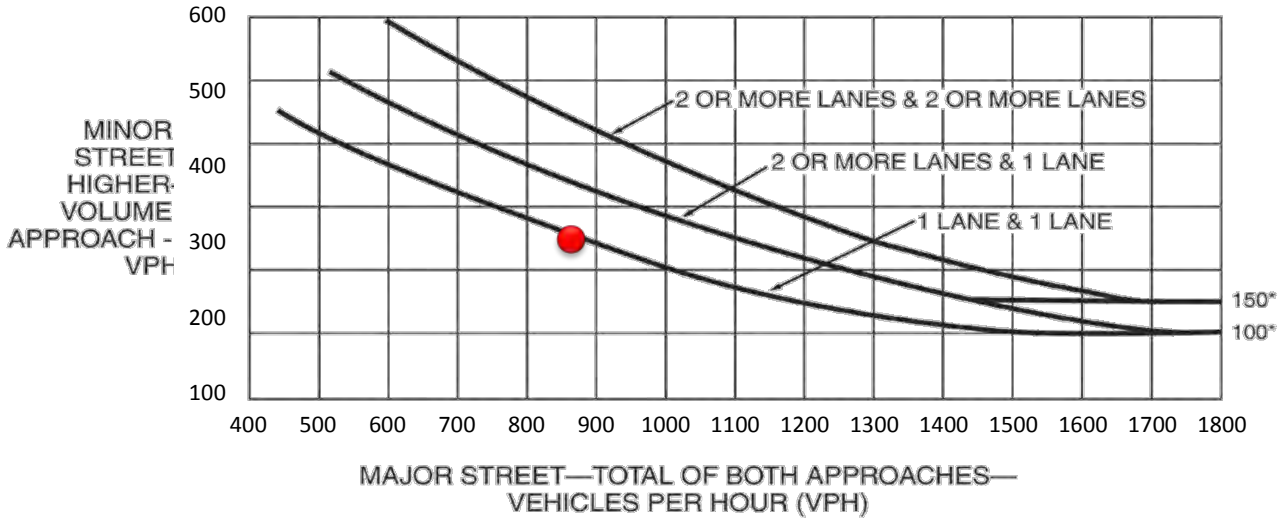
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
864	304

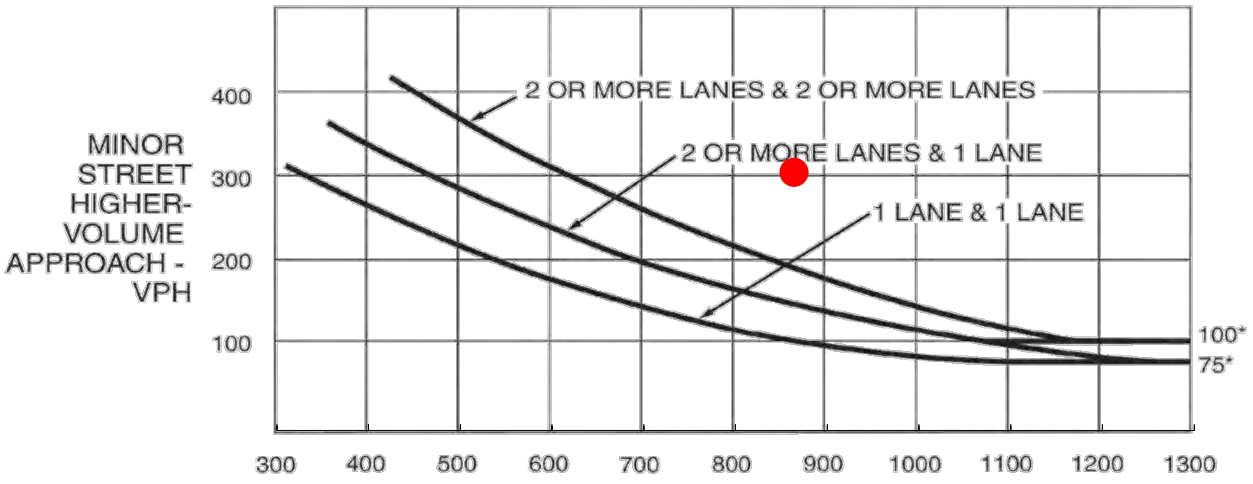
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Highgrove Place	**Number of Lanes on minor street:**	1
Major Street	W Center Street	**Number of Lanes on major street:**	2
Scenario:	Existing + Project Alt 2	**Total Number of Vehicles Entering:**	1288
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	82.4
		Minor St approach total delay (veh-hr):	9.5

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
828	415

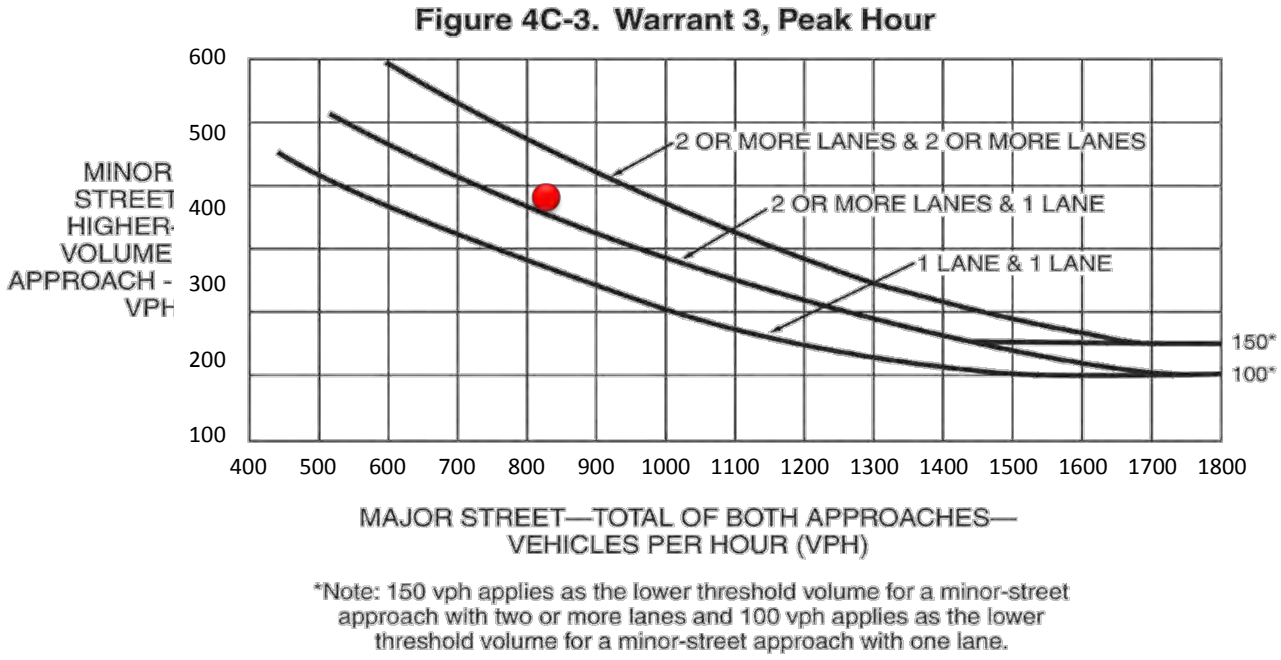
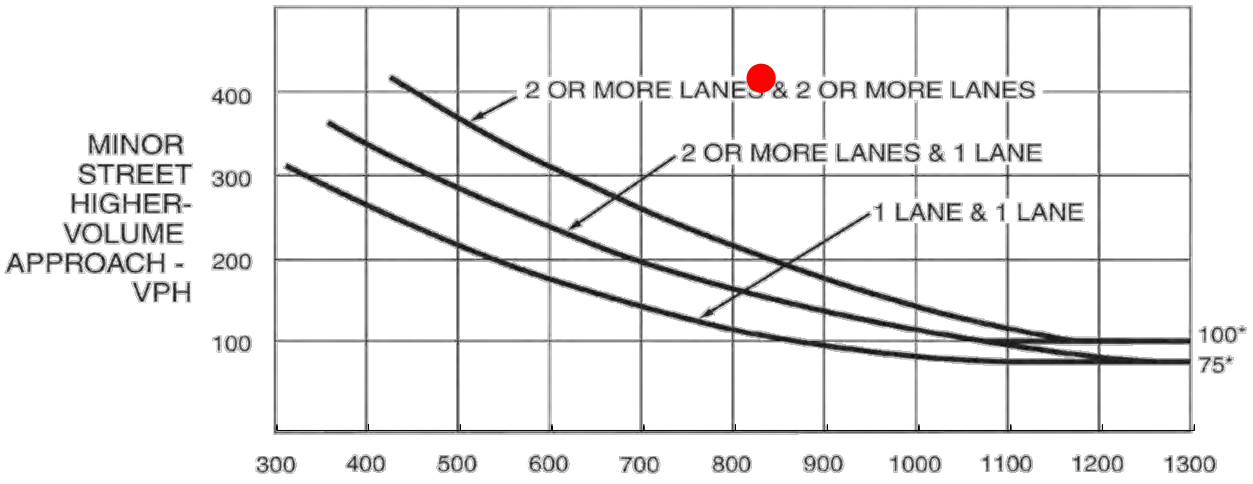


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

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SIGNAL WARRANT ANALYSIS

Minor Street:	Highgrove Place	**Number of Lanes on minor street:**	1
Major Street	W Center Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 With Orange AM Peak	**Total Number of Vehicles Entering:**	1500
		Number of Approaches:	4
		Intersection total delay (seconds):	46.7
		Minor St approach total delay (veh-hr):	4.8

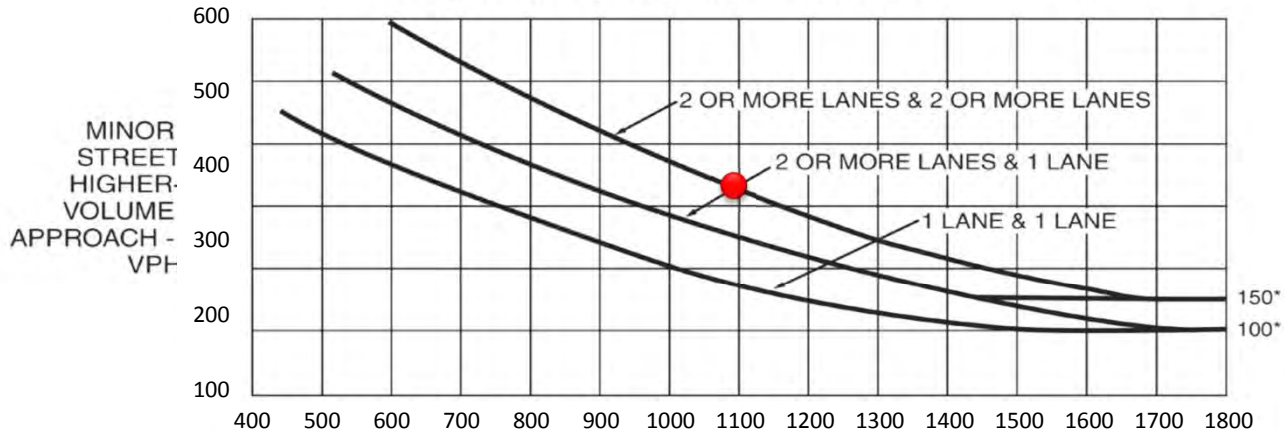
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1090	373

Figure 4C-3. Warrant 3, Peak Hour

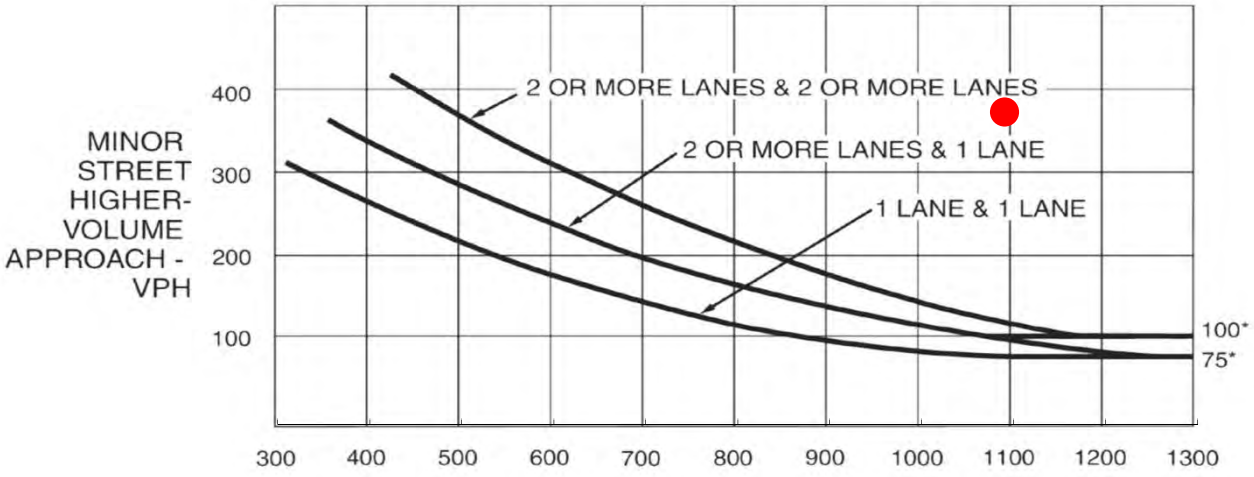


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

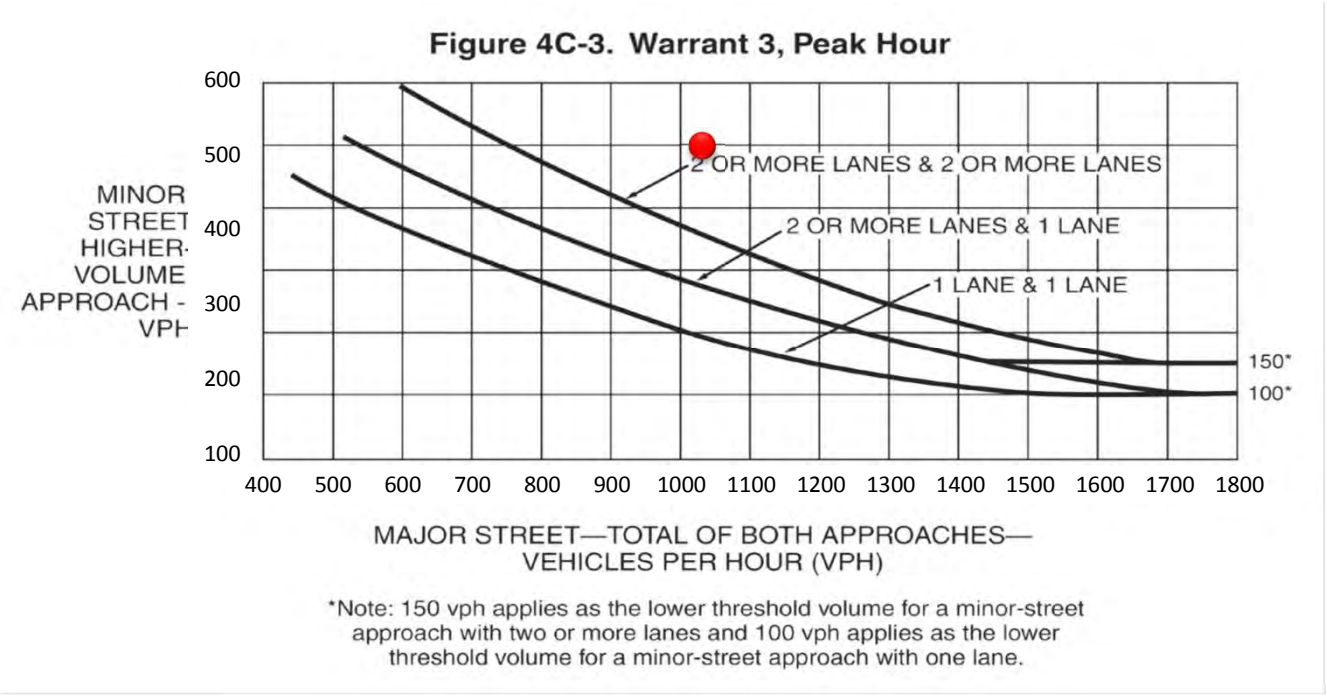
Minor Street:	Highgrove Place	**Number of Lanes on minor street:**	1
Major Street	W Center Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 With Orange PM Peak	**Total Number of Vehicles Entering:**	1599
		Number of Approaches:	4
		Intersection total delay (seconds):	41.2
		Minor St approach total delay (veh-hr):	5.8

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

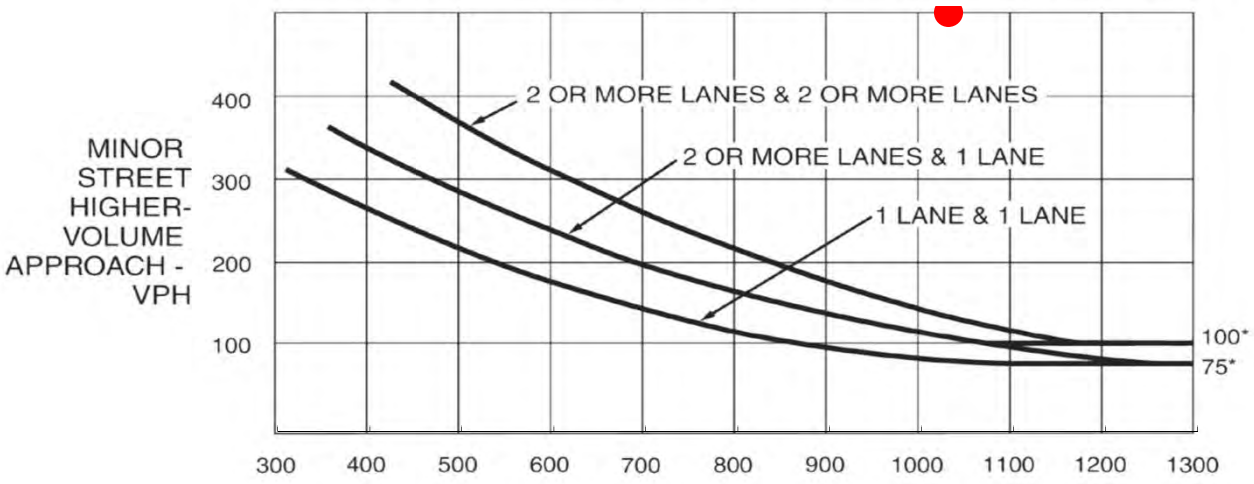
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1029	511



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Highgrove Place	**Number of Lanes on minor street:**	1
Major Street	W Center Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 With Orange AM Peak	**Total Number of Vehicles Entering:**	1421
		Number of Approaches:	4
		Intersection total delay (seconds):	36.9
		Minor St approach total delay (veh-hr):	3.6

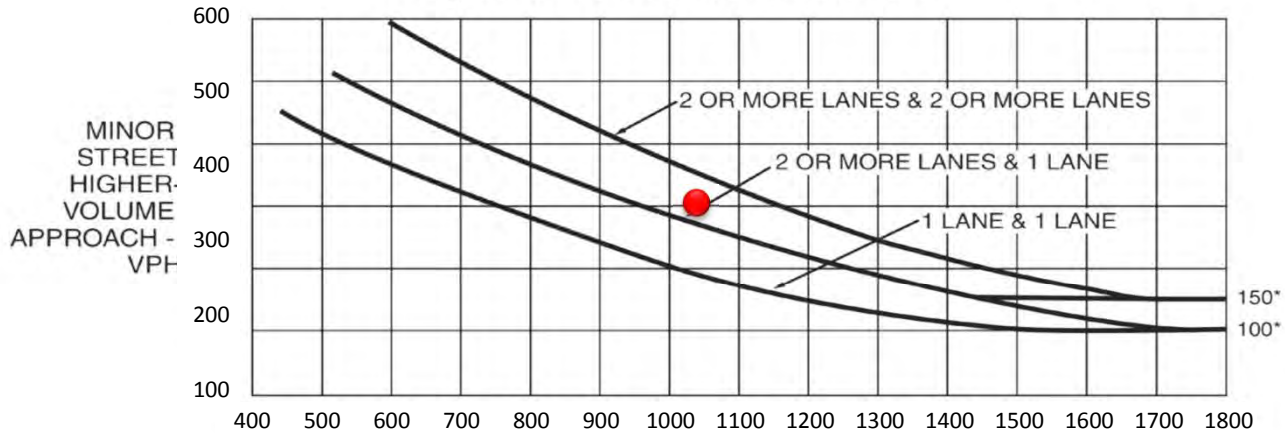
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1036	350

Figure 4C-3. Warrant 3, Peak Hour

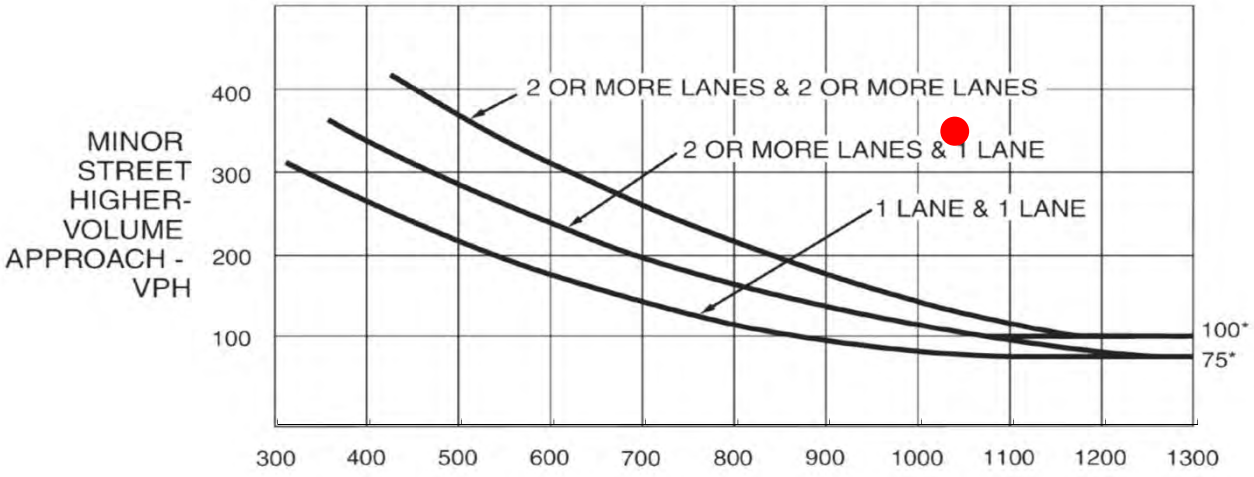


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	NO
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Highgrove Place	**Number of Lanes on minor street:**	1
Major Street	W Center Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 With Orange PM Peak	**Total Number of Vehicles Entering:**	1519
		Number of Approaches:	4
		Intersection total delay (seconds):	33.1
		Minor St approach total delay (veh-hr):	4.4

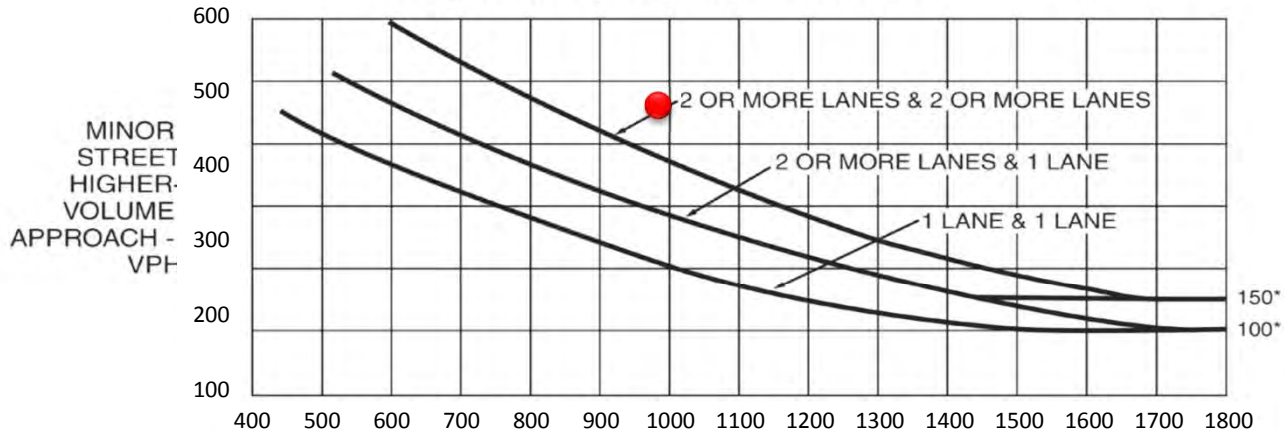
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
983	480

Figure 4C-3. Warrant 3, Peak Hour

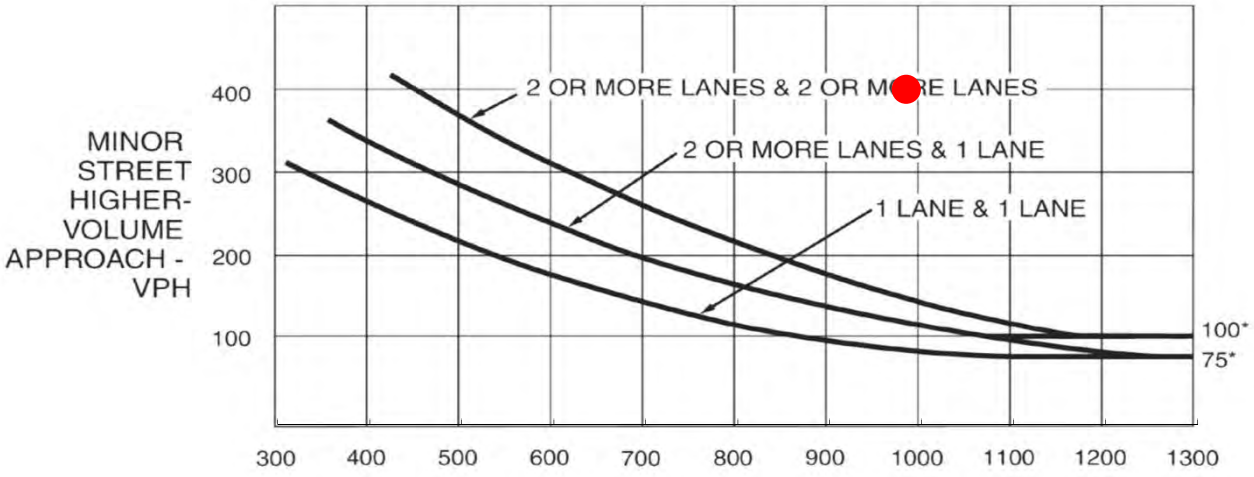


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	1603
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	60
		Minor St approach total delay (veh-hr):	9.4

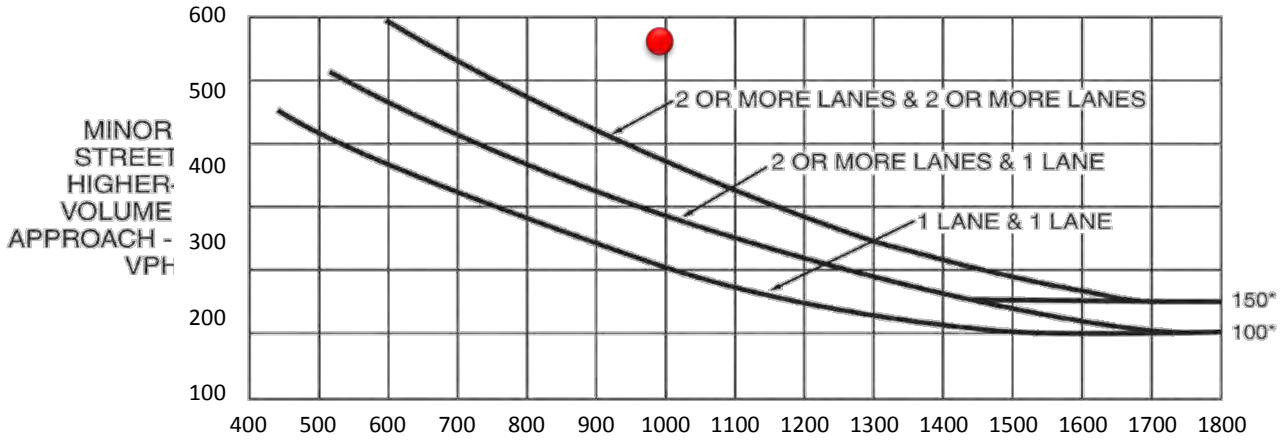
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
991	566

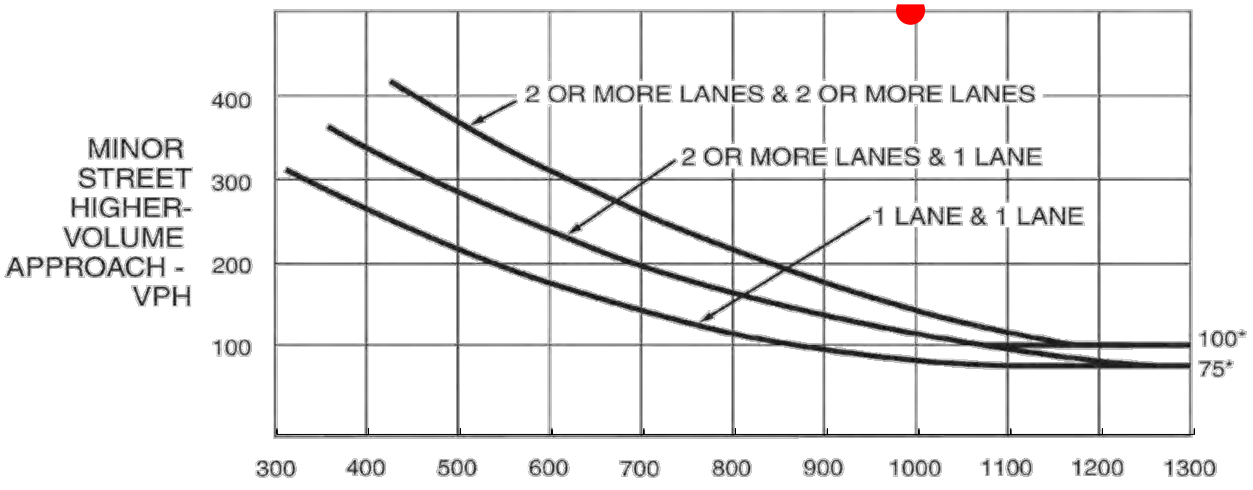
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	2042
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	125.3
		Minor St approach total delay (veh-hr):	21.8

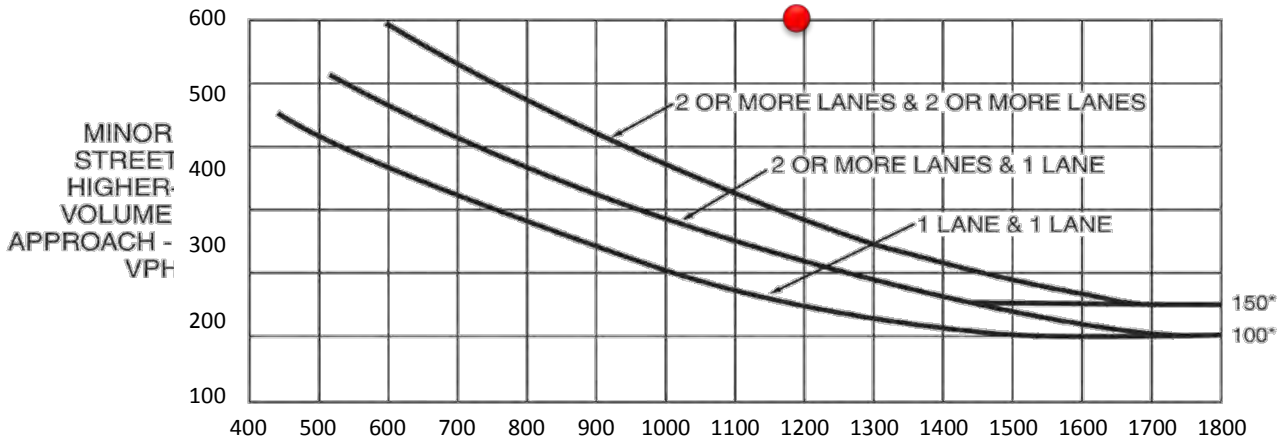
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1188	627

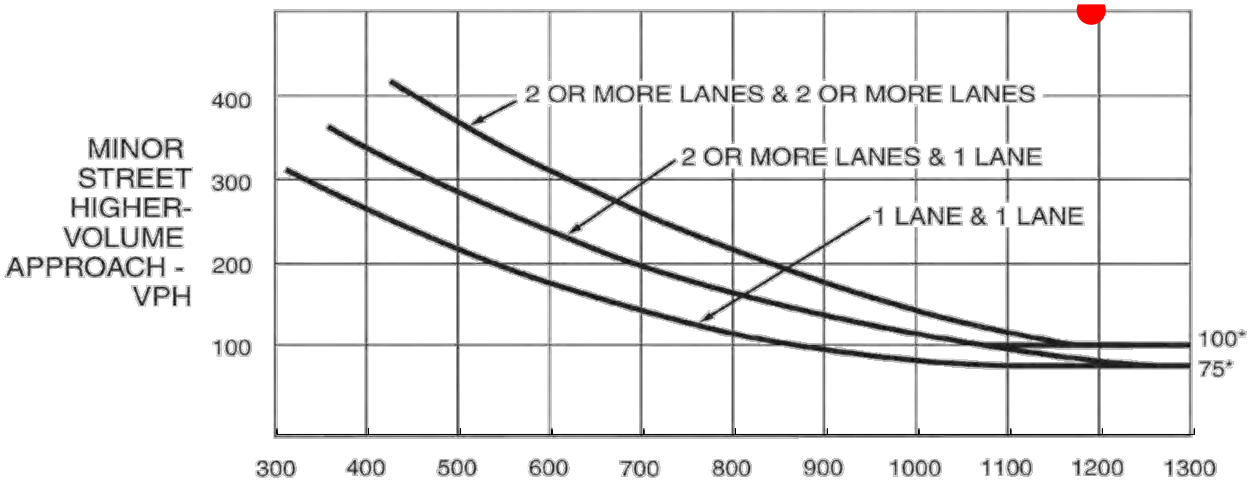
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	1445
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	39.7
		Minor St approach total delay (veh-hr):	5.6

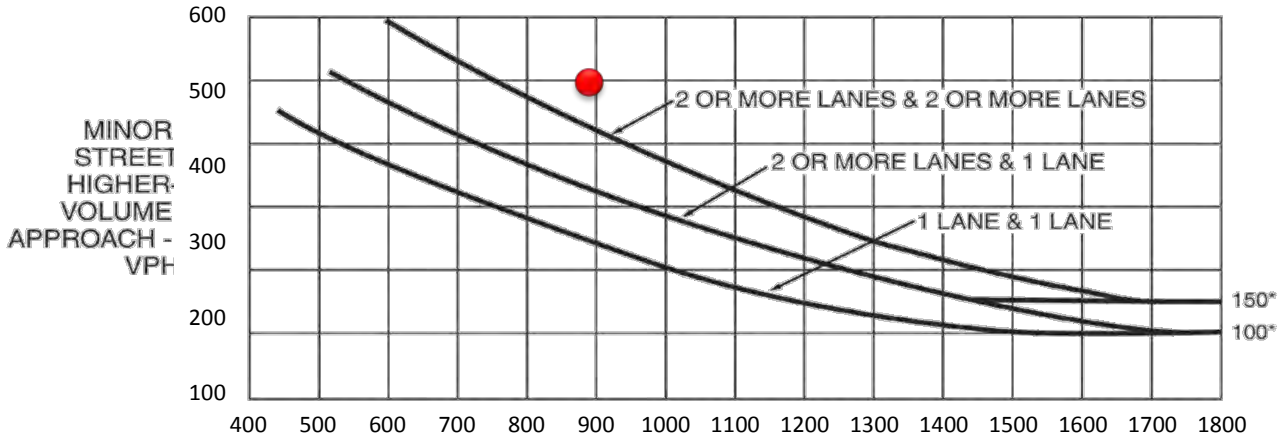
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
890	511

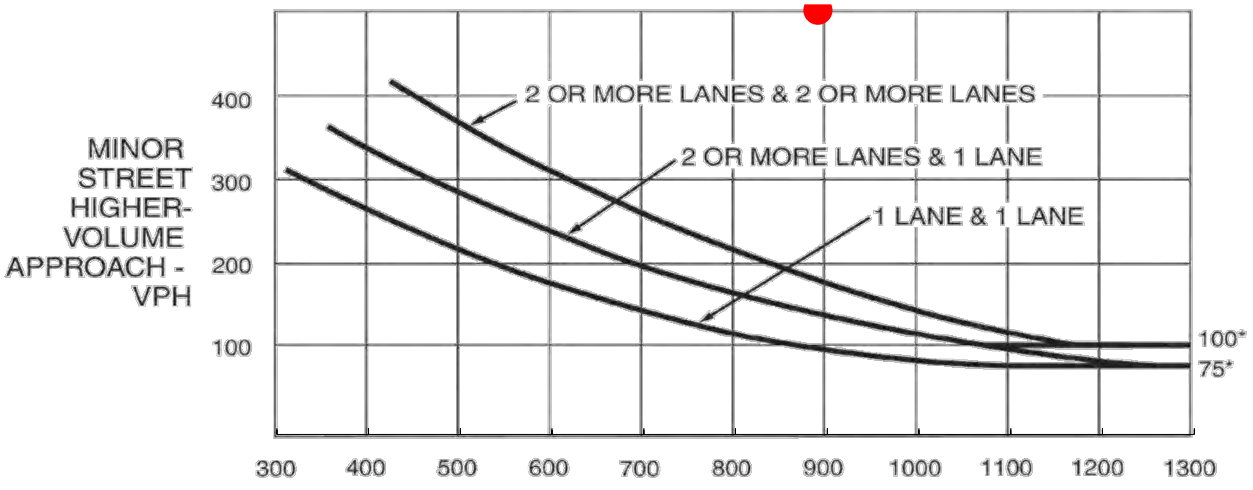
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	1865
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	87.4
		Minor St approach total delay (veh-hr):	13.9

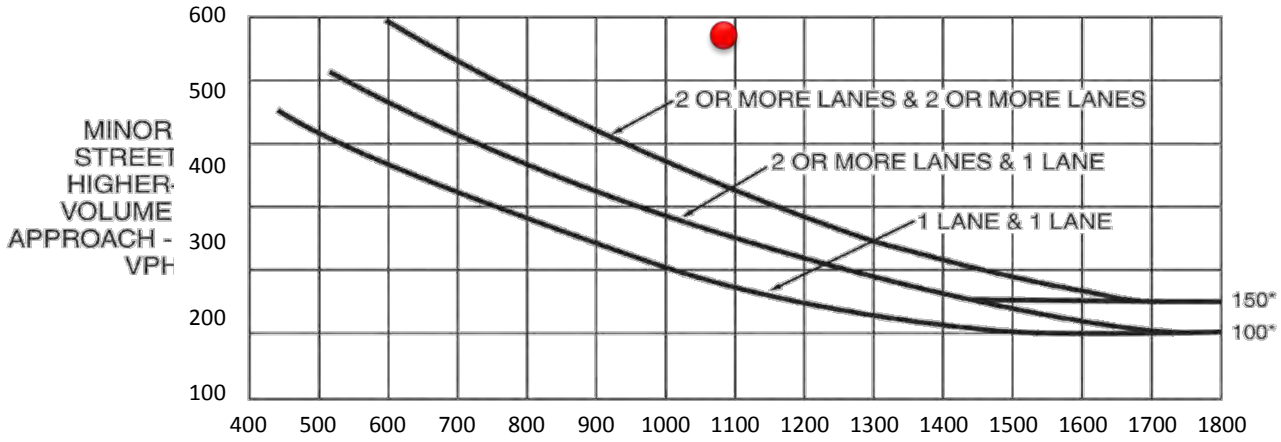
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1083	574

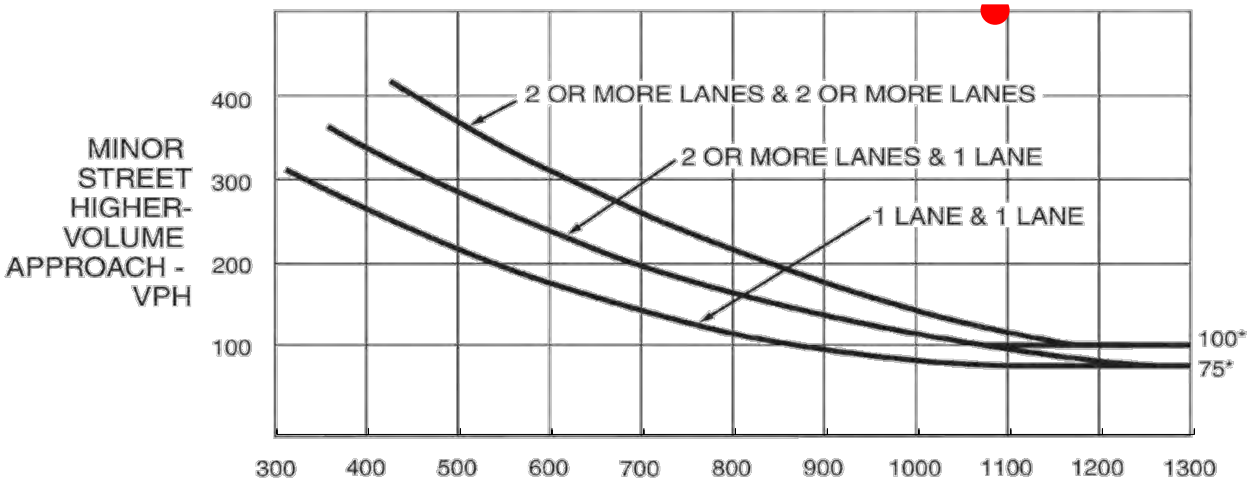
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

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SIGNAL WARRANT ANALYSIS

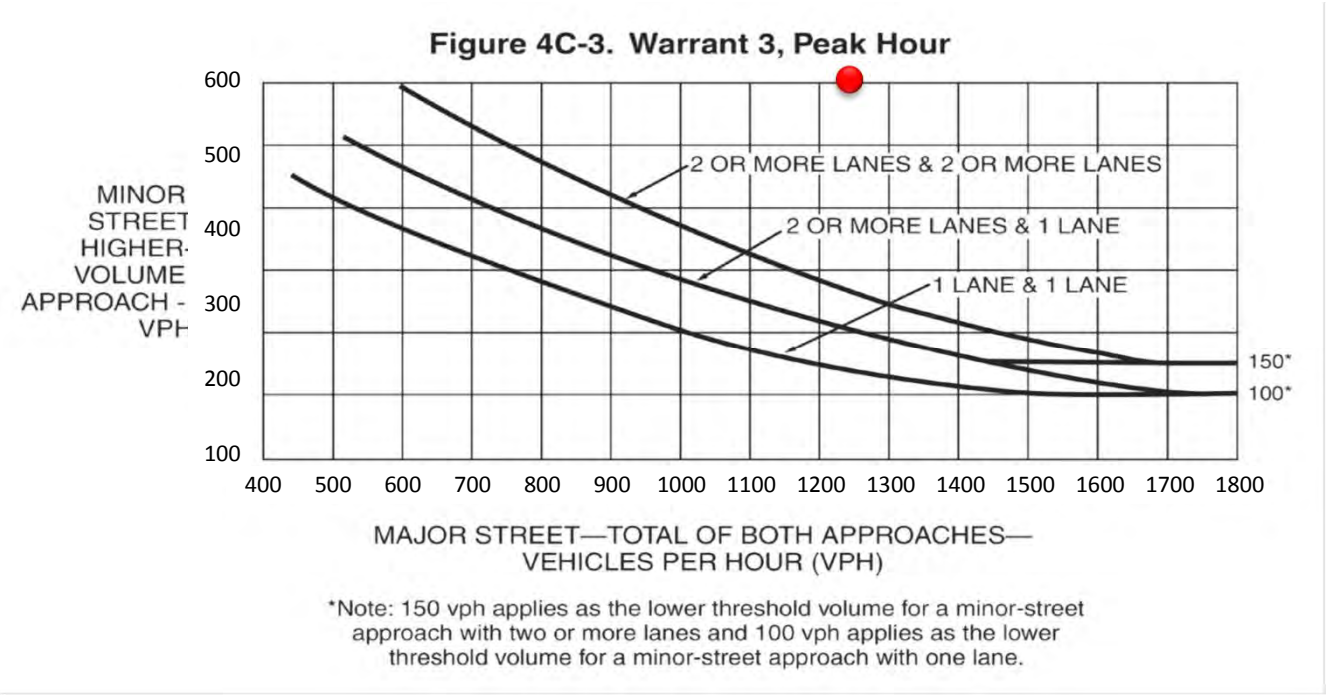
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 With Orange	**Total Number of Vehicles Entering:**	1986
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	122.2
		Minor St approach total delay (veh-hr):	23.2

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

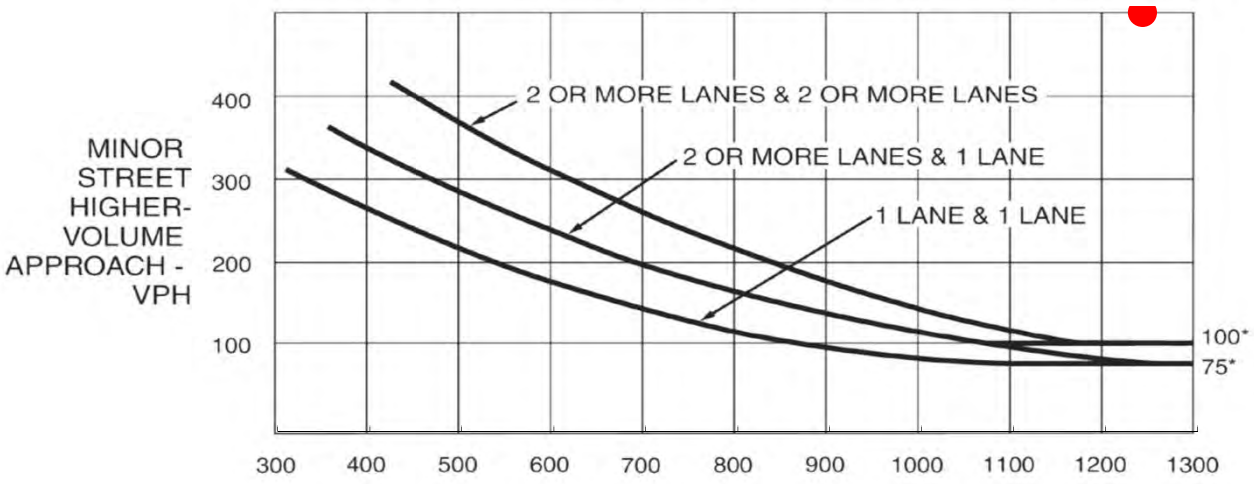
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1240	682



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

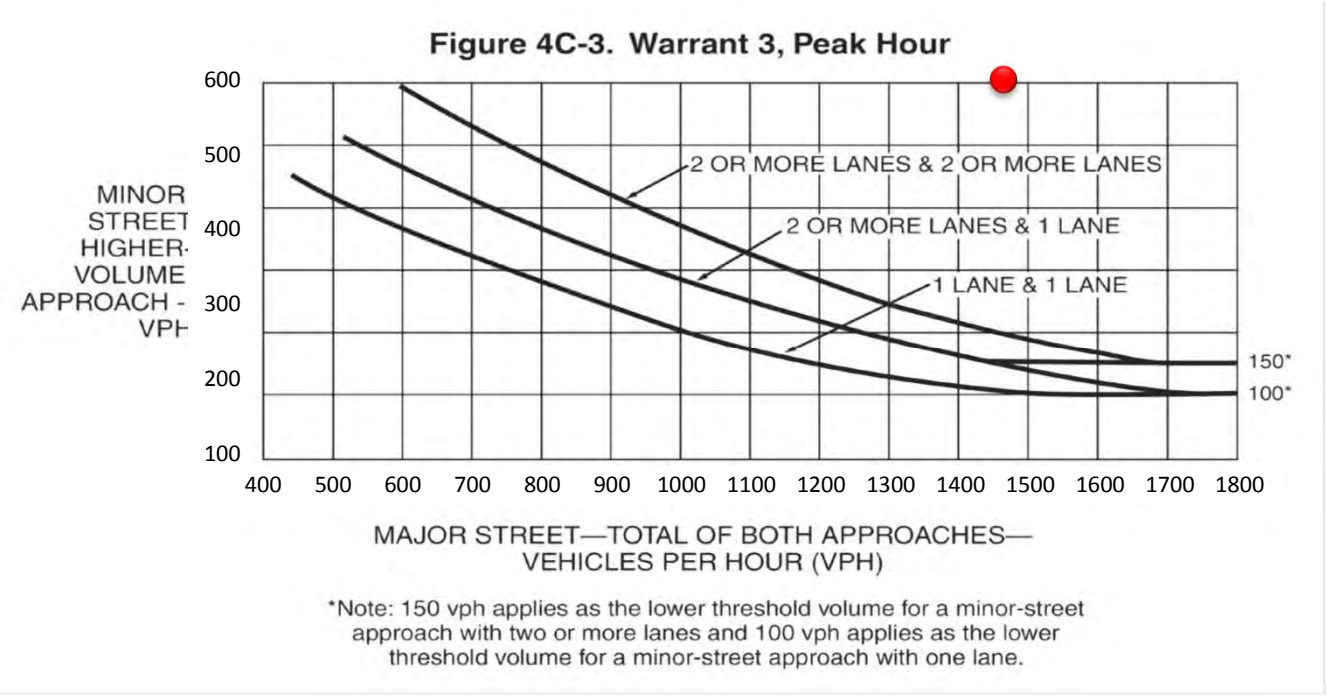
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 With Orange	**Total Number of Vehicles Entering:**	2485
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	232.7
		Minor St approach total delay (veh-hr):	48.7

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

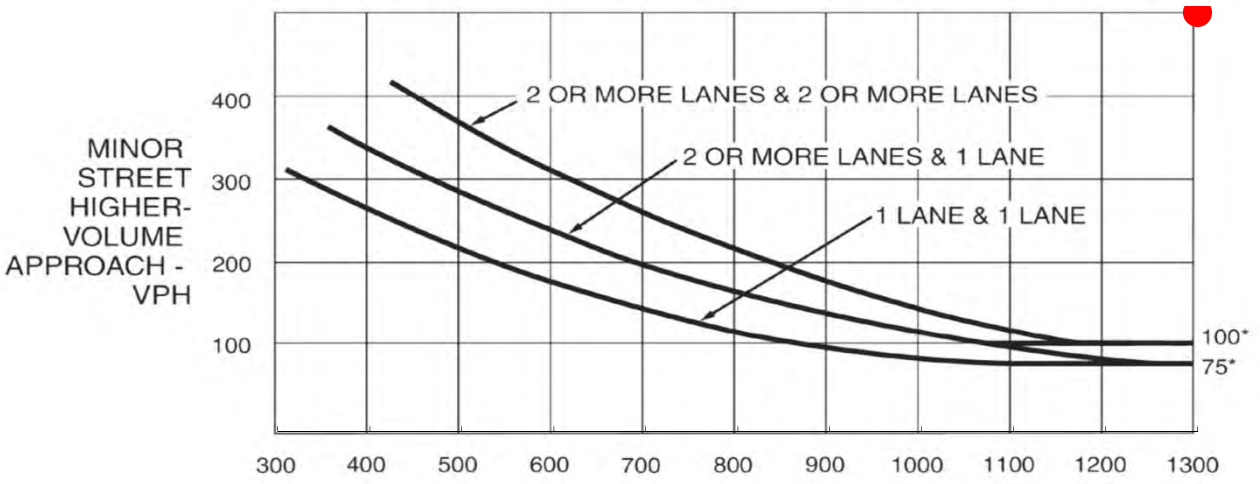
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1461	753



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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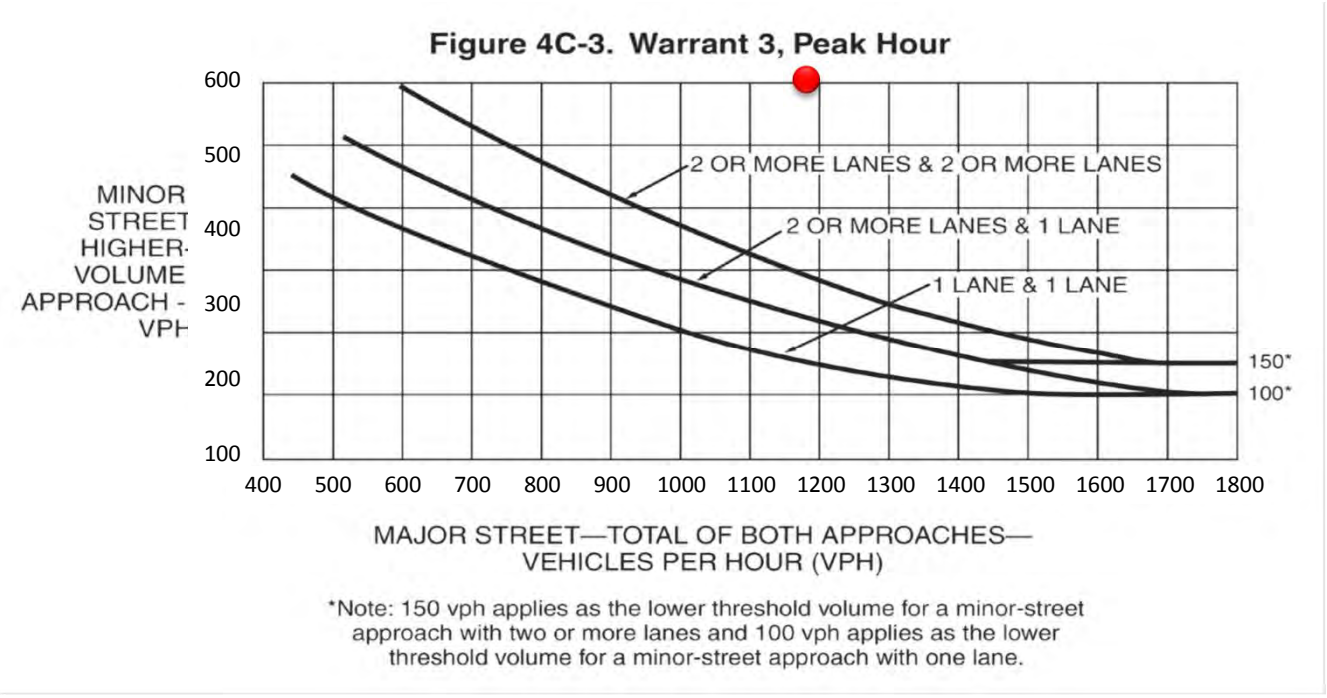
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 Without Orange	**Total Number of Vehicles Entering:**	1857
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	95.5
		Minor St approach total delay (veh-hr):	17.2

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

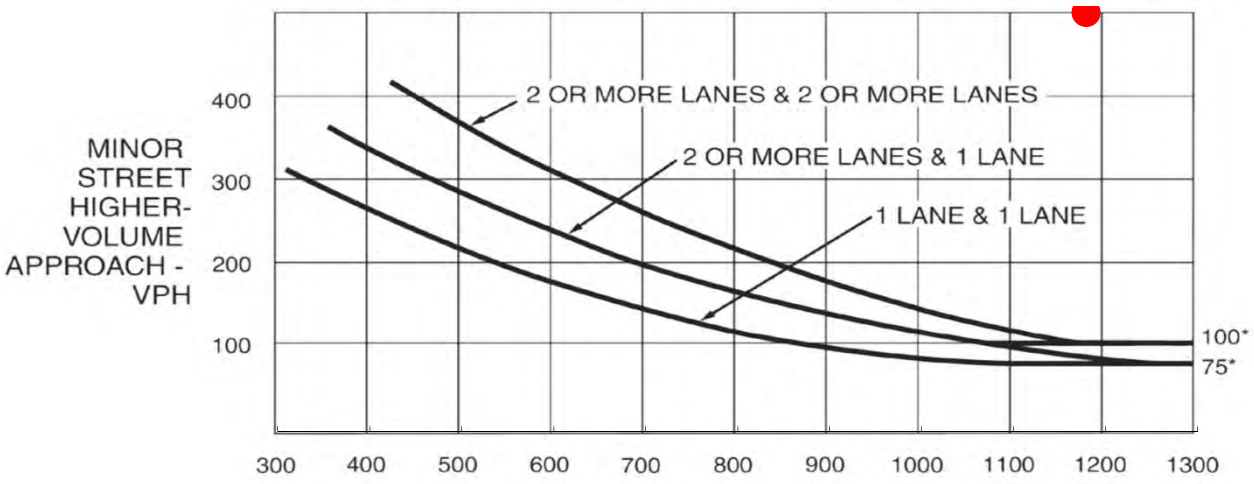
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1179	647



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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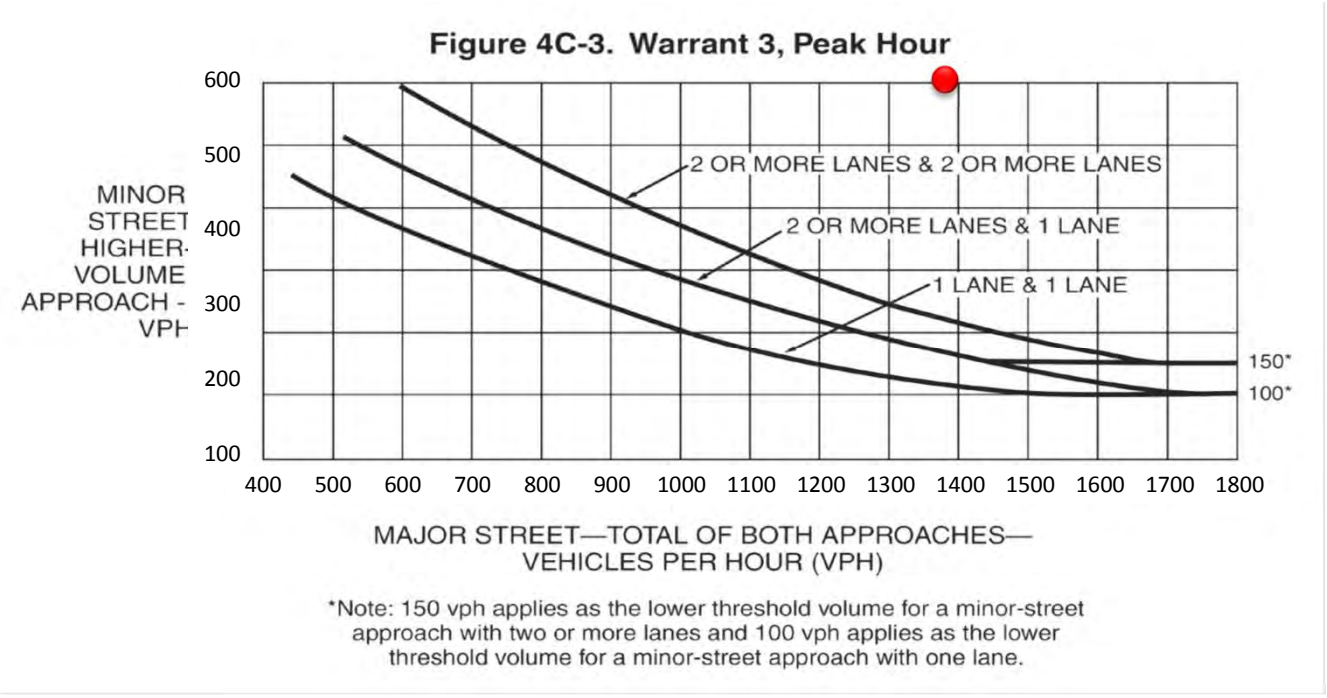
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 Without Orange	**Total Number of Vehicles Entering:**	2340
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	196.3
		Minor St approach total delay (veh-hr):	38.6

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

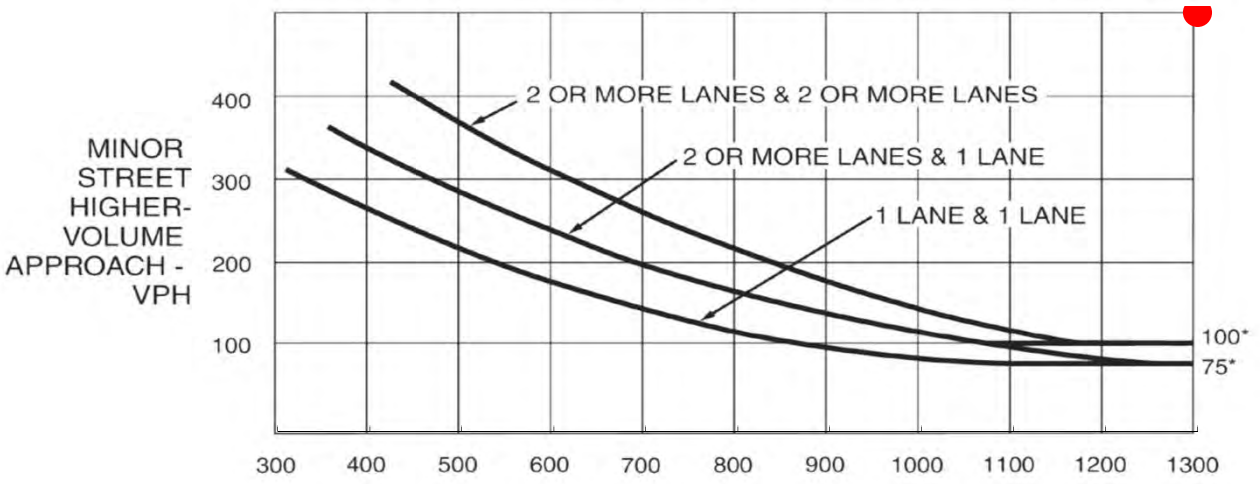
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1377	708



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

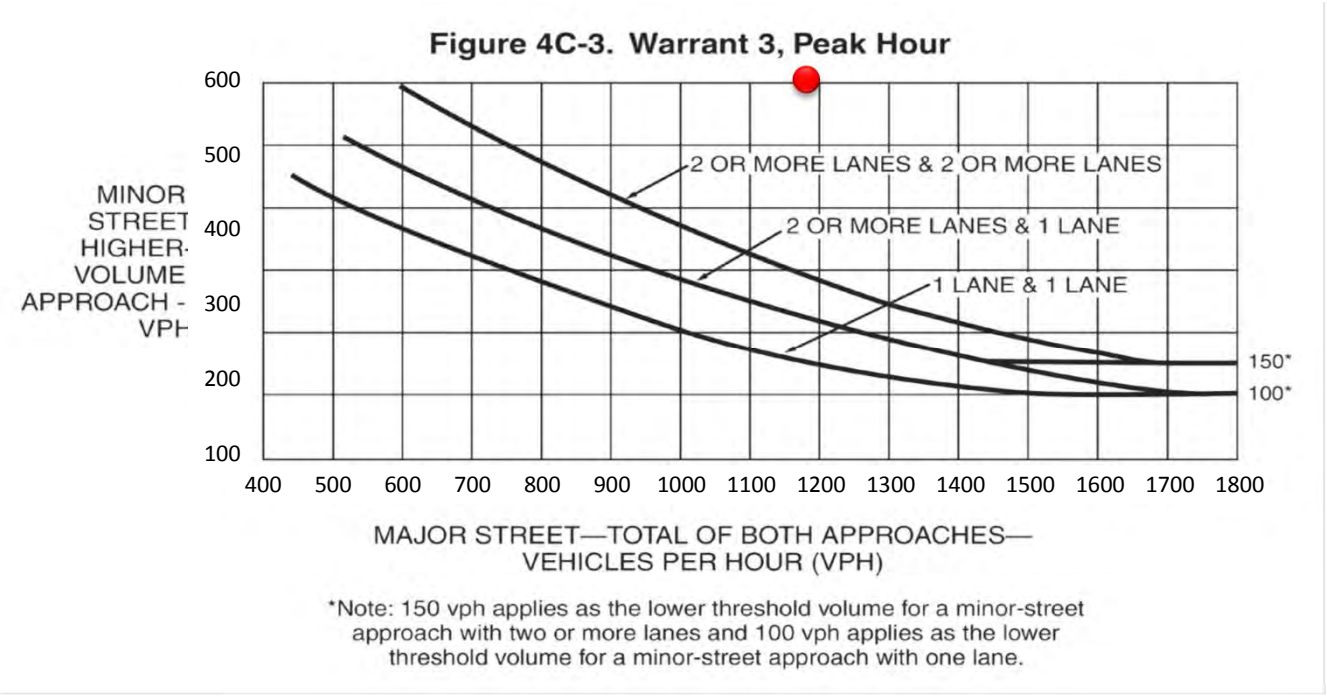
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 With Orange	**Total Number of Vehicles Entering:**	1887
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	102.6
		Minor St approach total delay (veh-hr):	18.4

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

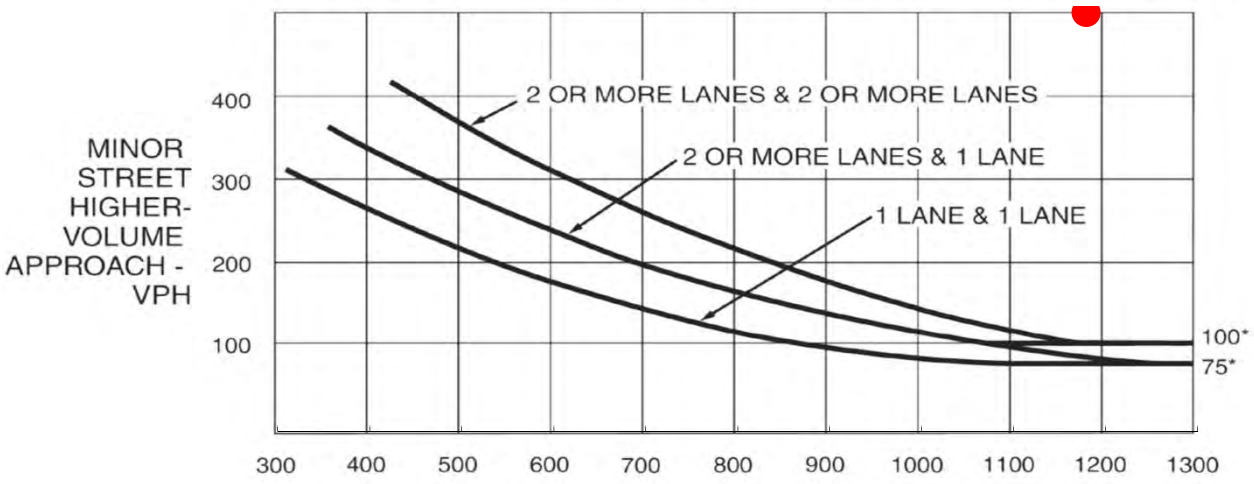
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1179	647



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

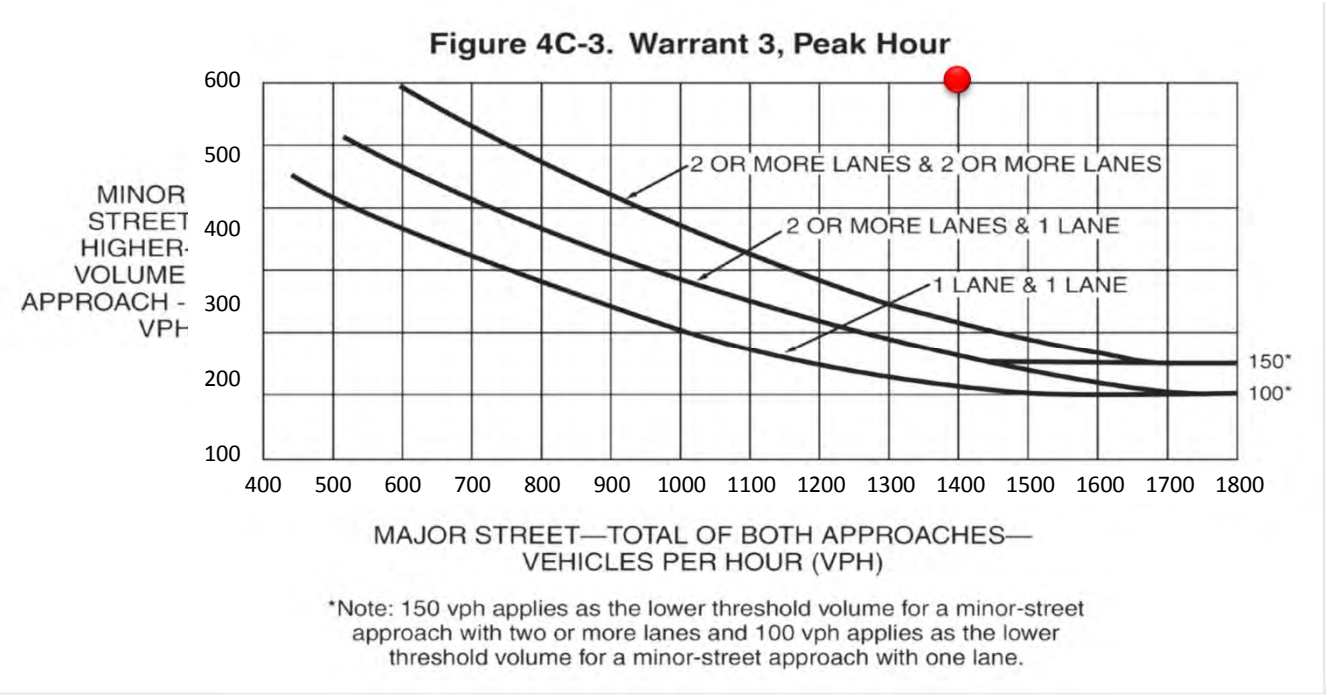
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 With Orange	**Total Number of Vehicles Entering:**	2372
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	204.8
		Minor St approach total delay (veh-hr):	40.8

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

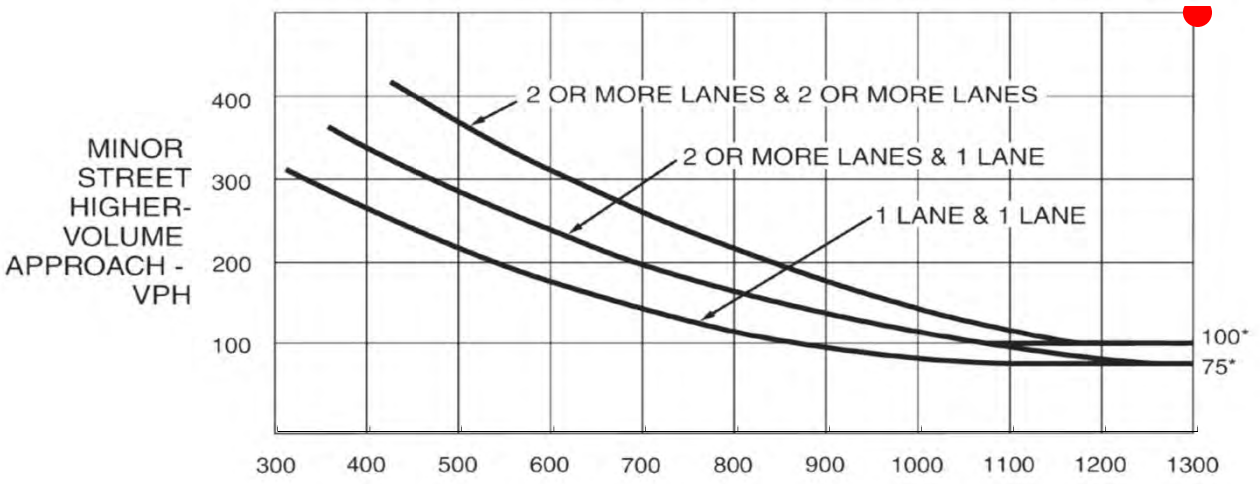
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1395	718



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 Without Orange	**Total Number of Vehicles Entering:**	1677
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	65.3
		Minor St approach total delay (veh-hr):	10.4

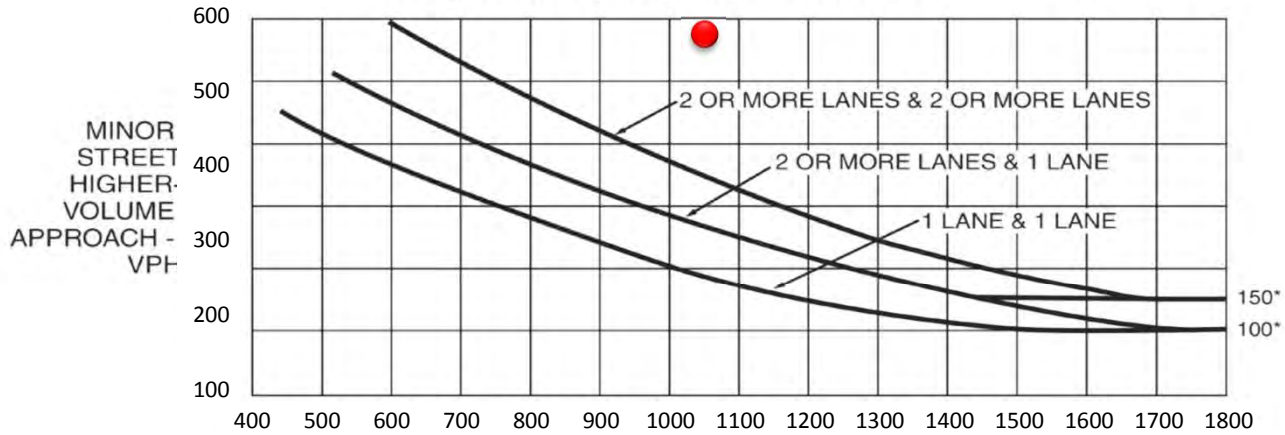
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1047	575

Figure 4C-3. Warrant 3, Peak Hour

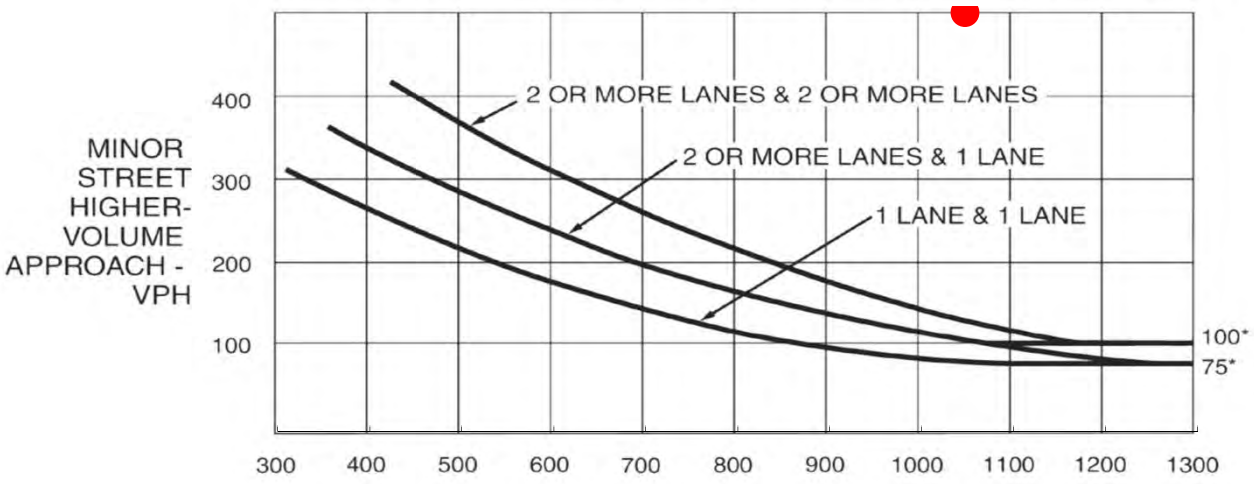


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

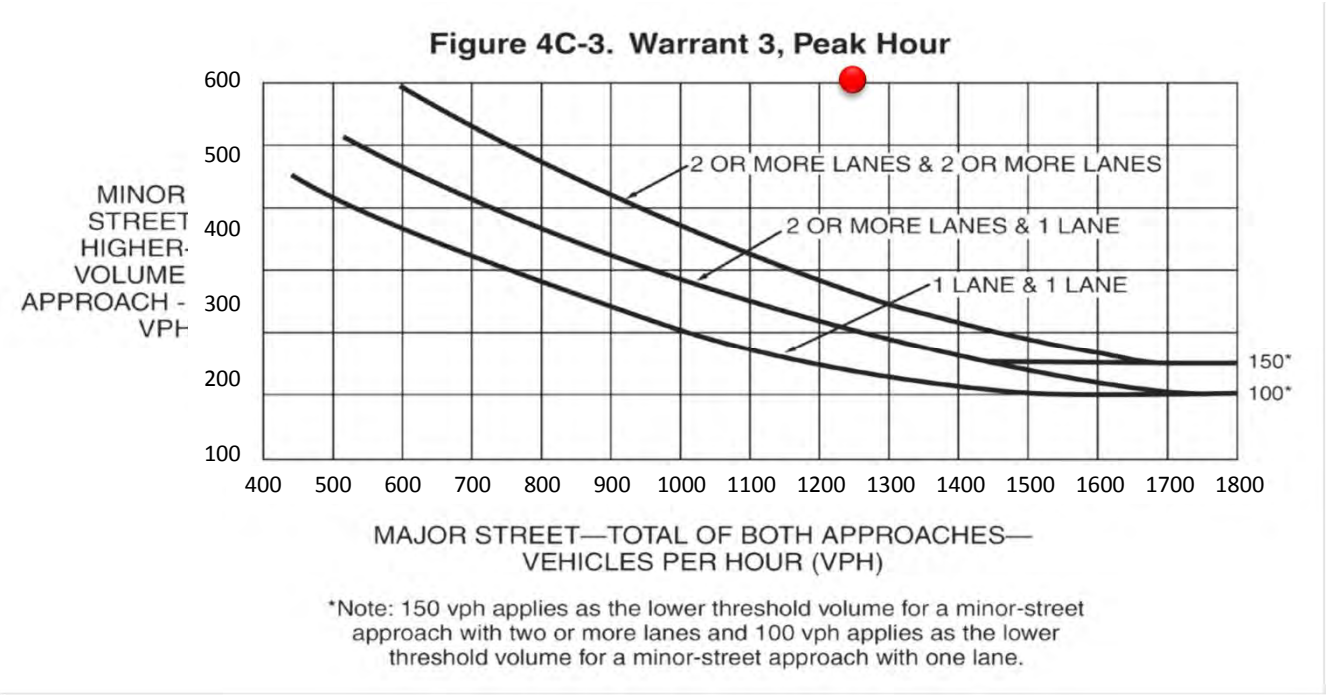
Minor Street:	West La Cadena Drive	**Number of Lanes on minor street:**	1
Major Street	Interchange Drive / I-215 SB Ramps	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 Without Orange	**Total Number of Vehicles Entering:**	2116
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	140
		Minor St approach total delay (veh-hr):	24.9

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

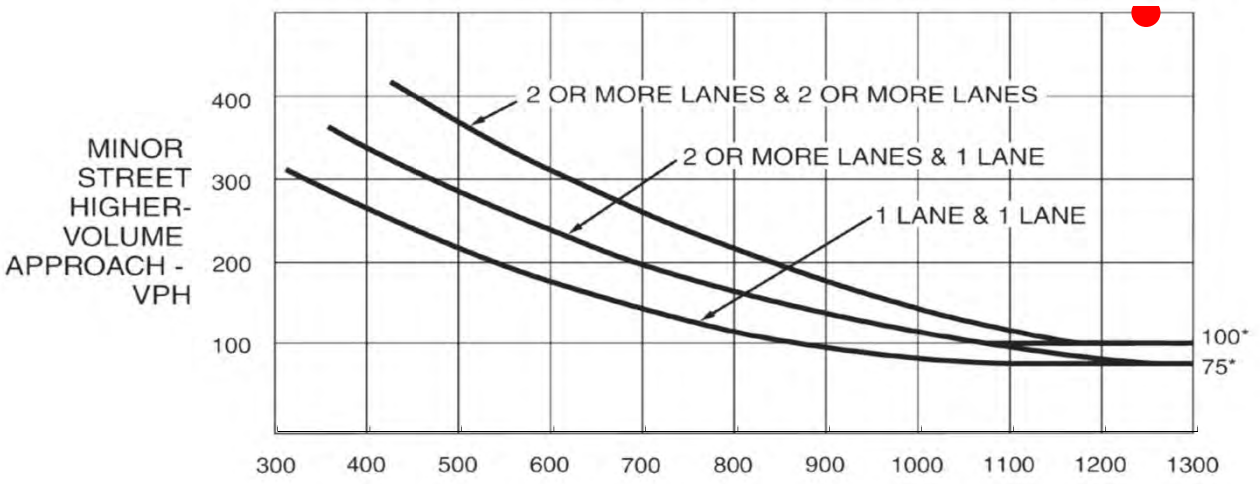
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1244	641



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

SIGNAL WARRANT ANALYSIS

Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	1679
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	1040.8
		Minor St approach total delay (veh-hr):	261.9

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
773	906

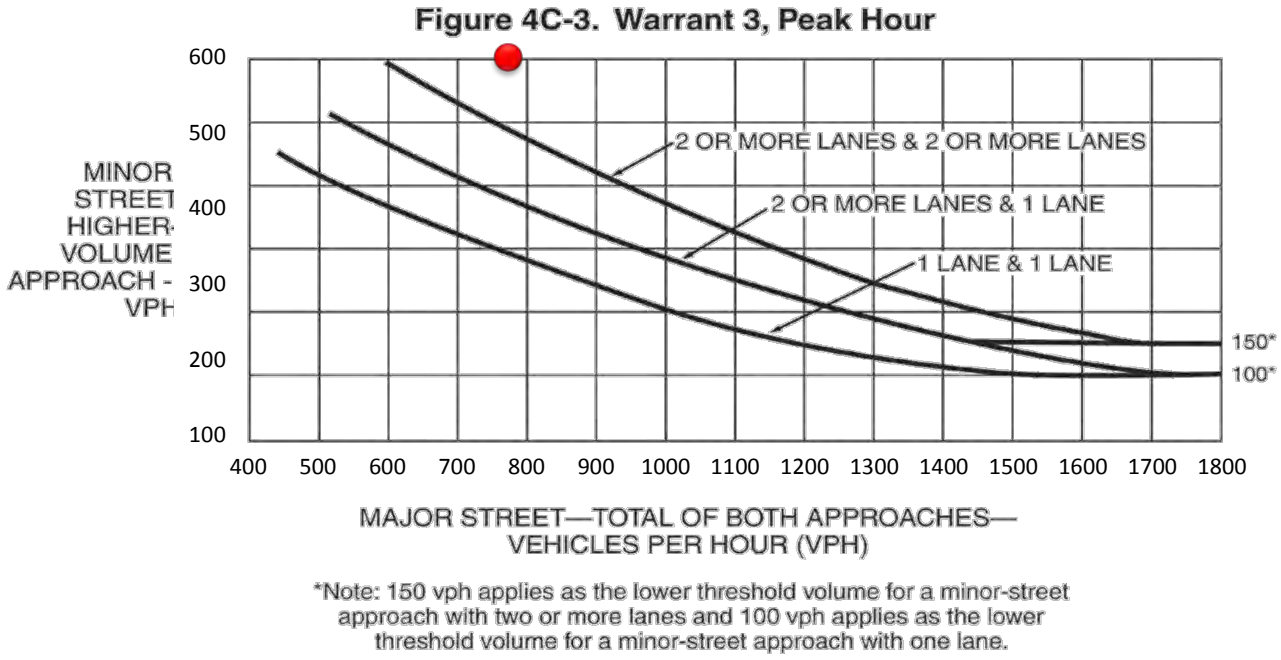
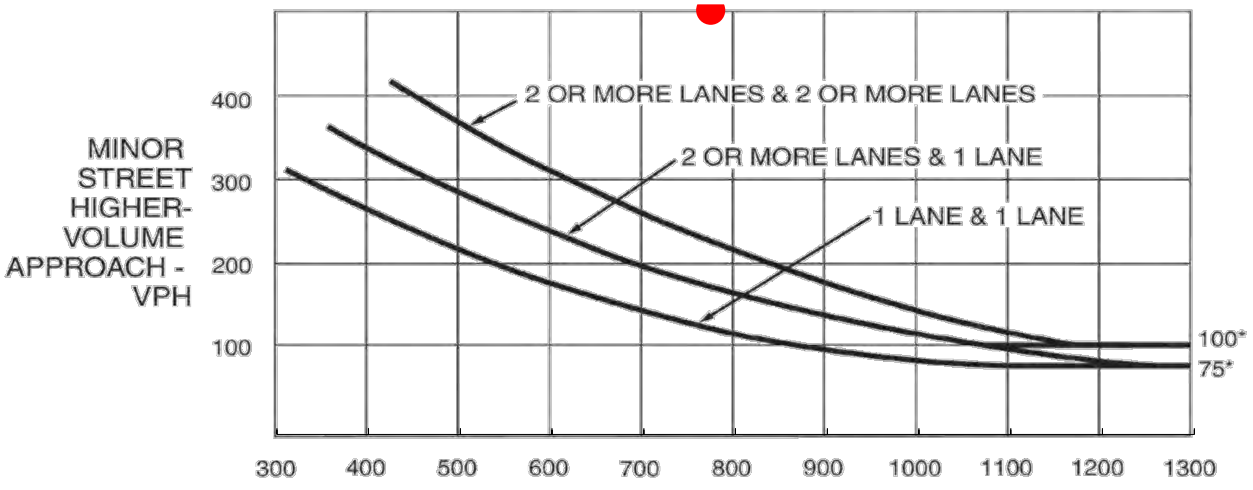


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	1641
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	1981.4
		Minor St approach total delay (veh-hr):	206.9

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1265	376

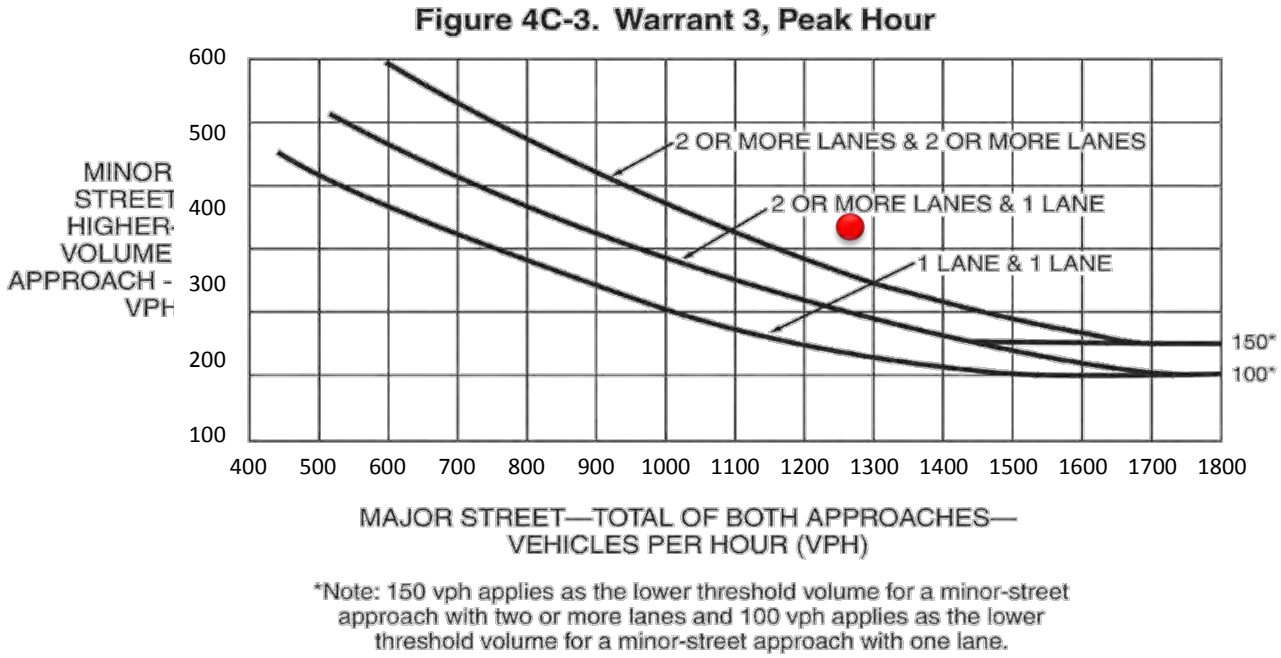
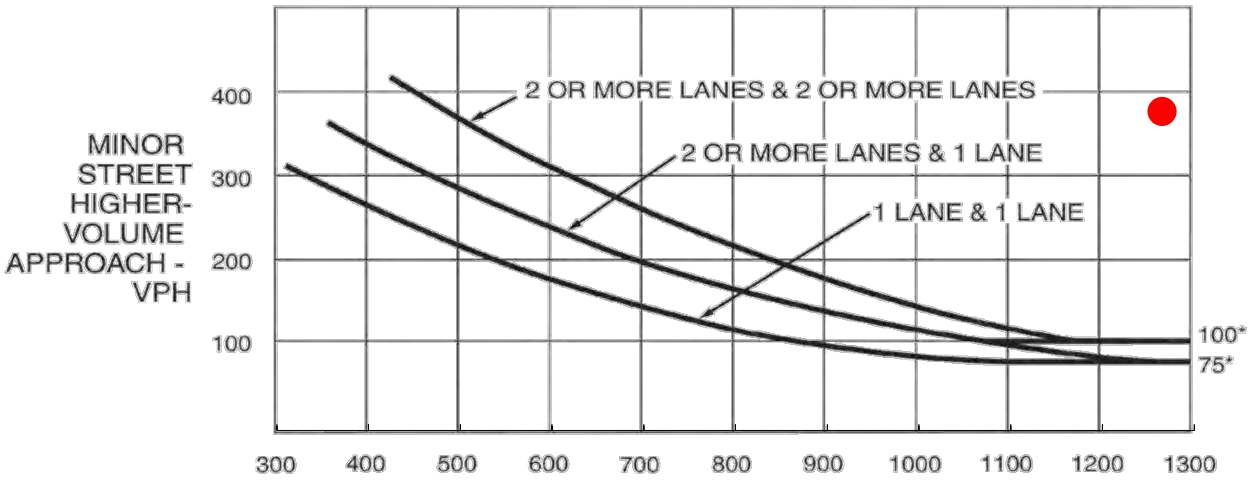


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	1511
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	564.3
		Minor St approach total delay (veh-hr):	127.9

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
695	816

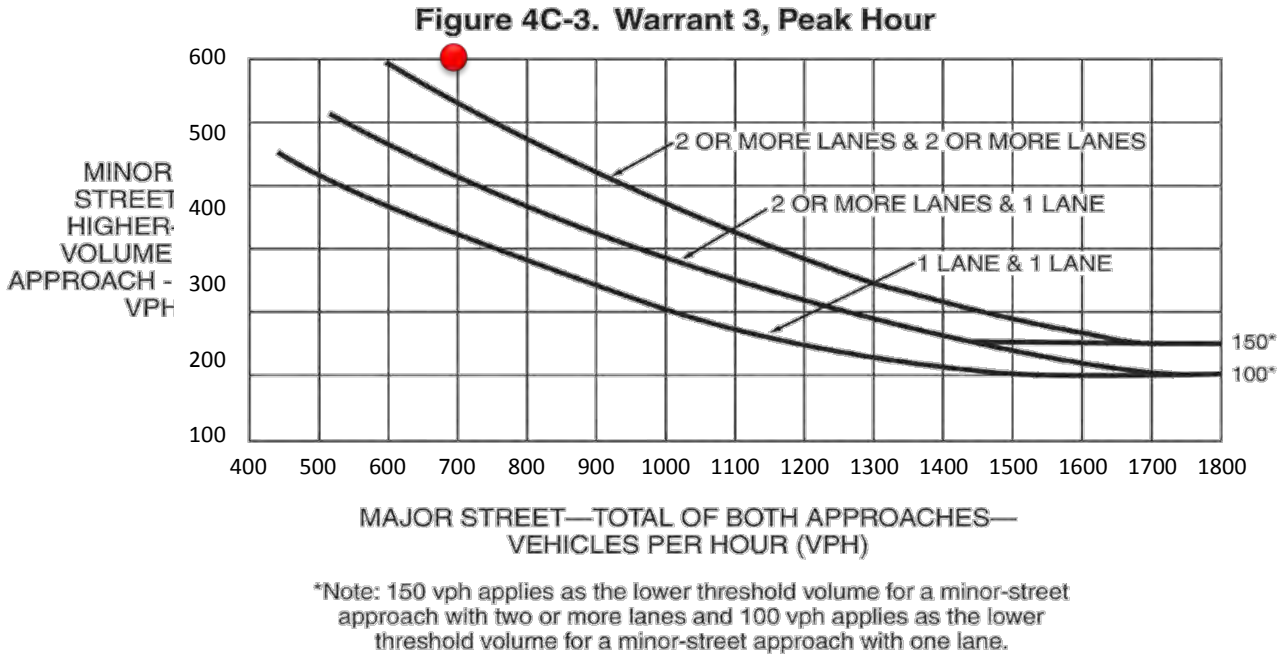
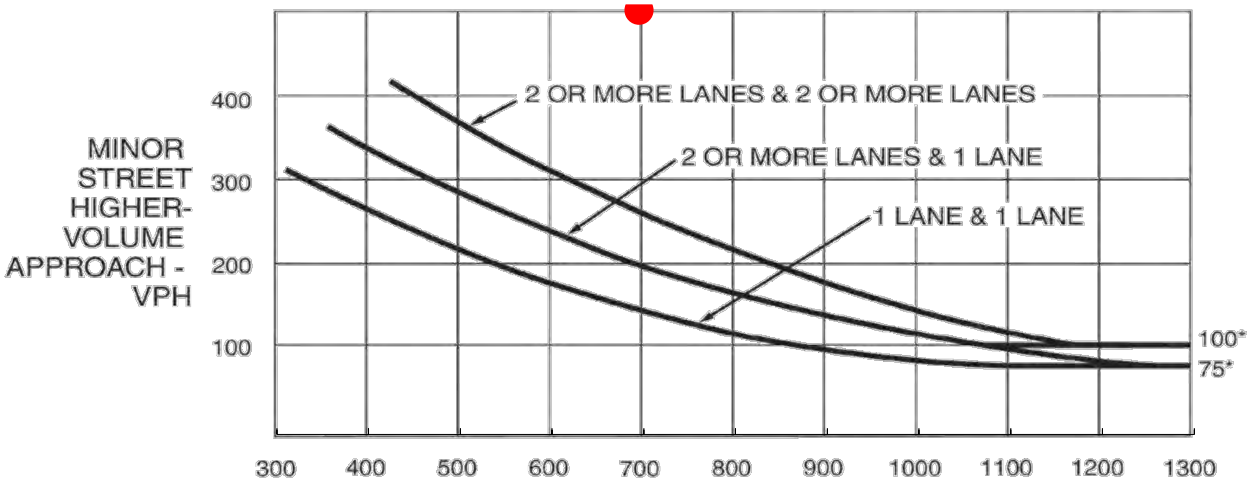


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	1502
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	1062
		Minor St approach total delay (veh-hr):	101.5

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1158	344

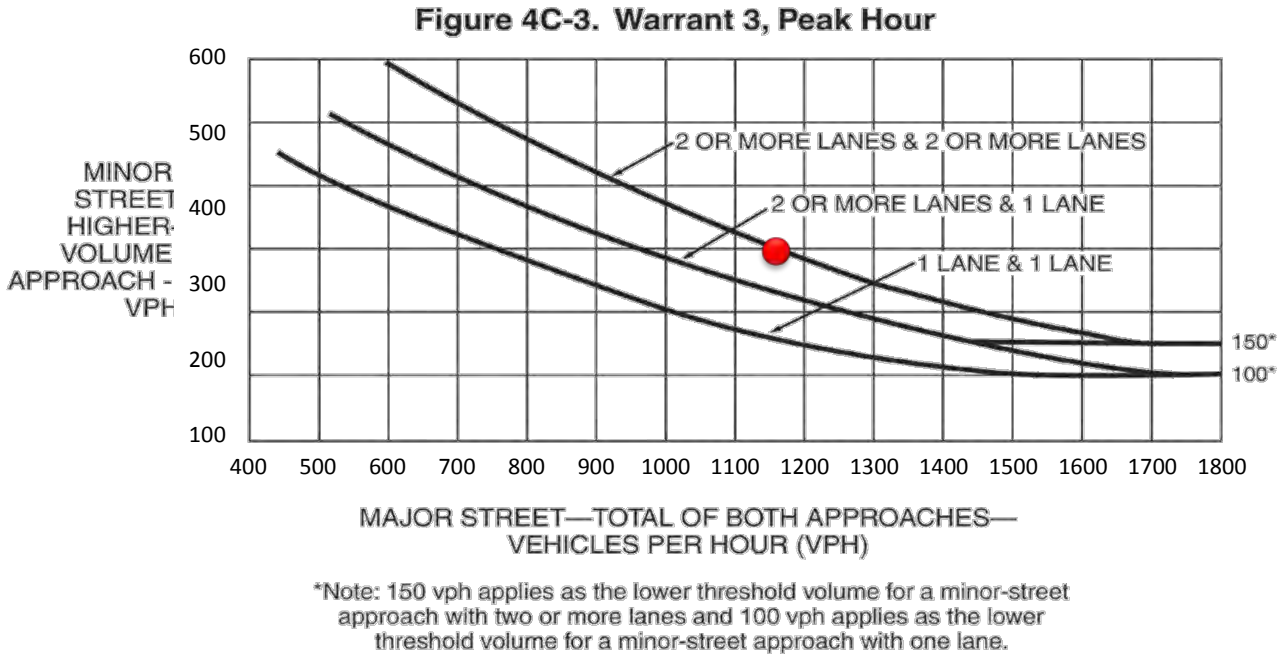
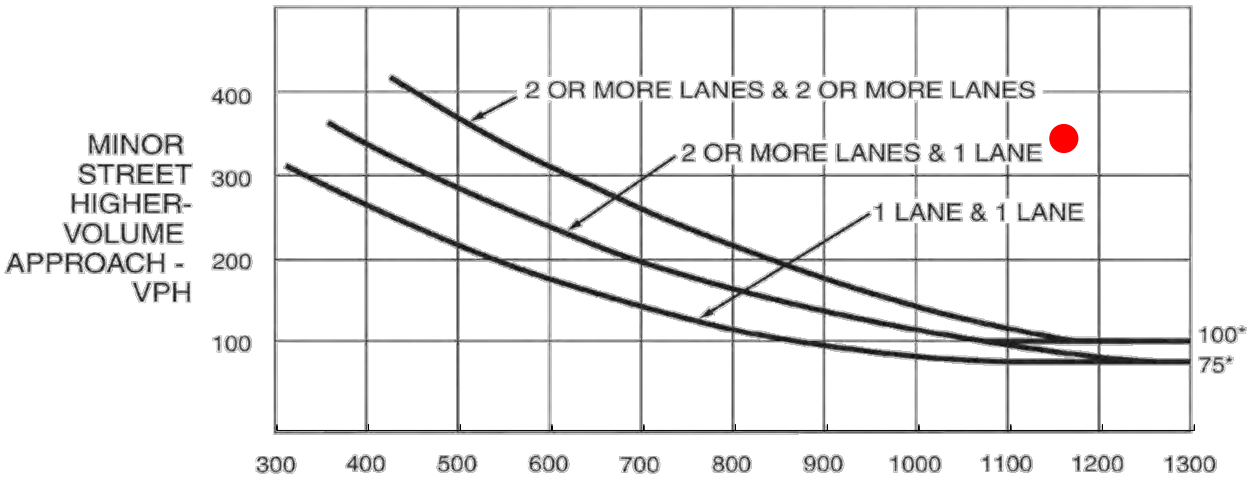


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

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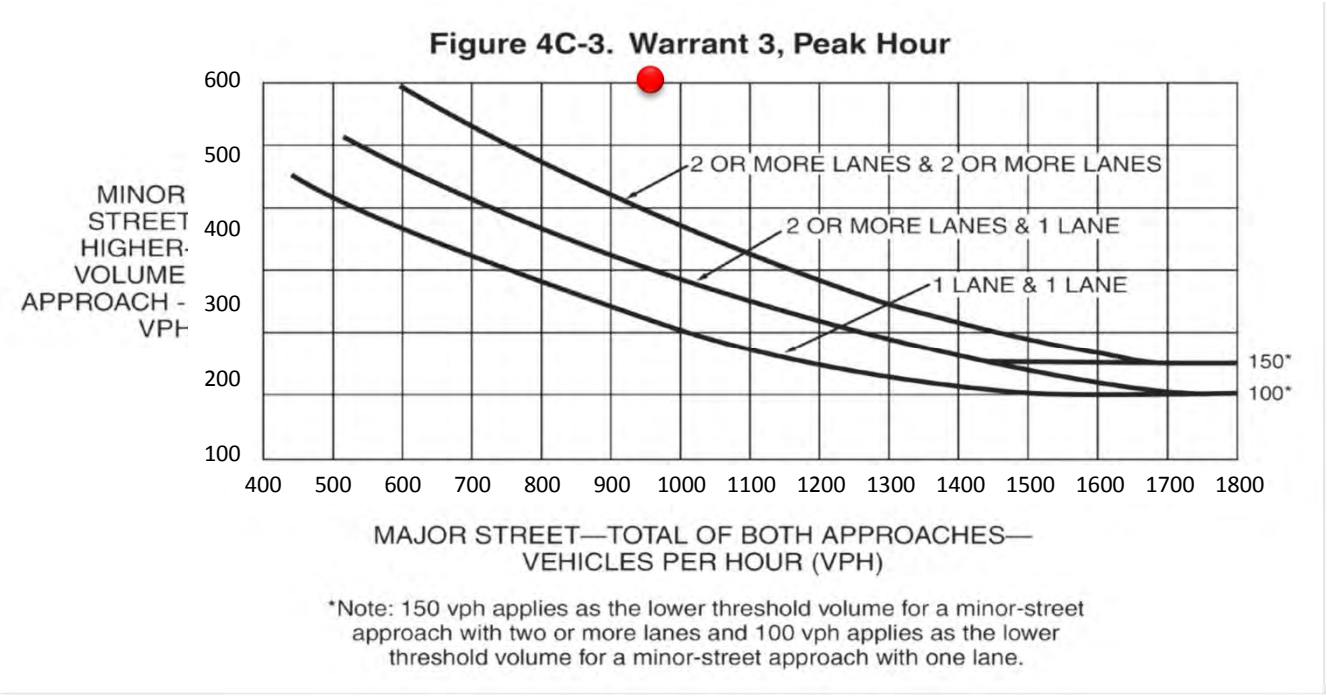
Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 With Orange AM Peak	**Total Number of Vehicles Entering:**	2067
		Number of Approaches:	4
		Intersection total delay (seconds):	3052.5
		Minor St approach total delay (veh-hr):	942.9

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

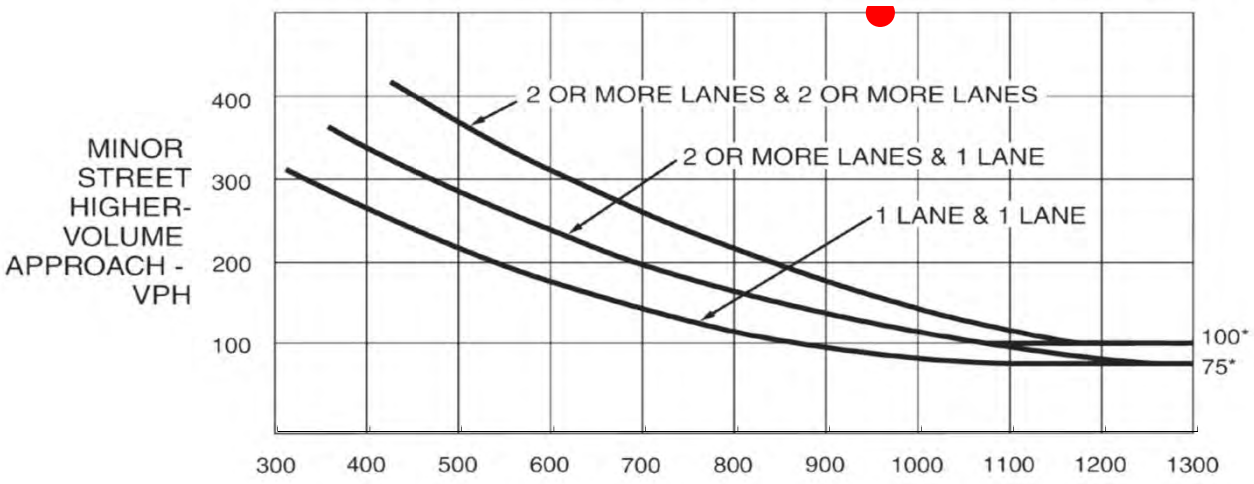
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
955	1112



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 With Orange PM Peak	**Total Number of Vehicles Entering:**	2006
		Number of Approaches:	4
		Intersection total delay (seconds):	10178
		Minor St approach total delay (veh-hr):	1317.5

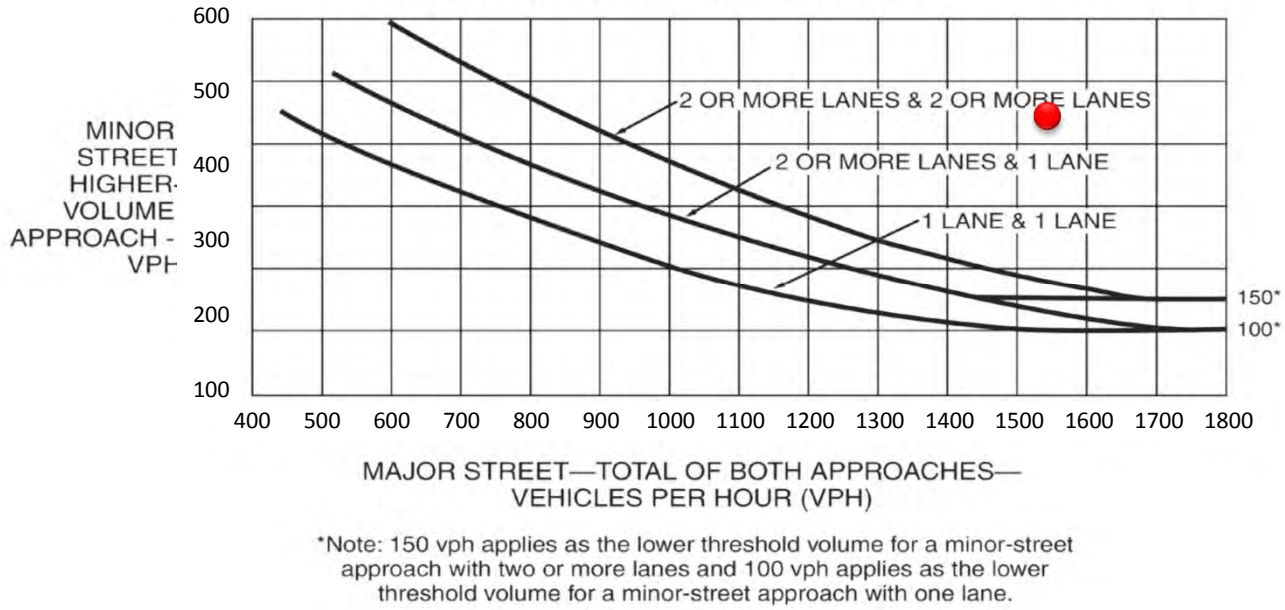
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1540	466

Figure 4C-3. Warrant 3, Peak Hour

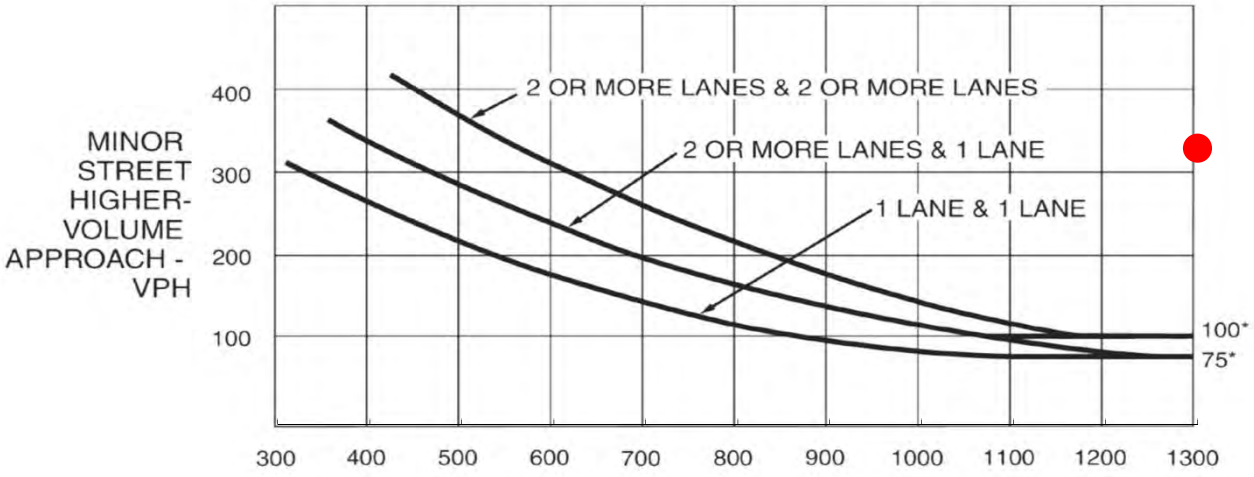


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

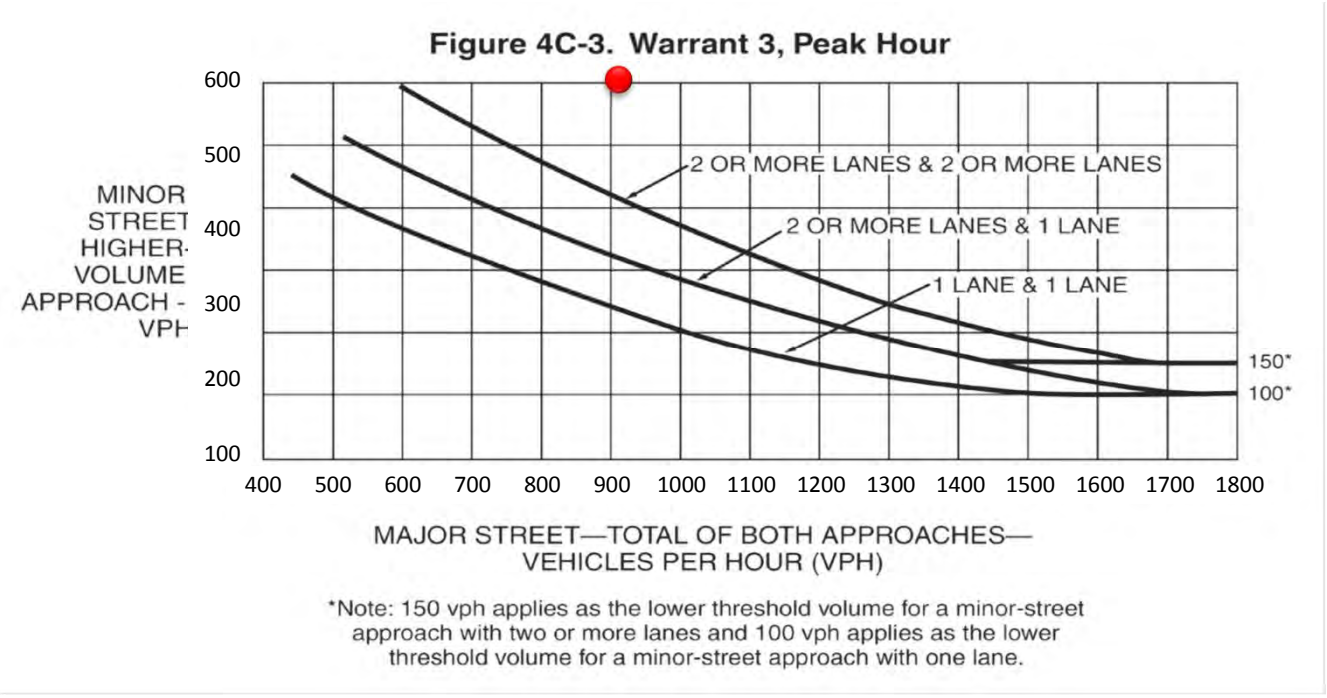
Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 Without Orange AM Peak	**Total Number of Vehicles Entering:**	1965
		Number of Approaches:	4
		Intersection total delay (seconds):	2314.3
		Minor St approach total delay (veh-hr):	679.5

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

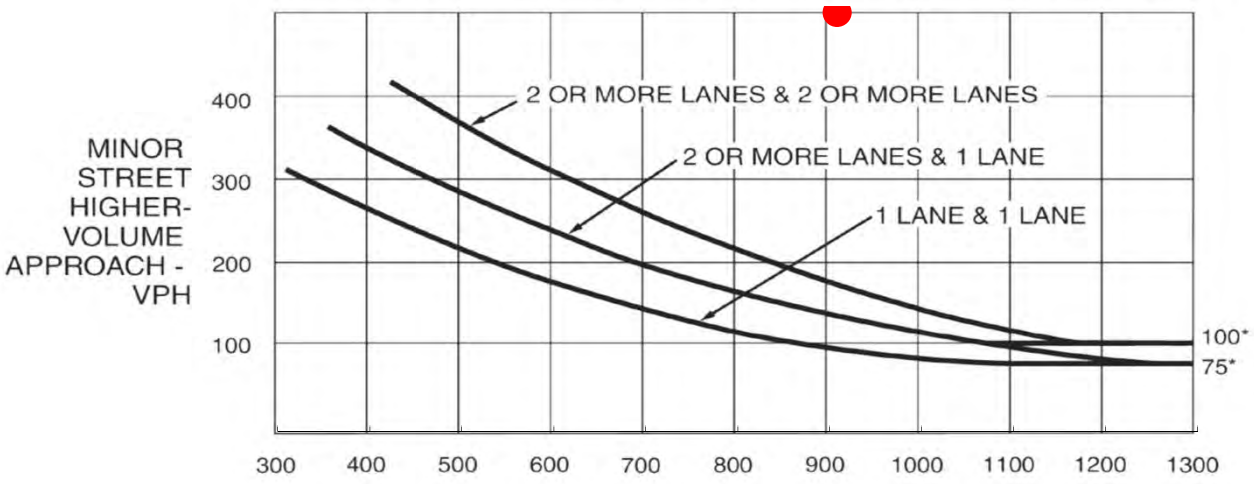
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
908	1057



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 1 Without Orange	**Total Number of Vehicles Entering:**	1890
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	5190.3
		Minor St approach total delay (veh-hr):	632.9

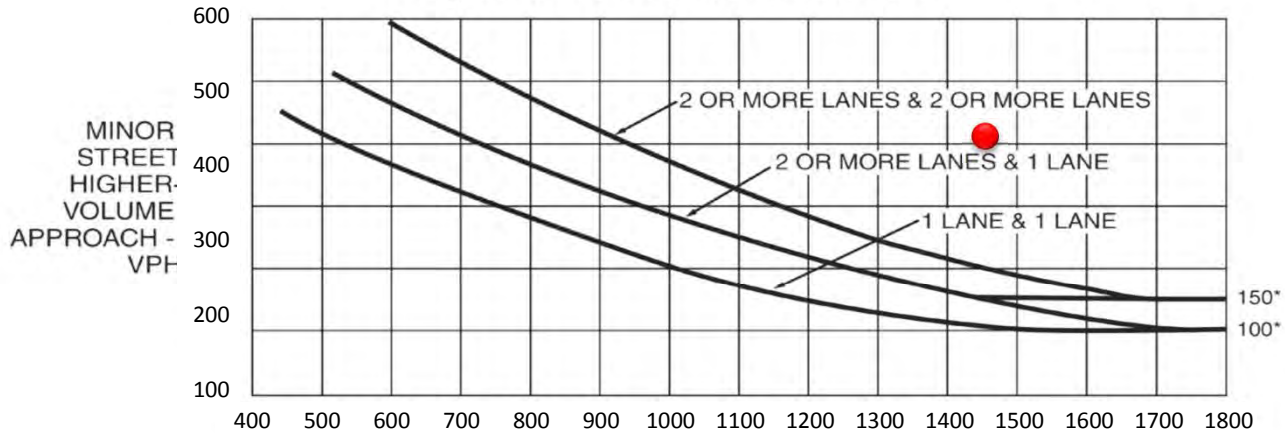
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1451	439

Figure 4C-3. Warrant 3, Peak Hour

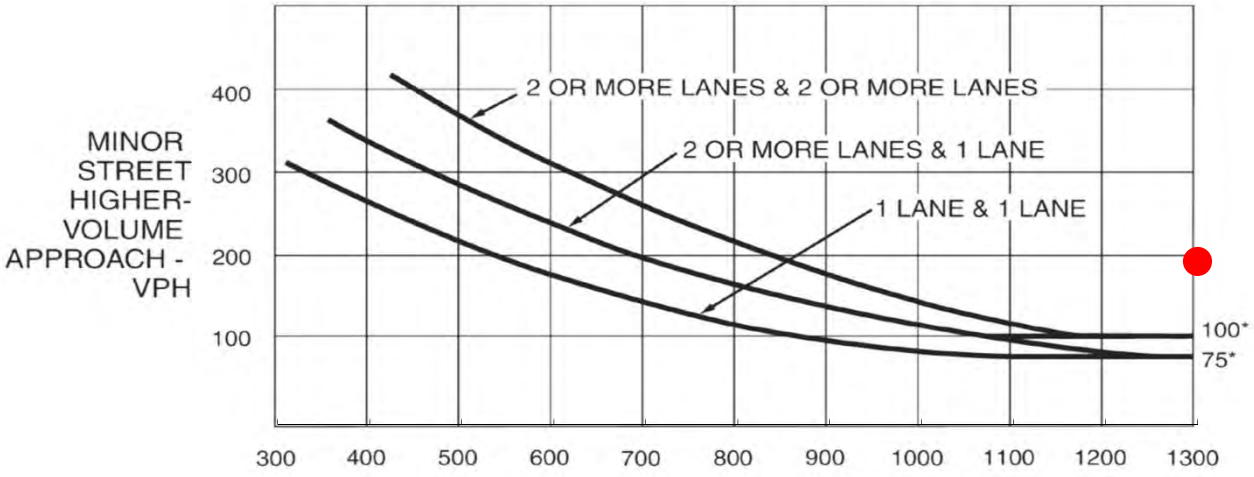


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 With Orange AM Peak	**Total Number of Vehicles Entering:**	1965
		Number of Approaches:	4
		Intersection total delay (seconds):	2314.3
		Minor St approach total delay (veh-hr):	679.5

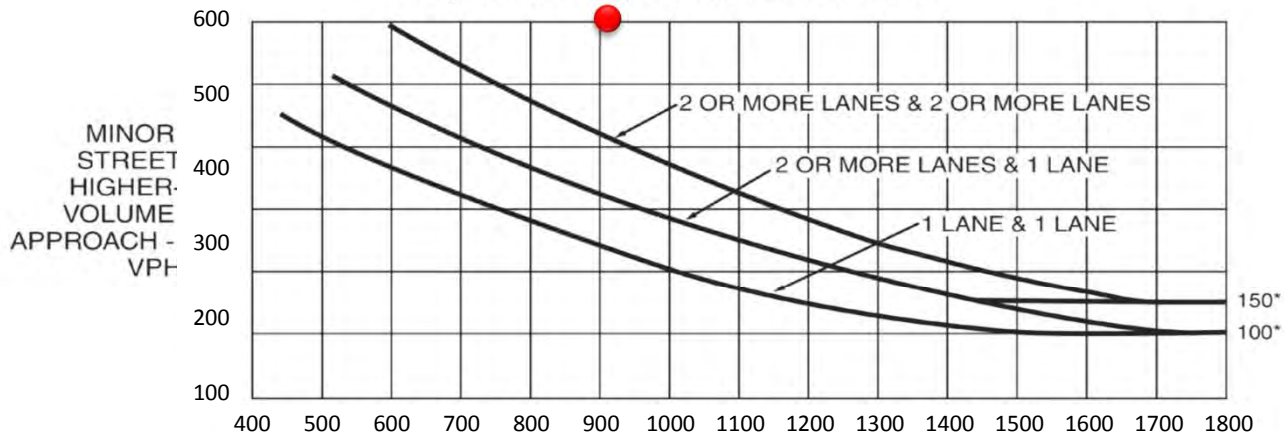
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
908	1057

Figure 4C-3. Warrant 3, Peak Hour

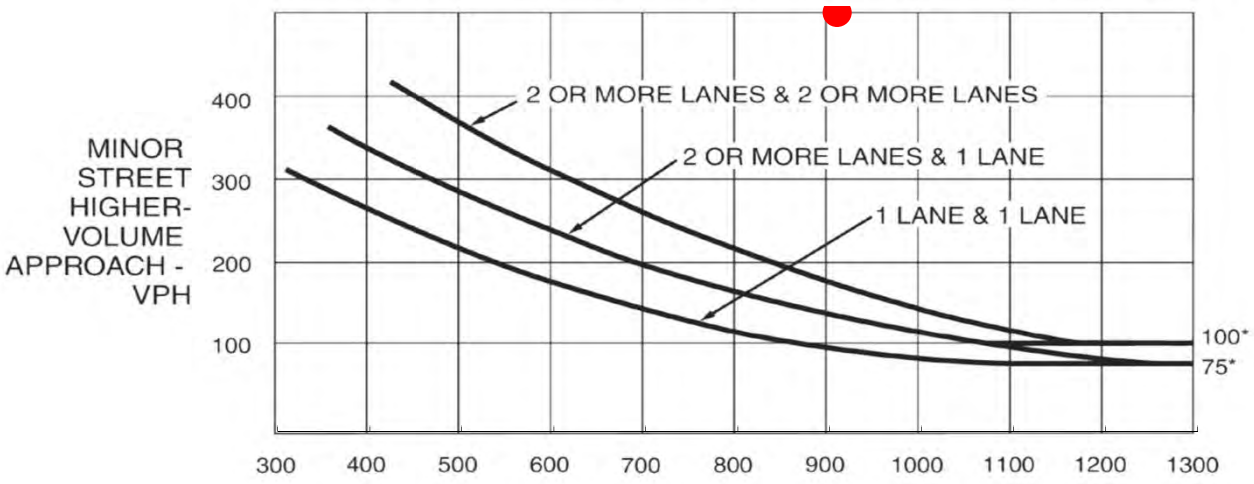


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 With Orange PM Peak	**Total Number of Vehicles Entering:**	1916
		Number of Approaches:	4
		Intersection total delay (seconds):	5953.6
		Minor St approach total delay (veh-hr):	735.9

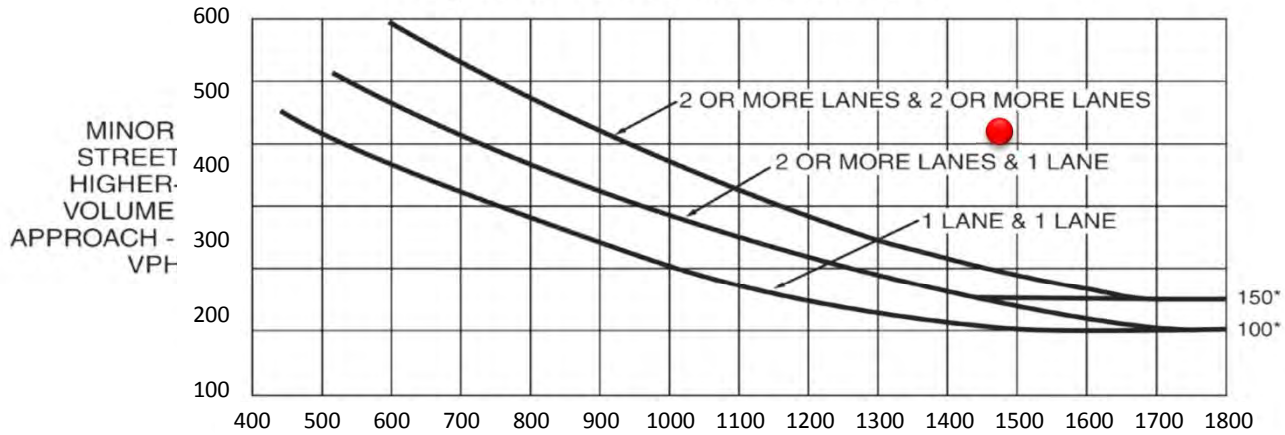
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1471	445

Figure 4C-3. Warrant 3, Peak Hour

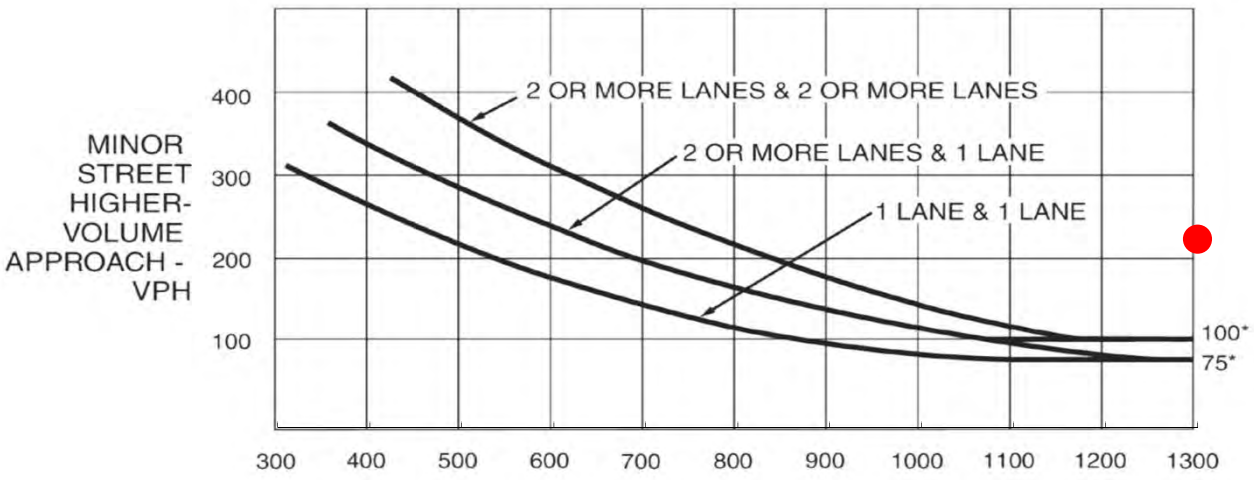


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 Without Orange AM Peak	**Total Number of Vehicles Entering:**	1746
		Number of Approaches:	4
		Intersection total delay (seconds):	1187.4
		Minor St approach total delay (veh-hr):	309.7

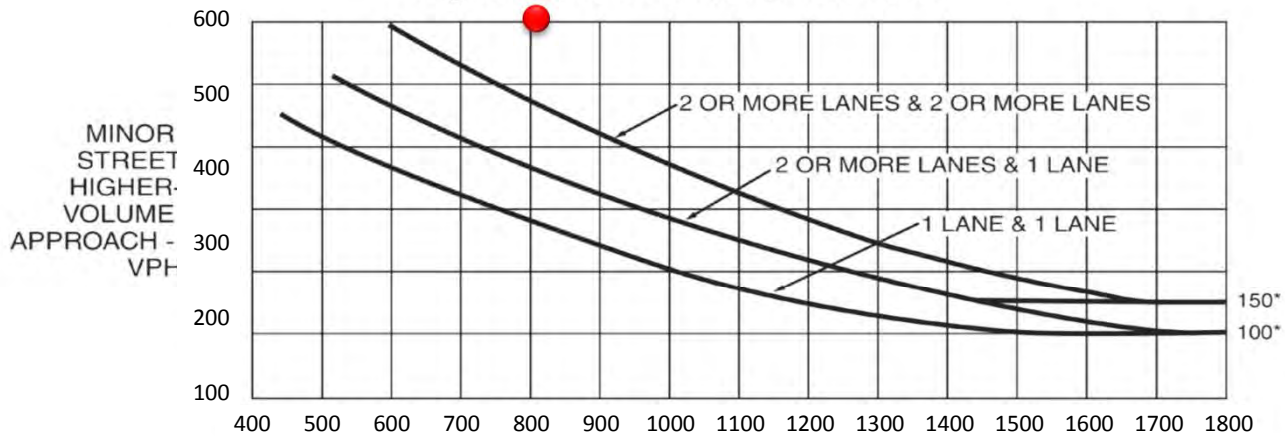
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
807	939

Figure 4C-3. Warrant 3, Peak Hour

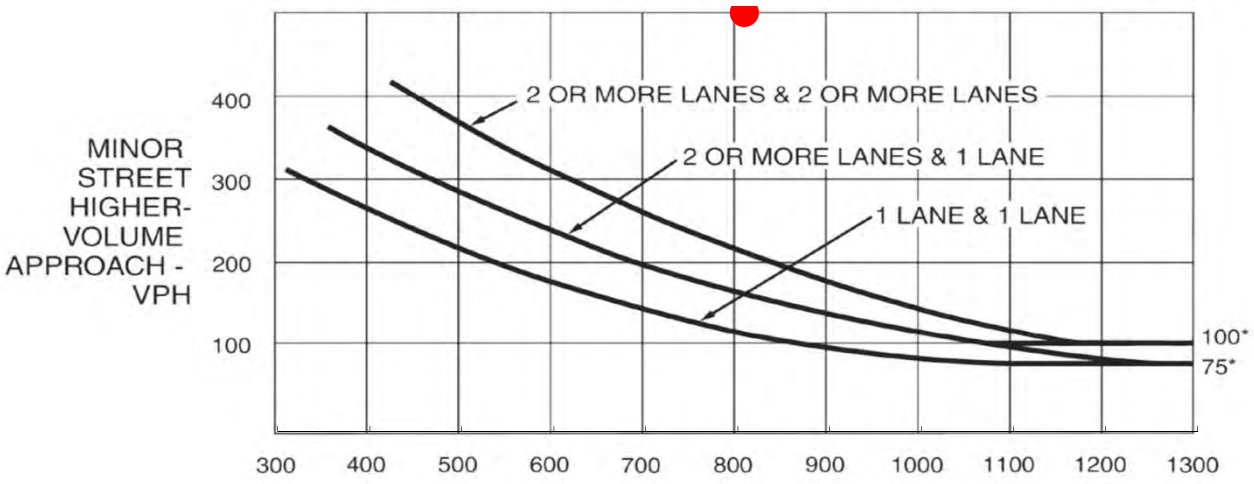


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

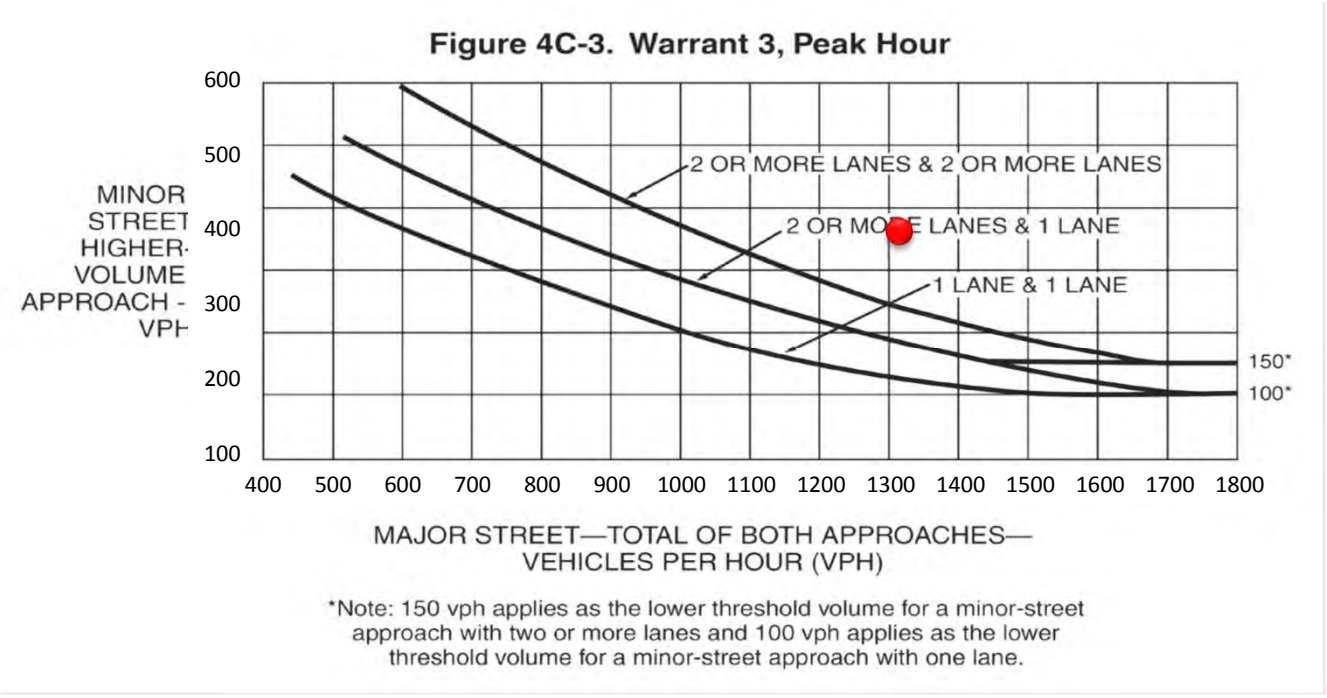
Minor Street:	I-215 NB Ramps	**Number of Lanes on minor street:**	1
Major Street	East La Cadena Drive	**Number of Lanes on major street:**	1
Scenario:	2040 Alt 2 Without Orange	**Total Number of Vehicles Entering:**	1709
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	2320.2
		Minor St approach total delay (veh-hr):	255.9

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

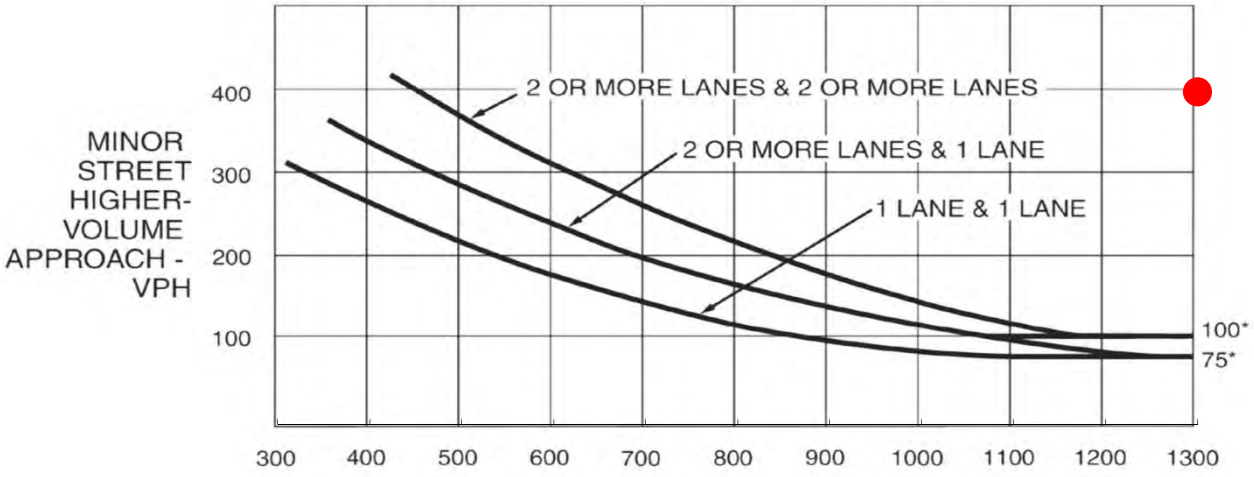
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1312	397



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

SIGNAL WARRANT ANALYSIS

Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	2107
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	3182.1
		Minor St approach total delay (veh-hr):	377.4

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1680	427

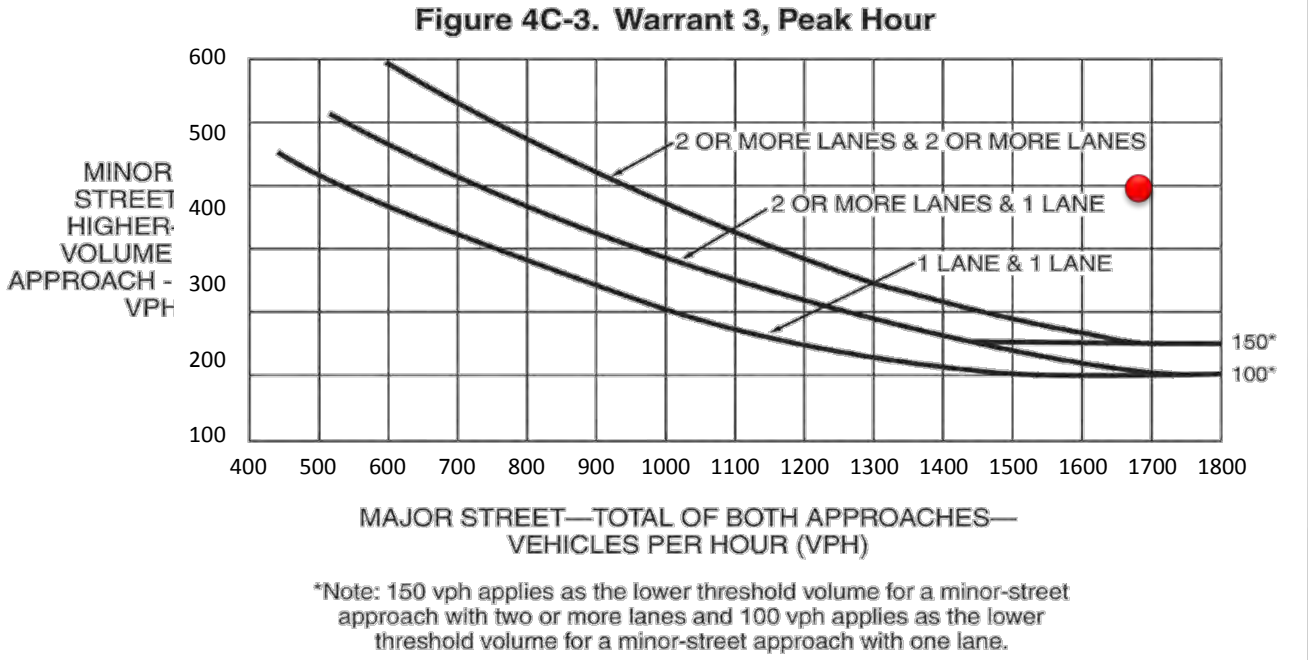
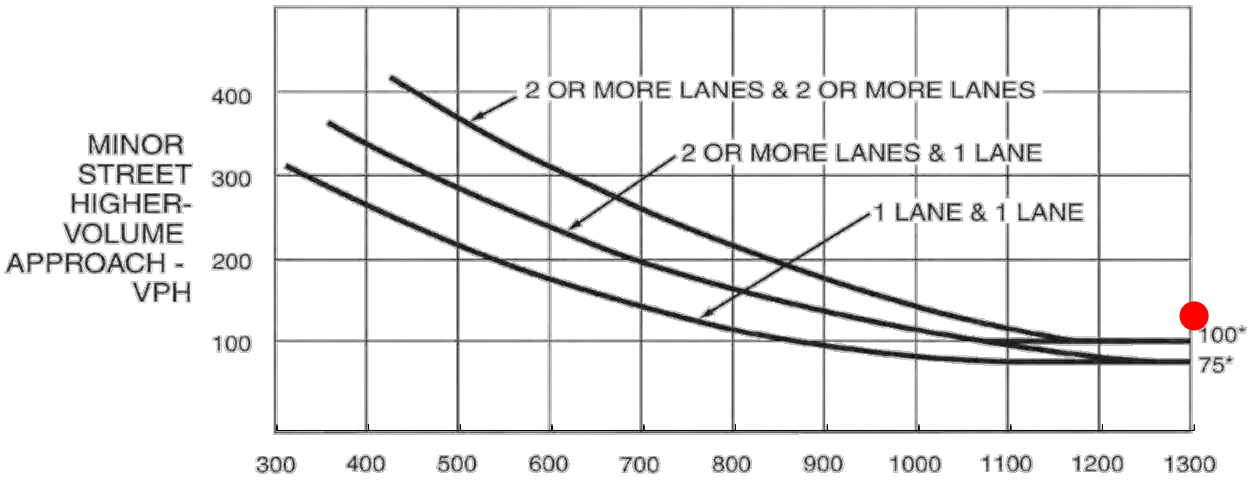


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	2732
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	25873
		Minor St approach total delay (veh-hr):	3191.0

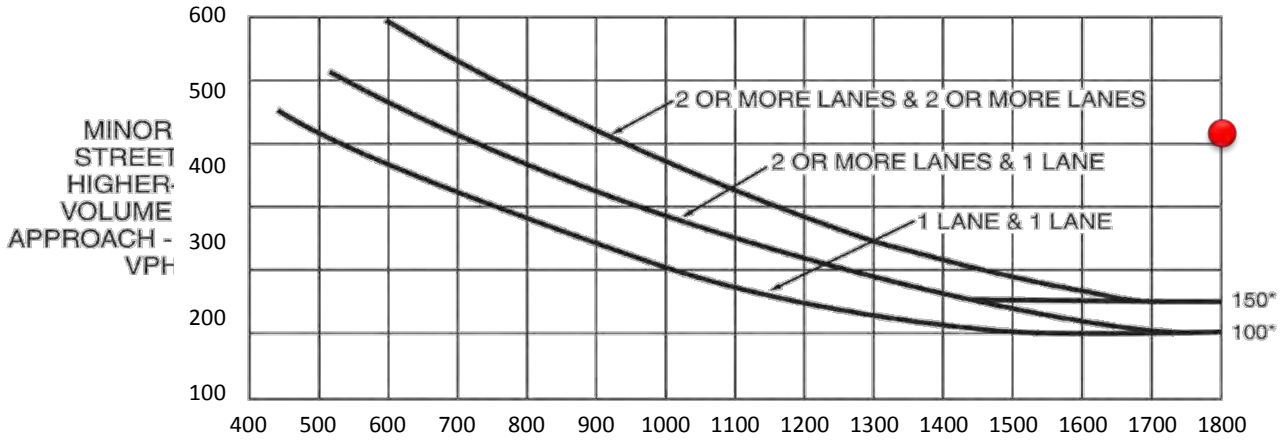
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2286	444

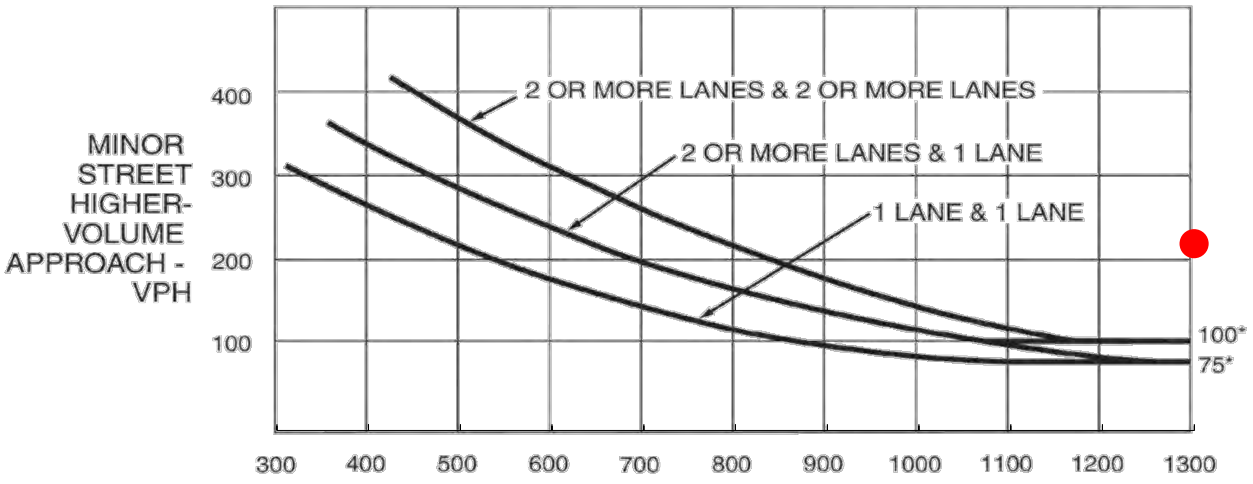
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	2123
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	3340.4
		Minor St approach total delay (veh-hr):	407.3

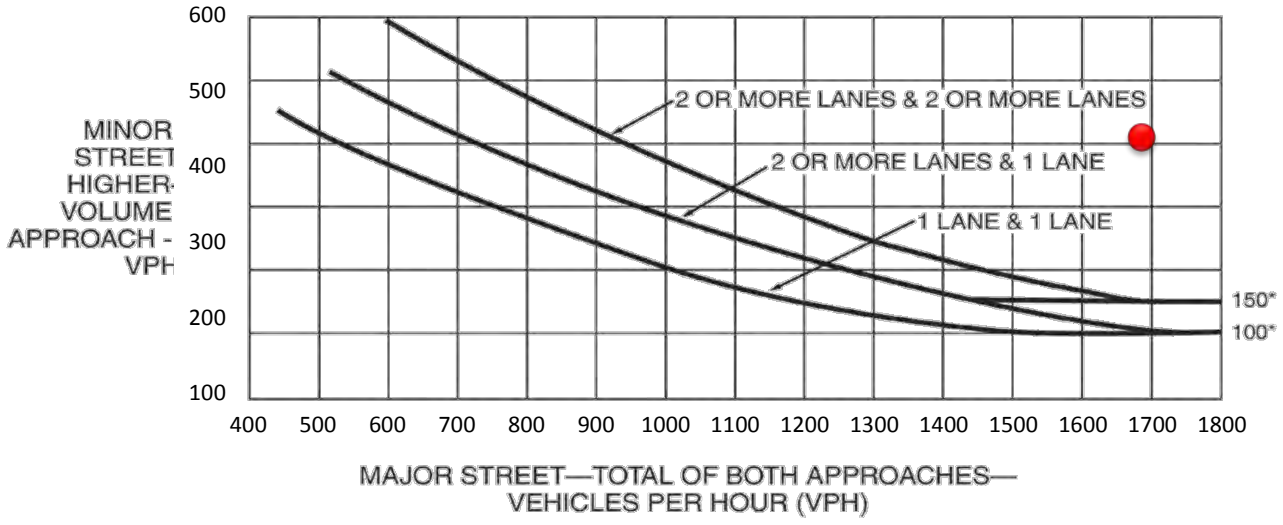
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1684	439

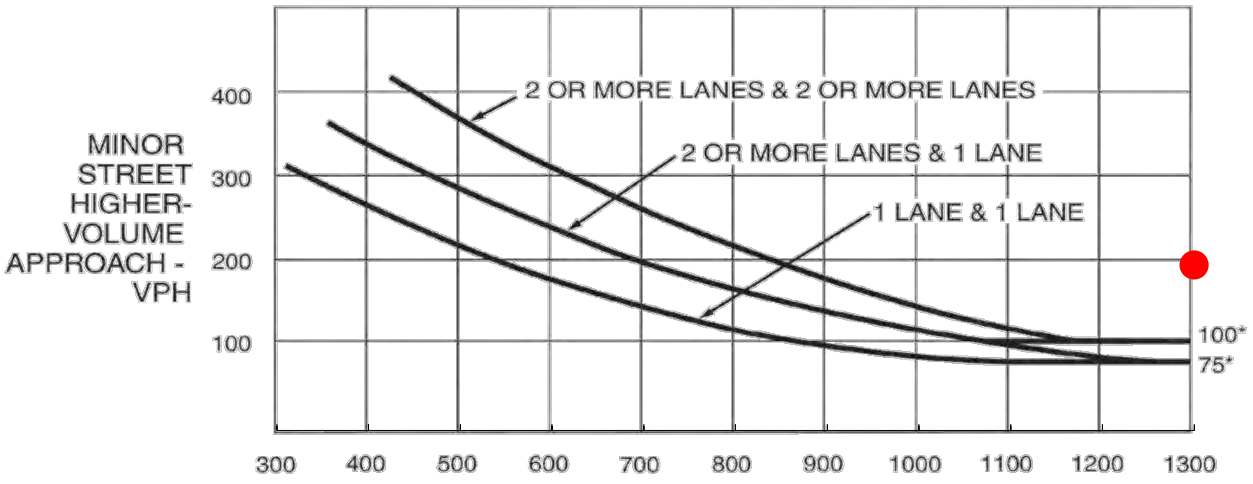
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	2773
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	24494
		Minor St approach total delay (veh-hr):	2857.6

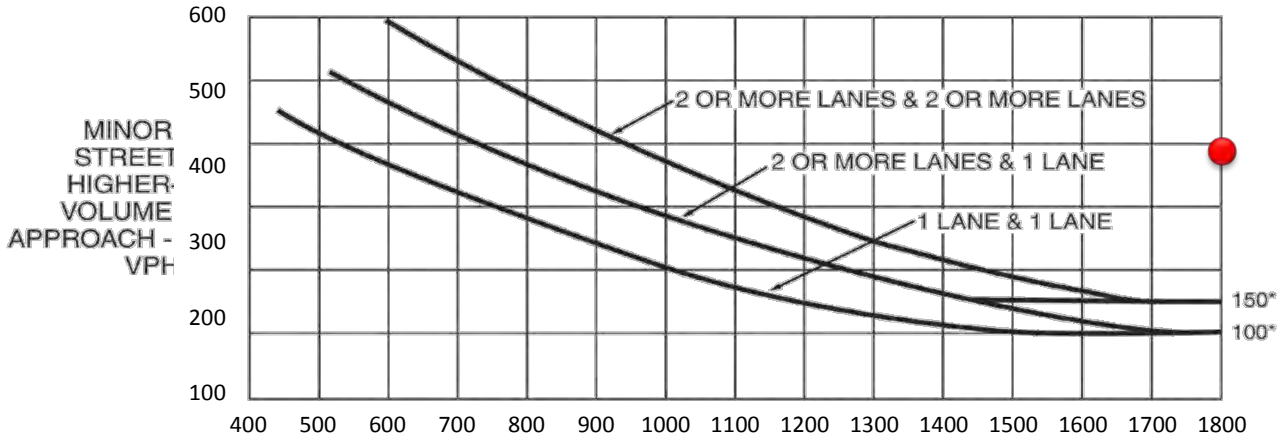
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2351	420

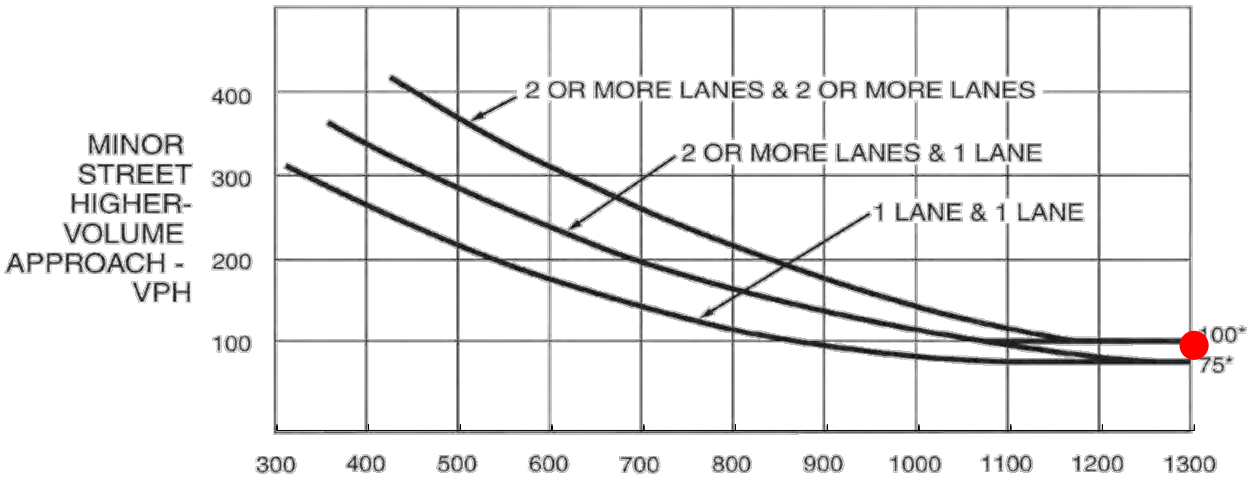
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

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SIGNAL WARRANT ANALYSIS

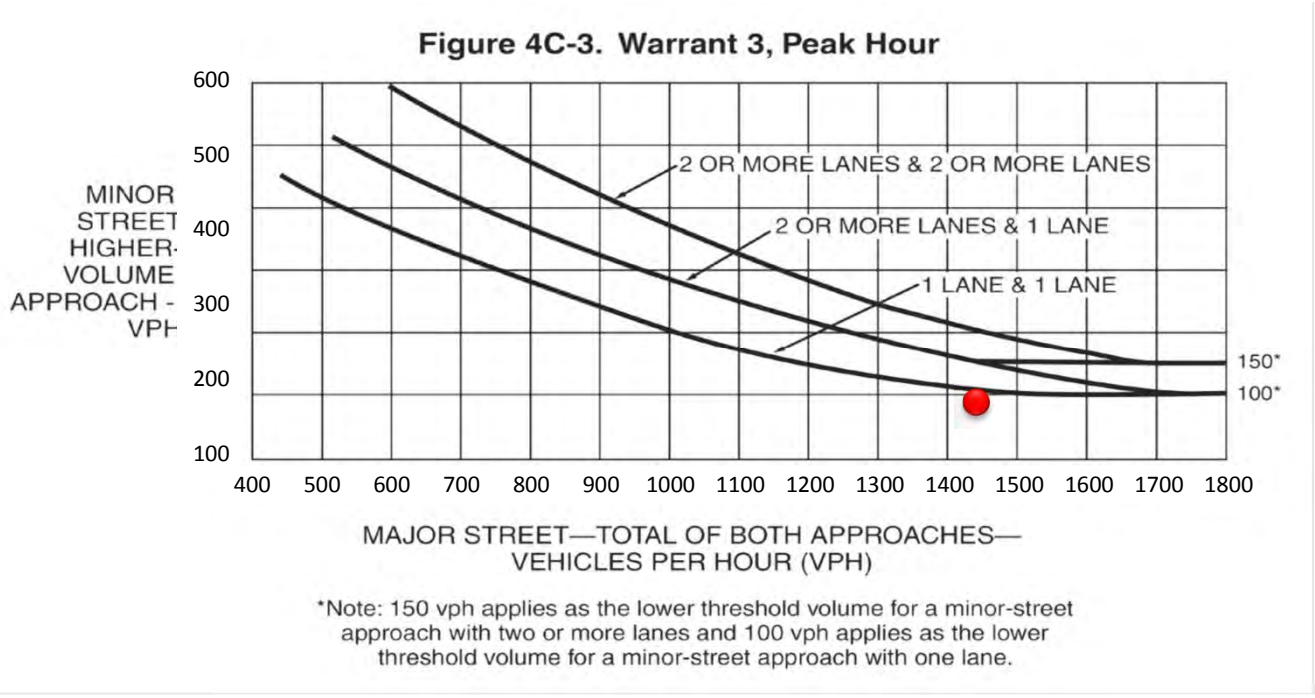
Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 With Orange AM Peak	**Total Number of Vehicles Entering:**	1608
		Number of Approaches:	4
		Intersection total delay (seconds):	92.5
		Minor St approach total delay (veh-hr):	4.3

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

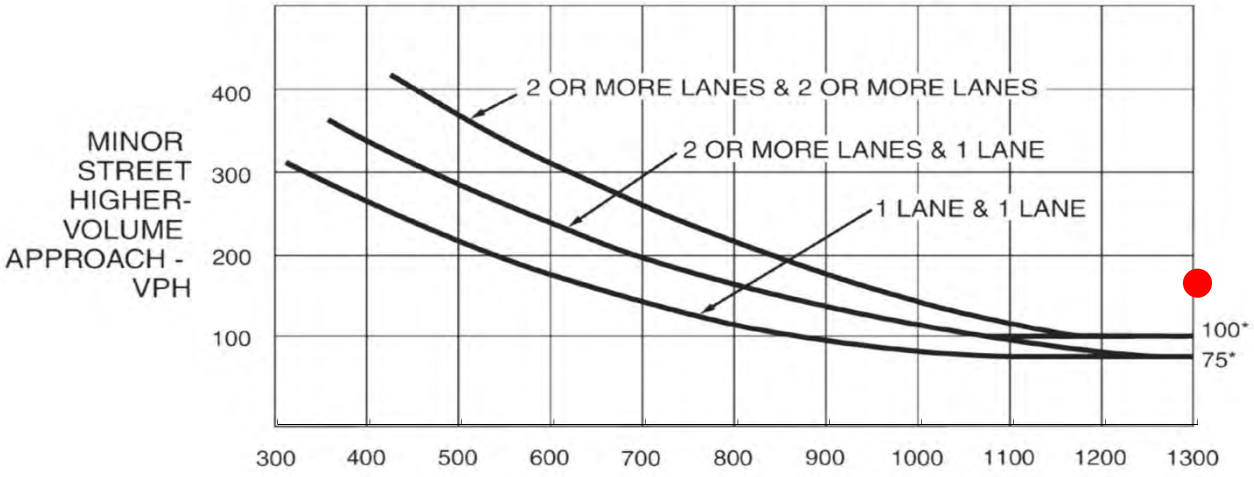
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1439	169



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

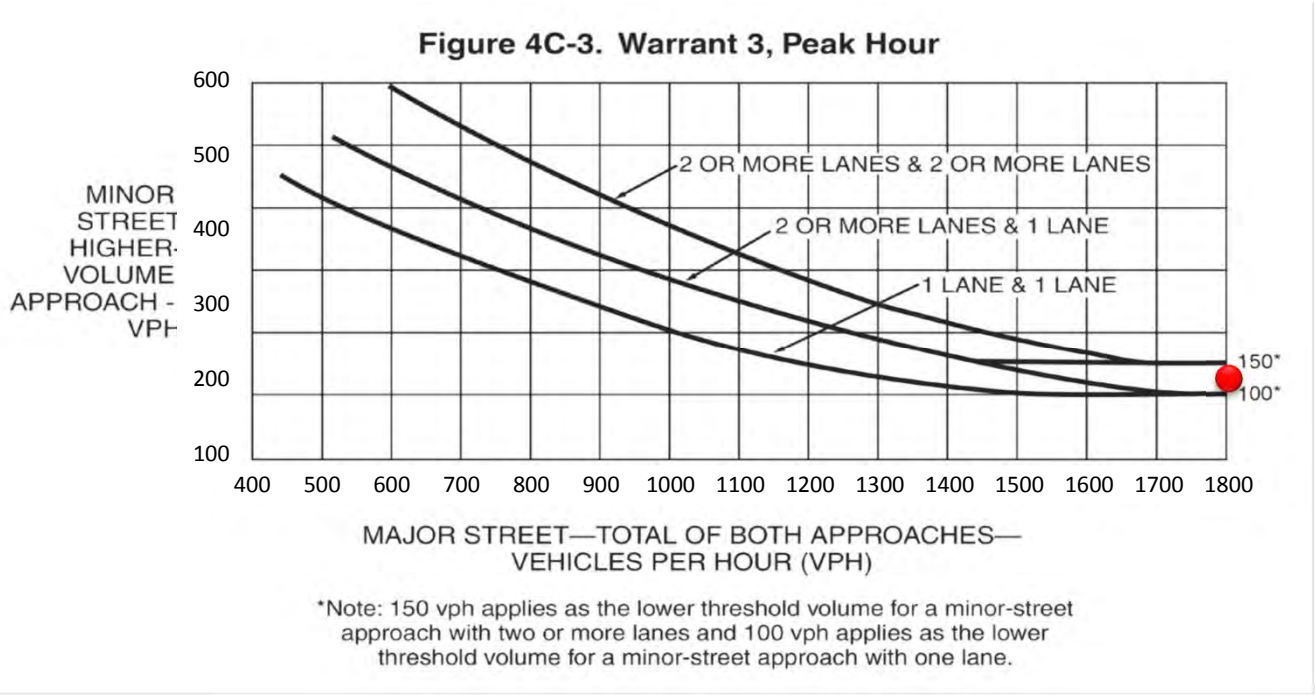
Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 With Orange	**Total Number of Vehicles Entering:**	2296
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	808.2
		Minor St approach total delay (veh-hr):	45.1

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

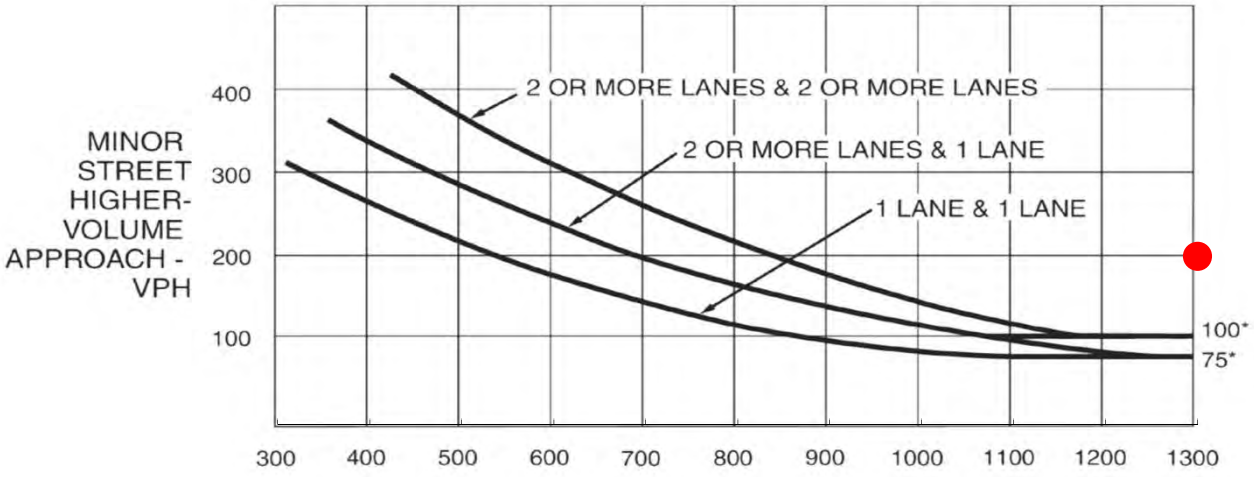
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2093	201



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 Without Orange AM Peak	**Total Number of Vehicles Entering:**	1665
		Number of Approaches:	4
		Intersection total delay (seconds):	117
		Minor St approach total delay (veh-hr):	5.9

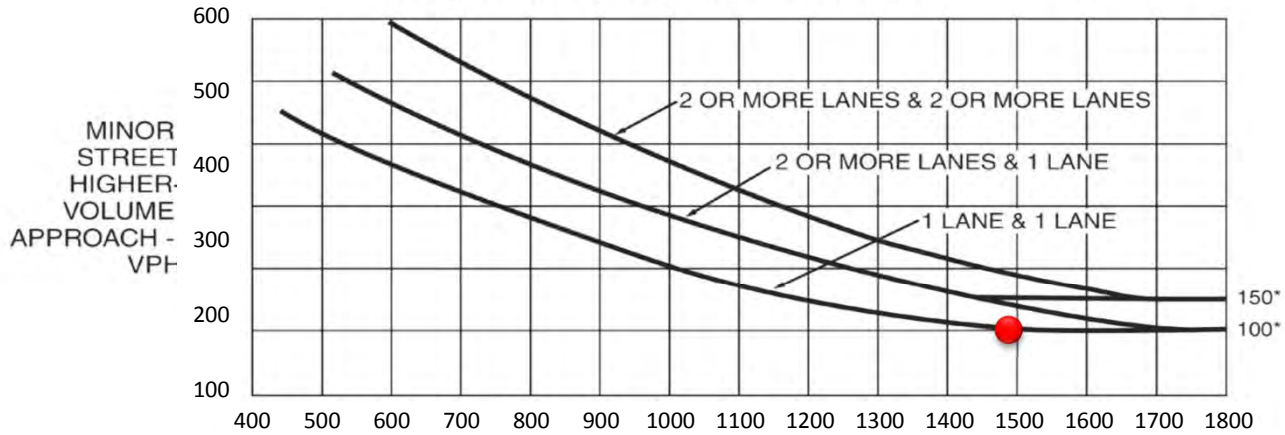
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1485	180

Figure 4C-3. Warrant 3, Peak Hour

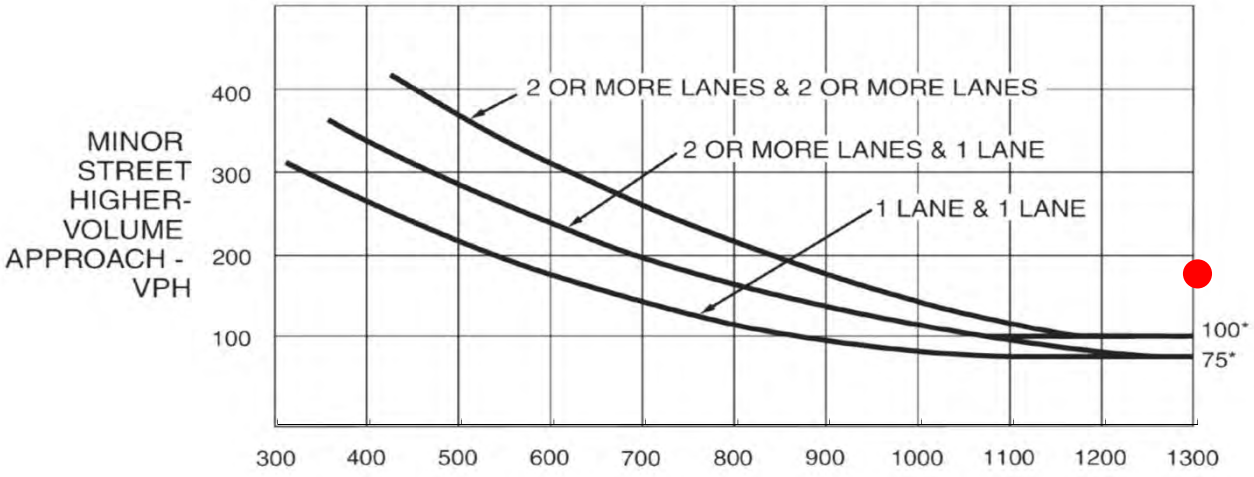


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 Without Orange	**Total Number of Vehicles Entering:**	2305
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	905.7
		Minor St approach total delay (veh-hr):	55.6

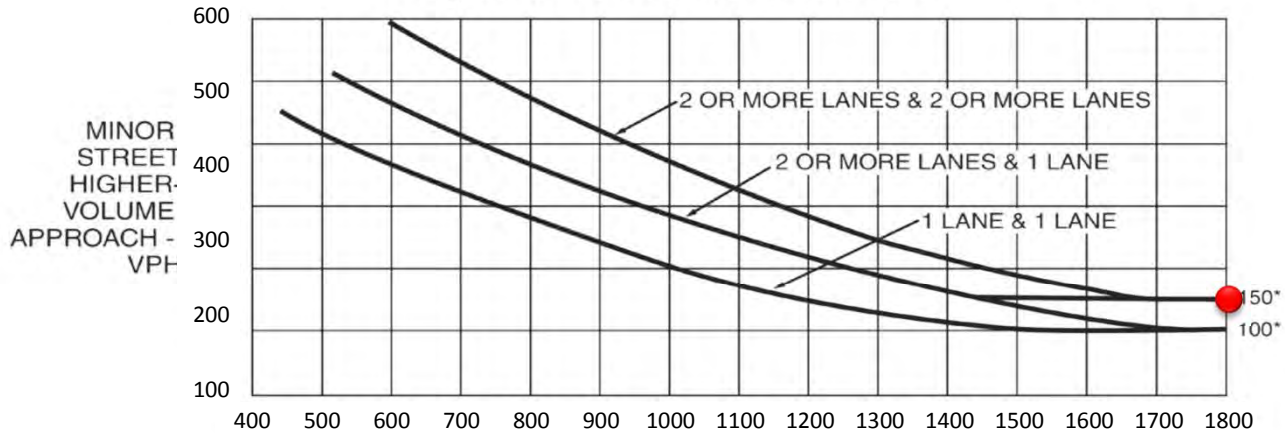
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2082	221

Figure 4C-3. Warrant 3, Peak Hour

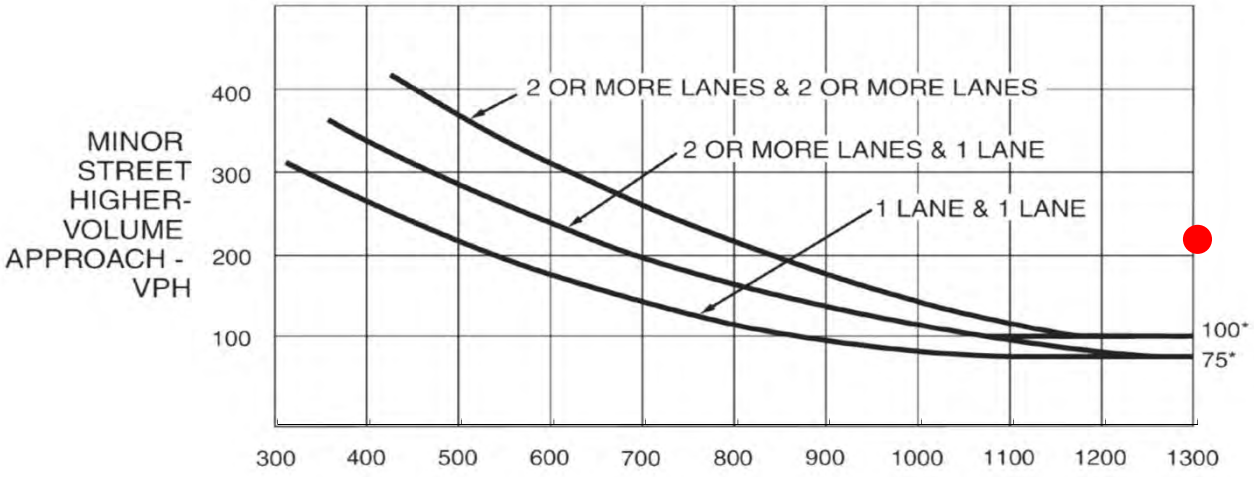


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 With Orange AM Peak	**Total Number of Vehicles Entering:**	1683
		Number of Approaches:	4
		Intersection total delay (seconds):	107.2
		Minor St approach total delay (veh-hr):	5.2

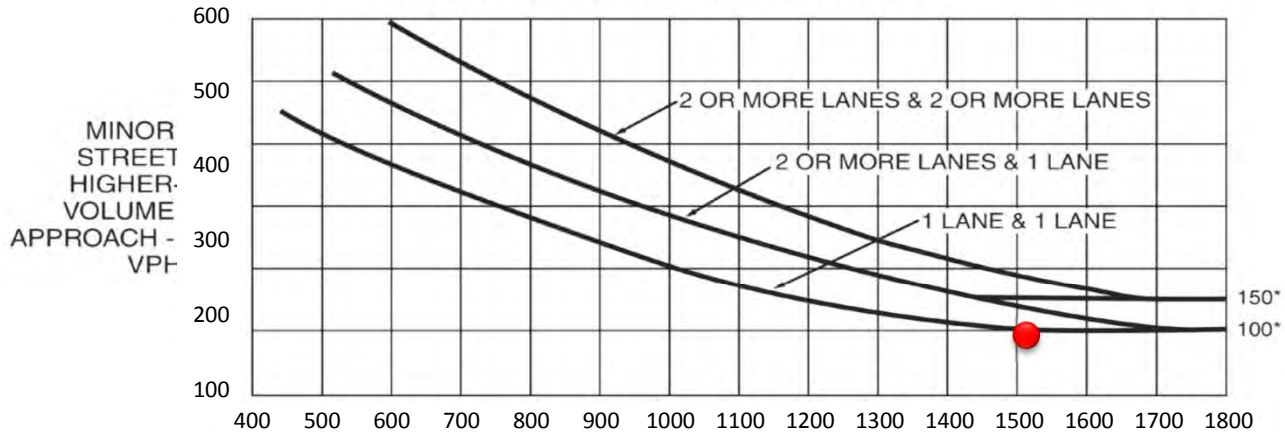
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1510	173

Figure 4C-3. Warrant 3, Peak Hour

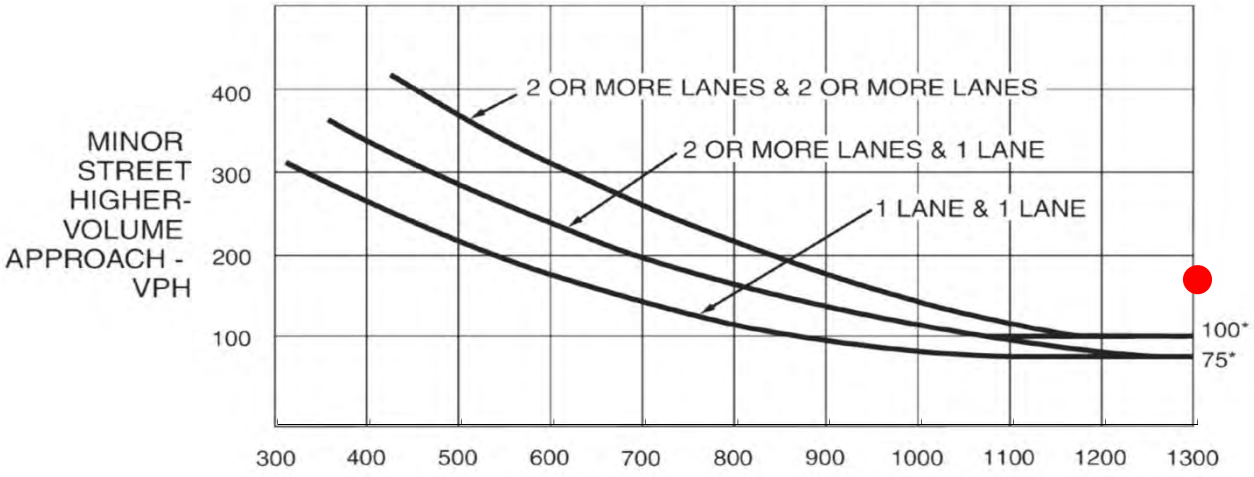


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

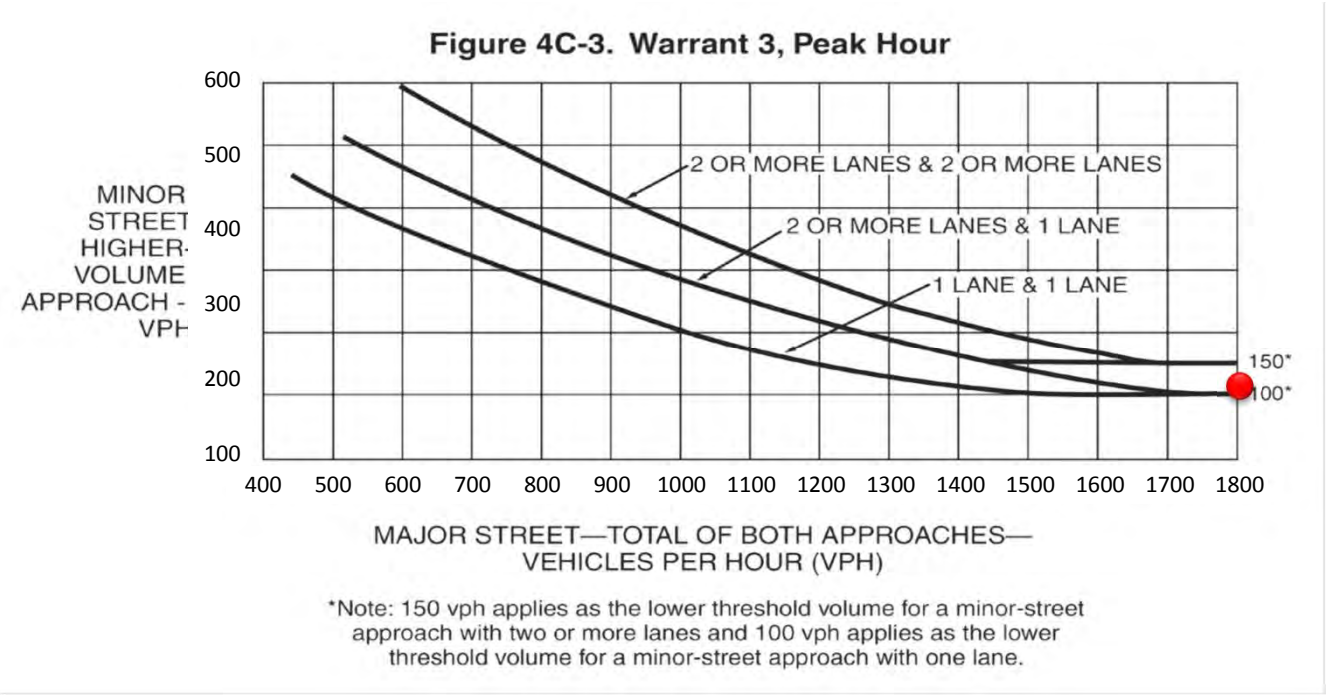
Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 With Orange	**Total Number of Vehicles Entering:**	2350
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	705.7
		Minor St approach total delay (veh-hr):	37.4

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

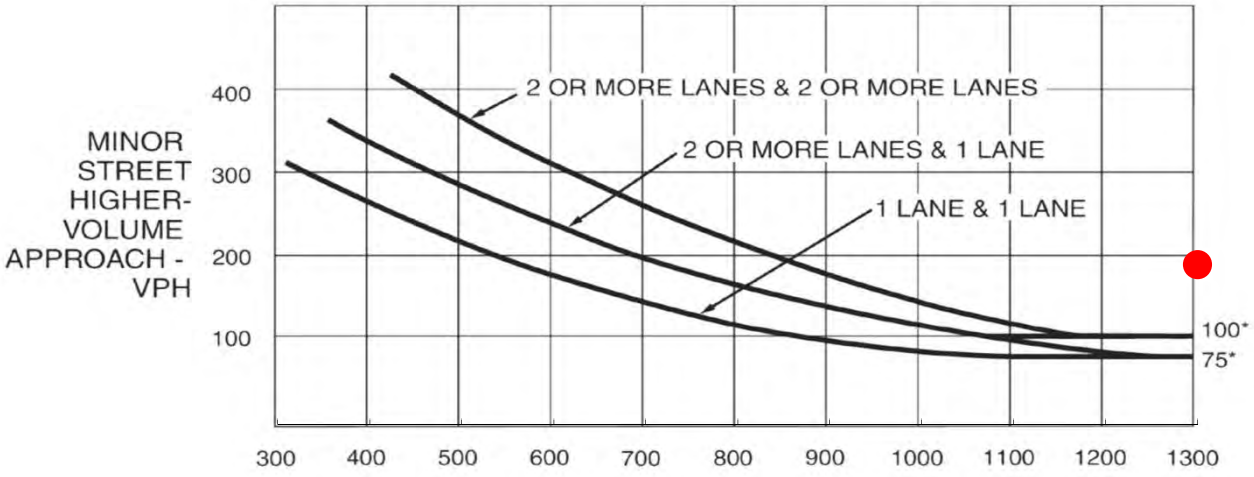
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2157	191



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 Without Orange AM Peak	**Total Number of Vehicles Entering:**	1688
		Number of Approaches:	4
		Intersection total delay (seconds):	128.2
		Minor St approach total delay (veh-hr):	6.4

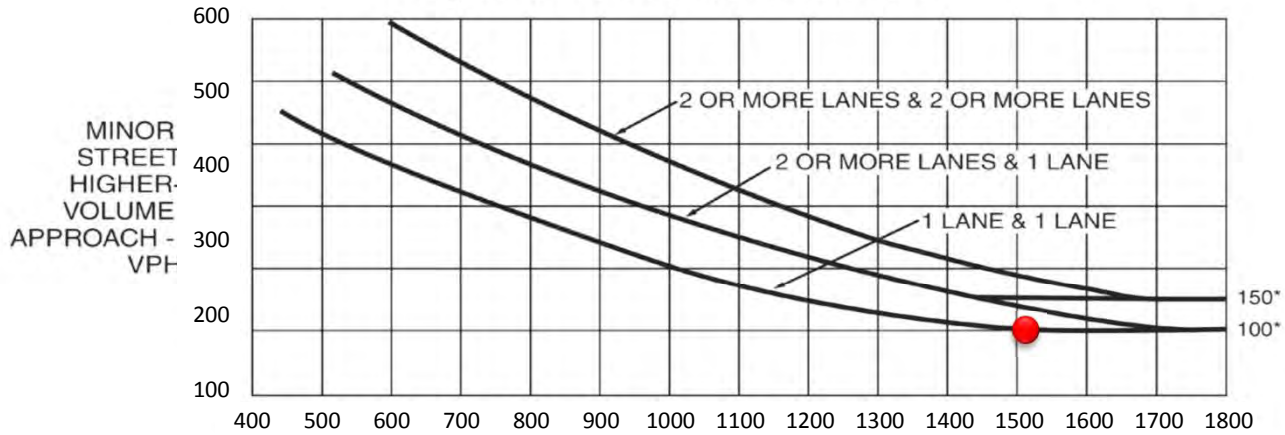
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1508	180

Figure 4C-3. Warrant 3, Peak Hour

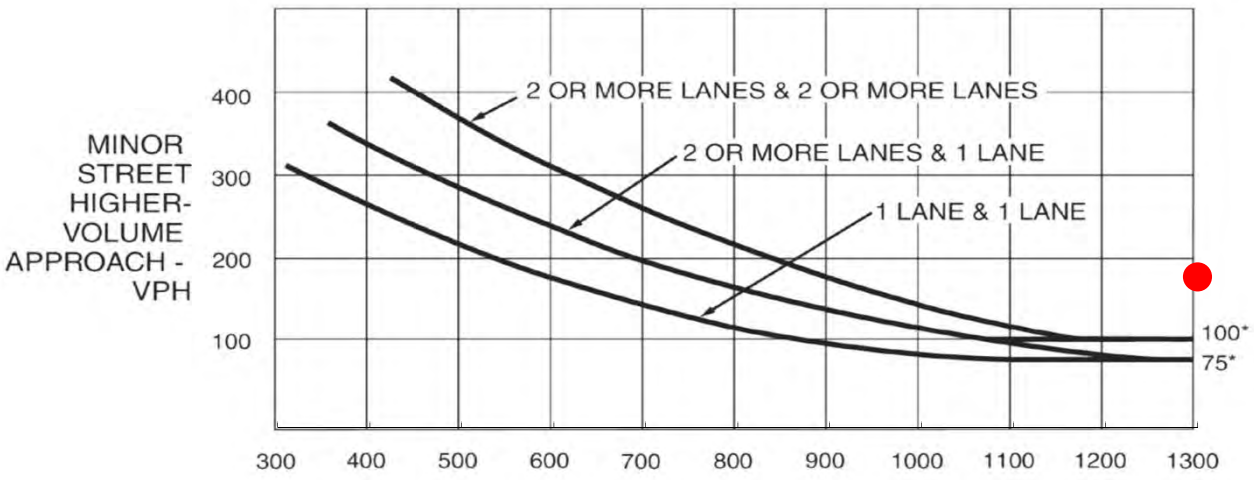


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

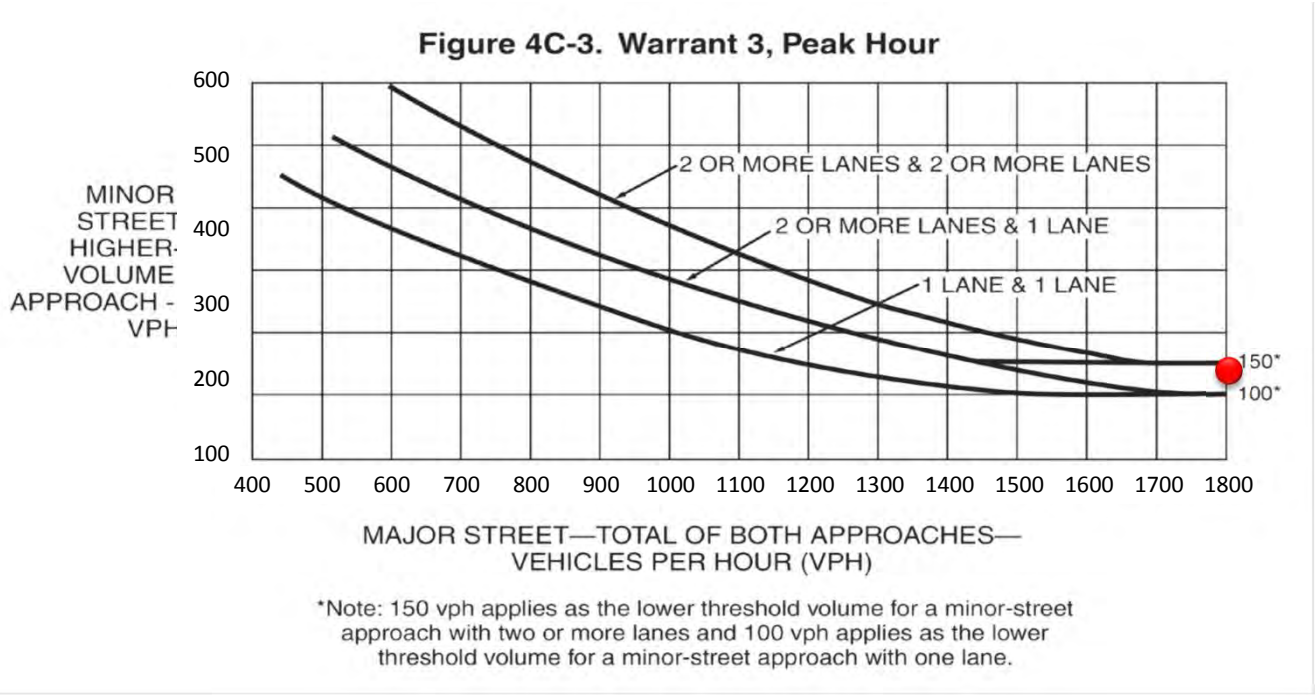
Minor Street:	Placentia Lane	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 Without Orange	**Total Number of Vehicles Entering:**	2366
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	838.6
		Minor St approach total delay (veh-hr):	49.2

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

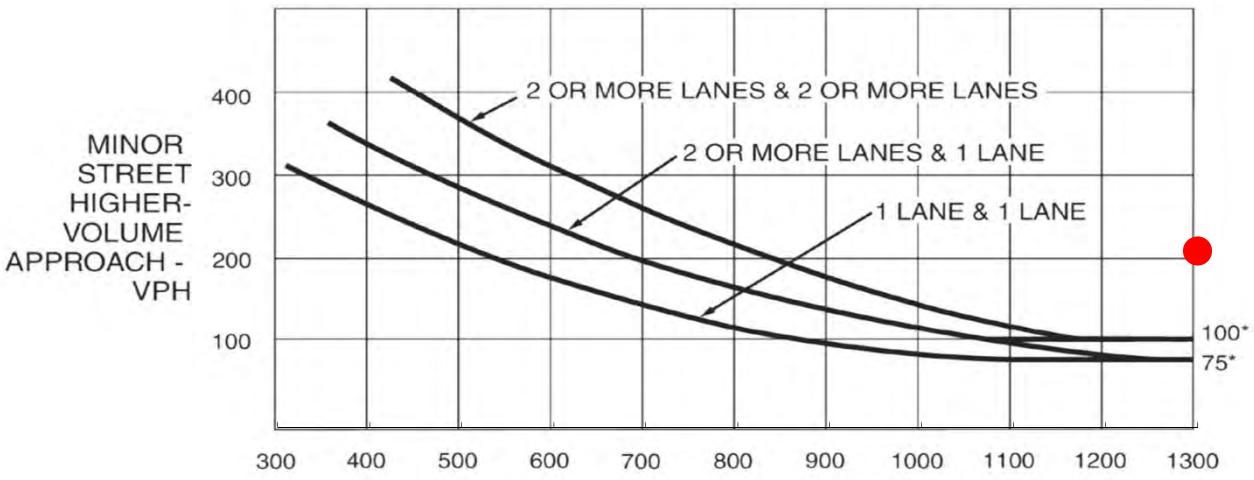
Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2153	211



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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	1833
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	223.1
		Minor St approach total delay (veh-hr):	3.7

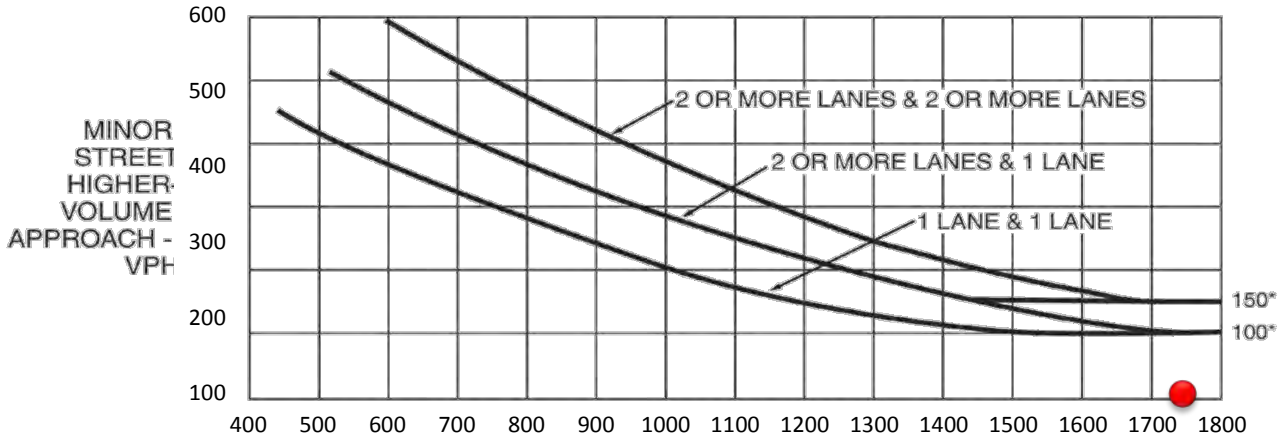
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	NO
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1743	59

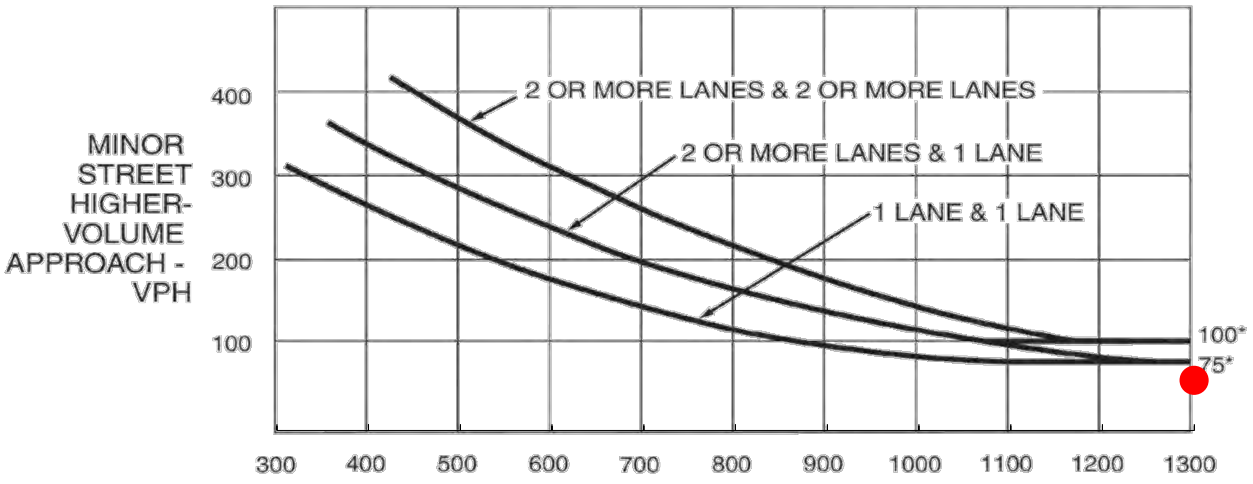
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	1971
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	114.7
		Minor St approach total delay (veh-hr):	0.7

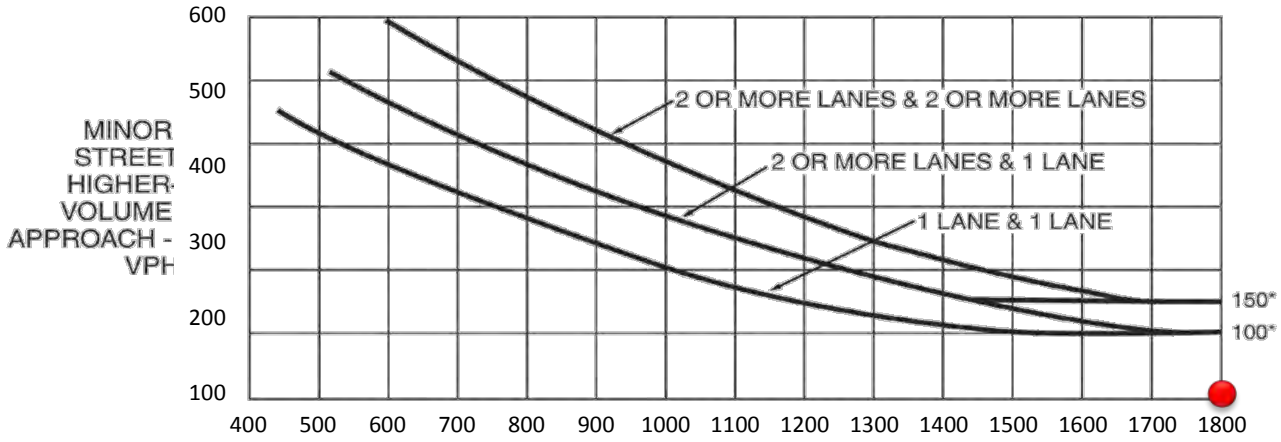
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	NO
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1856	21

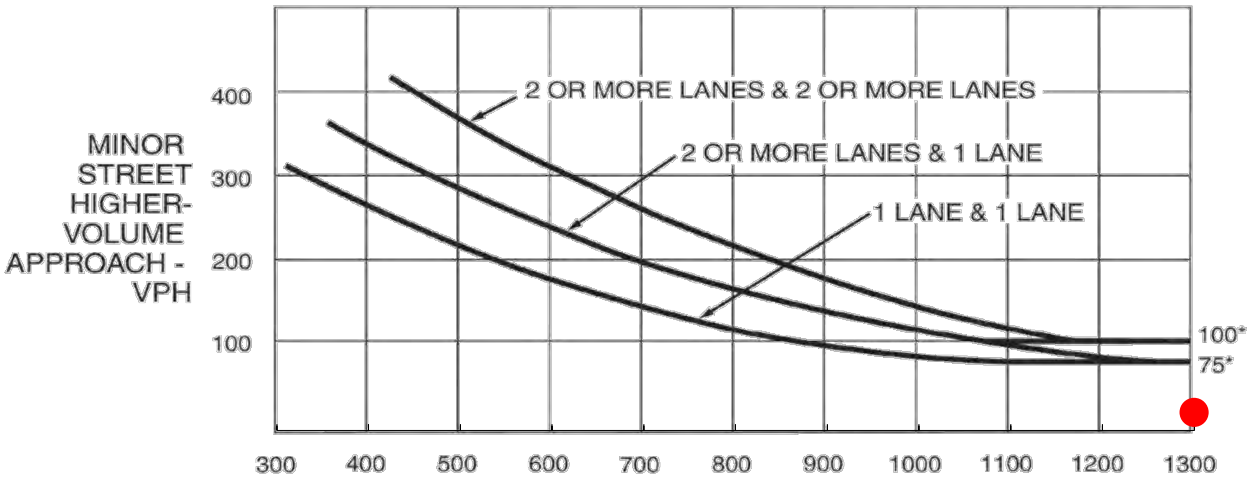
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	1712
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	85.6
		Minor St approach total delay (veh-hr):	0.6

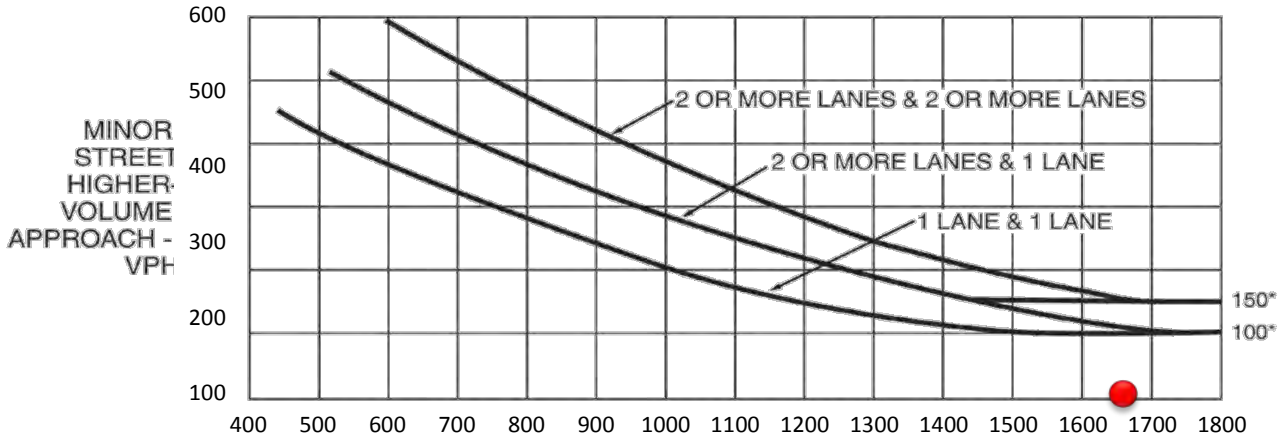
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	NO
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1658	26

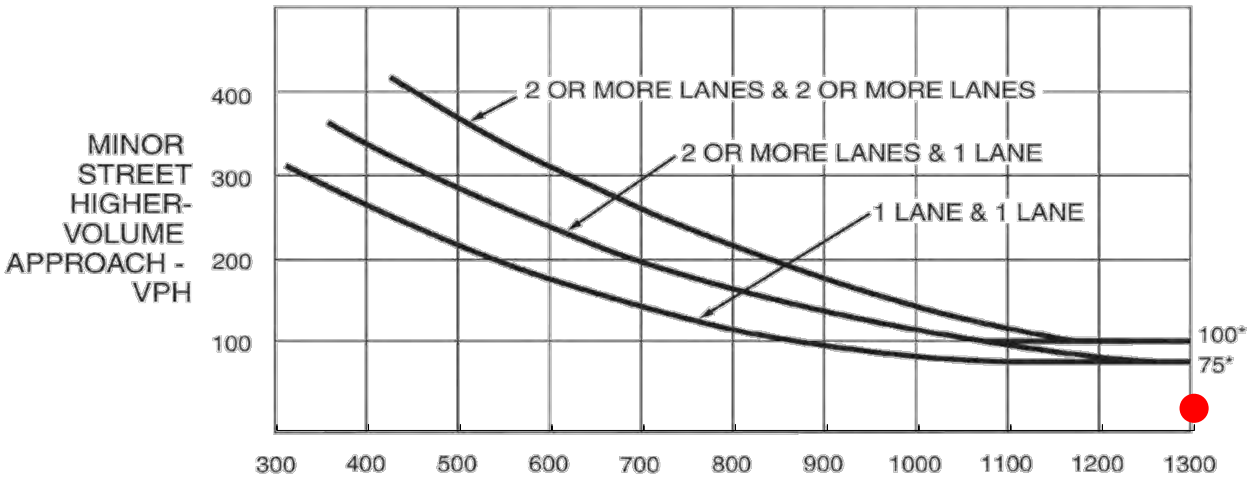
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	1909
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	58.7
		Minor St approach total delay (veh-hr):	0.2

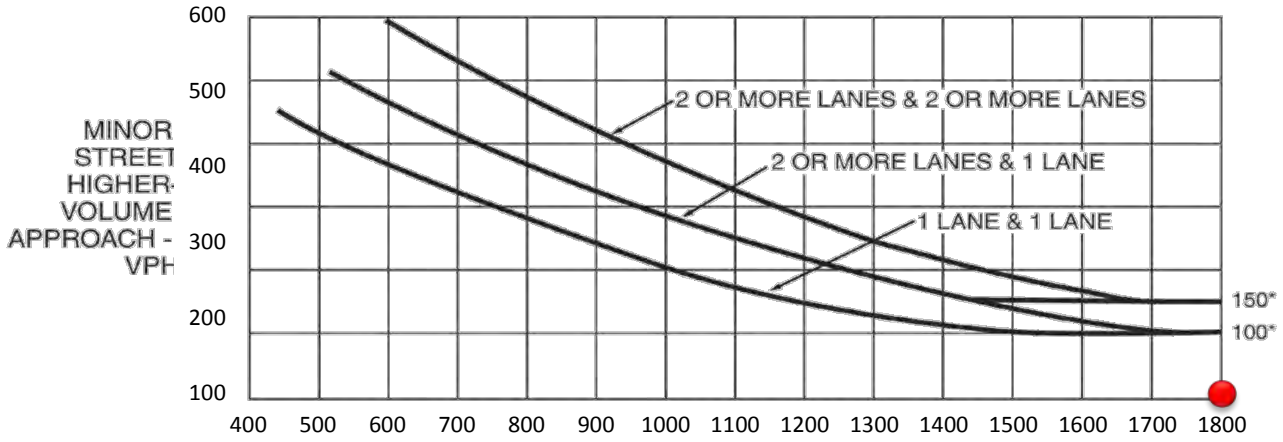
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	NO
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1805	13

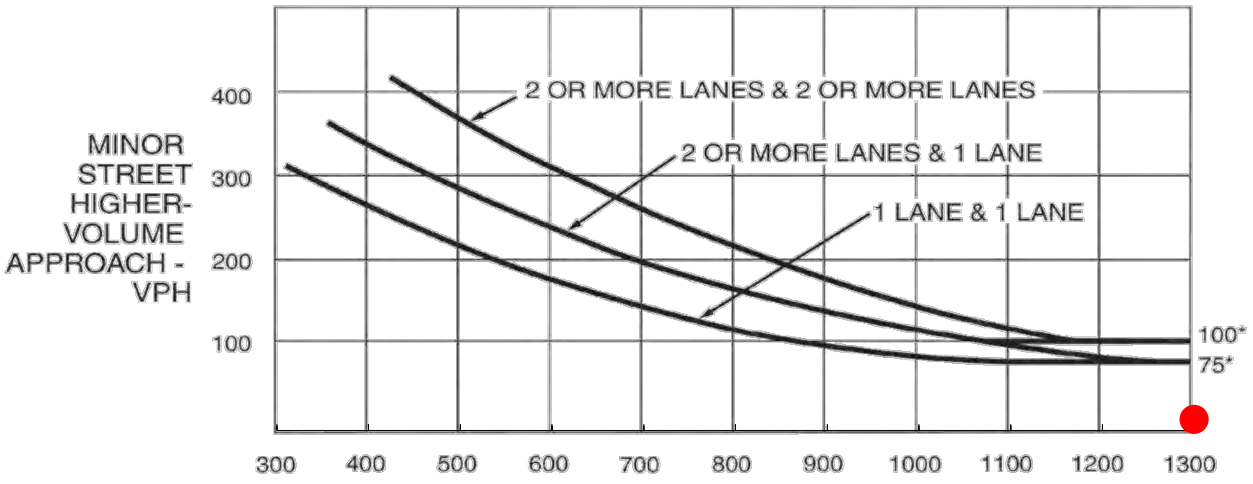
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

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SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 With Orange AM Peak	**Total Number of Vehicles Entering:**	2195
		Number of Approaches:	4
		Intersection total delay (seconds):	668.7
		Minor St approach total delay (veh-hr):	16.7

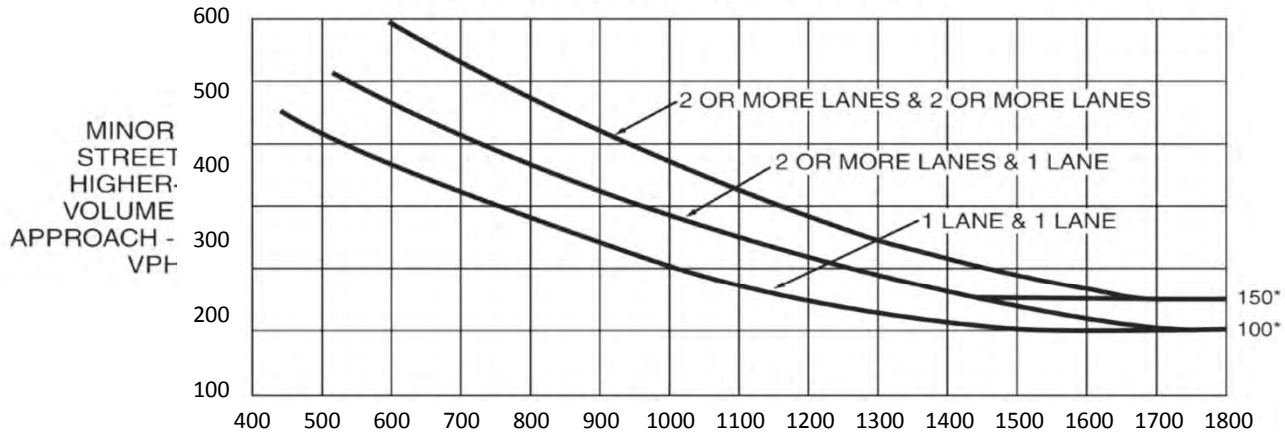
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2066	90

Figure 4C-3. Warrant 3, Peak Hour

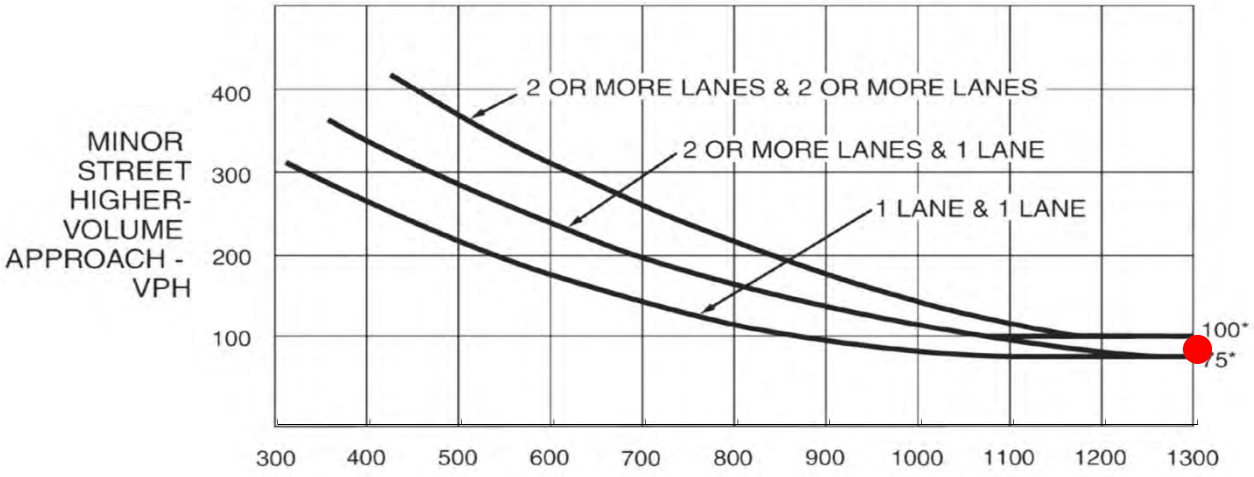


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 With Orange PM Peak	**Total Number of Vehicles Entering:**	2217
		Number of Approaches:	4
		Intersection total delay (seconds):	231.9
		Minor St approach total delay (veh-hr):	2.0

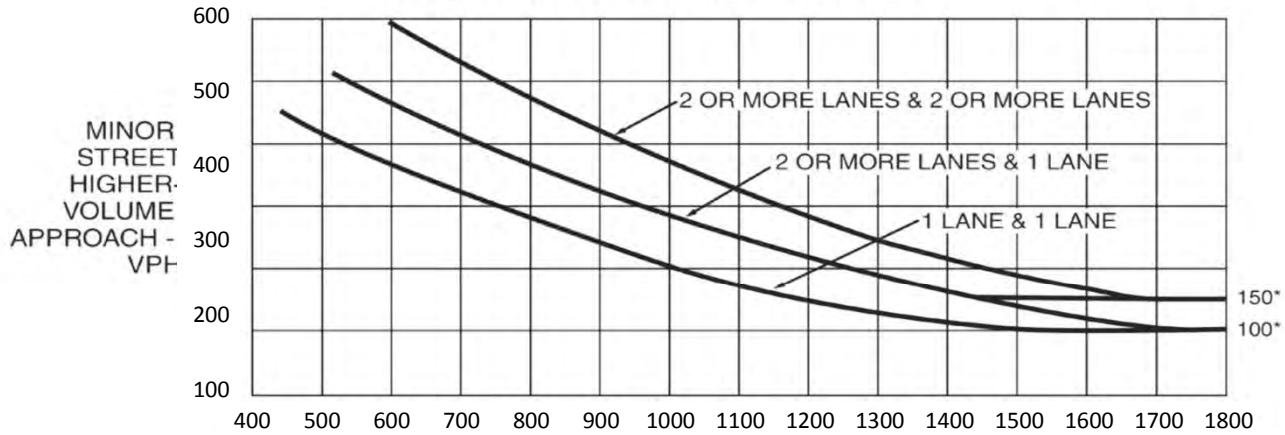
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	NO
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2083	31

Figure 4C-3. Warrant 3, Peak Hour

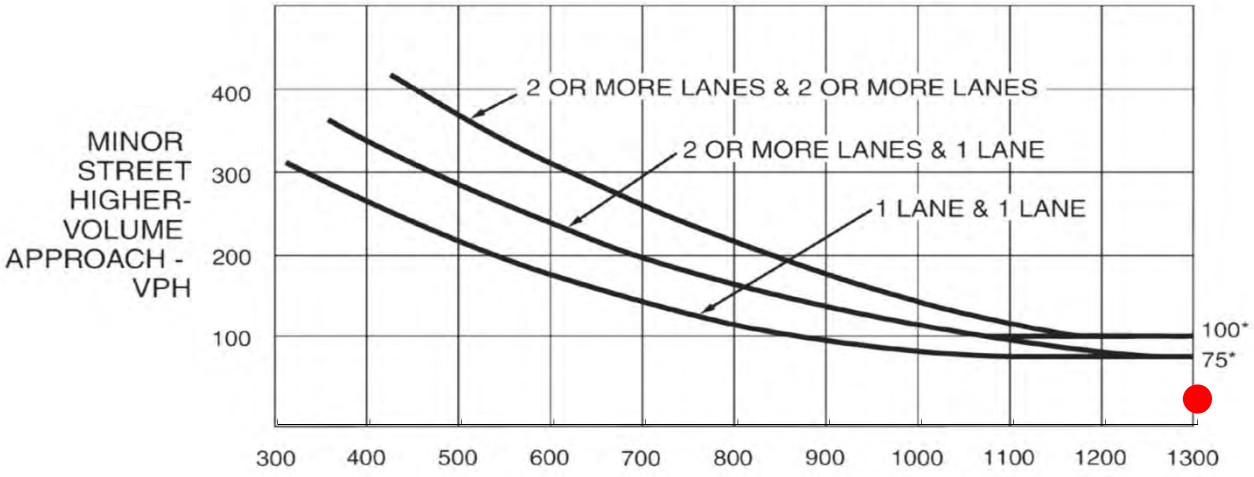


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	NO
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 Without Orange AM Peak	**Total Number of Vehicles Entering:**	2187
		Number of Approaches:	4
		Intersection total delay (seconds):	682.6
		Minor St approach total delay (veh-hr):	17.1

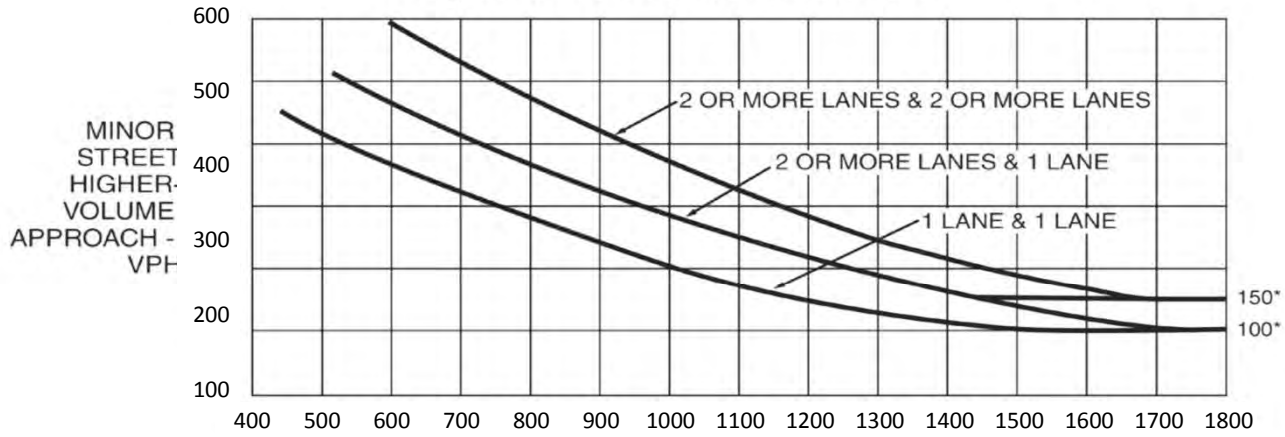
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2058	90

Figure 4C-3. Warrant 3, Peak Hour

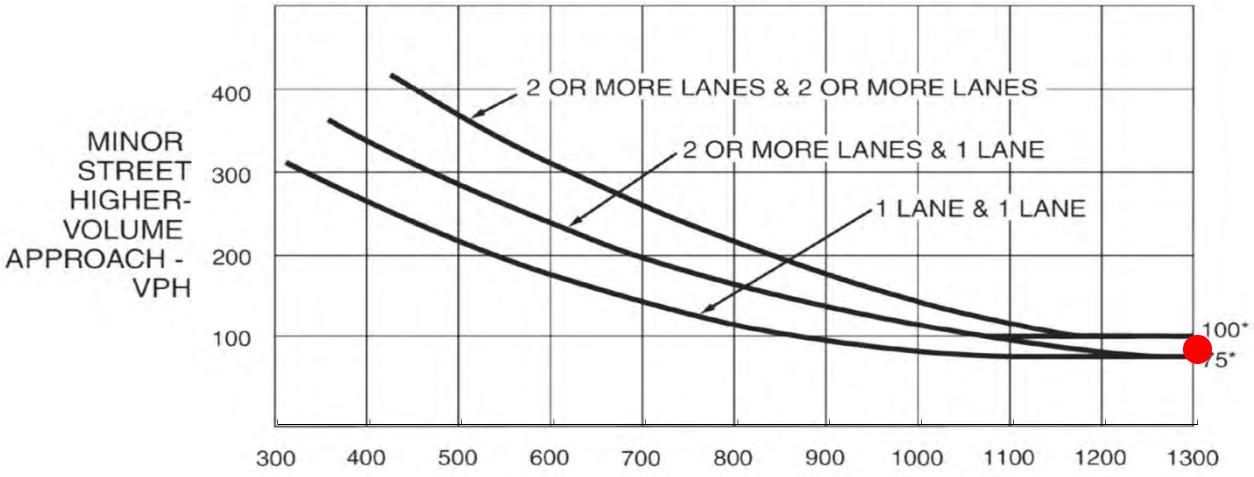


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	YES
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 Without Orange PM Peak	**Total Number of Vehicles Entering:**	2195
		Number of Approaches:	4
		Intersection total delay (seconds):	205
		Minor St approach total delay (veh-hr):	1.7

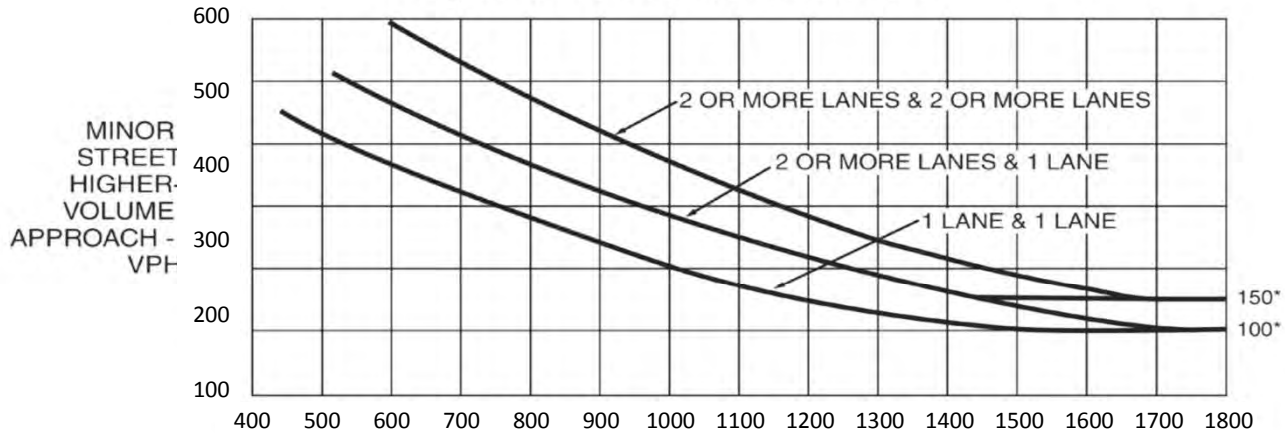
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	NO
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2063	30

Figure 4C-3. Warrant 3, Peak Hour

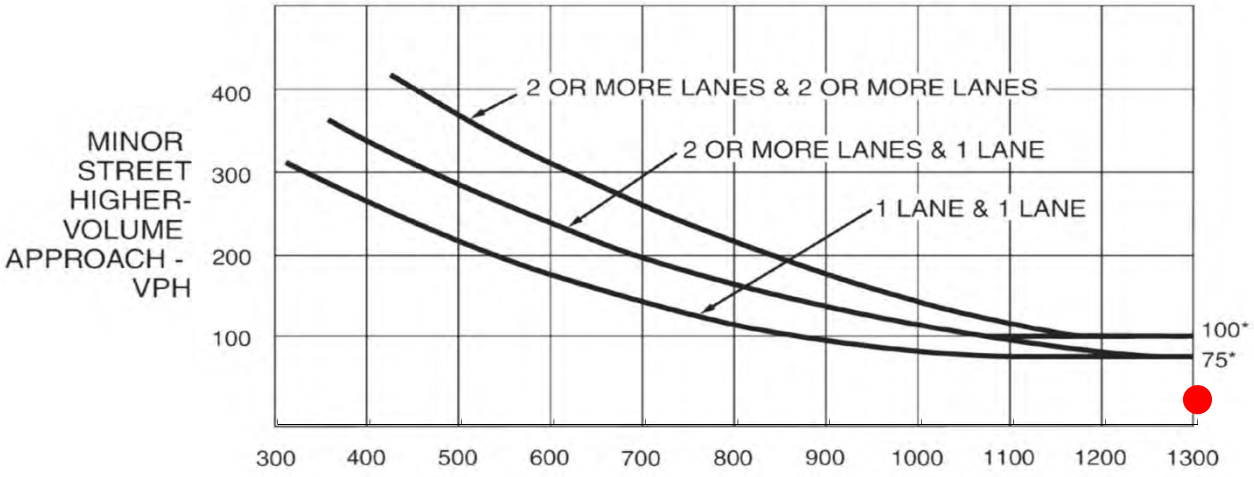


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	NO
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 With Orange AM Peak	**Total Number of Vehicles Entering:**	2039
		Number of Approaches:	4
		Intersection total delay (seconds):	164.3
		Minor St approach total delay (veh-hr):	1.9

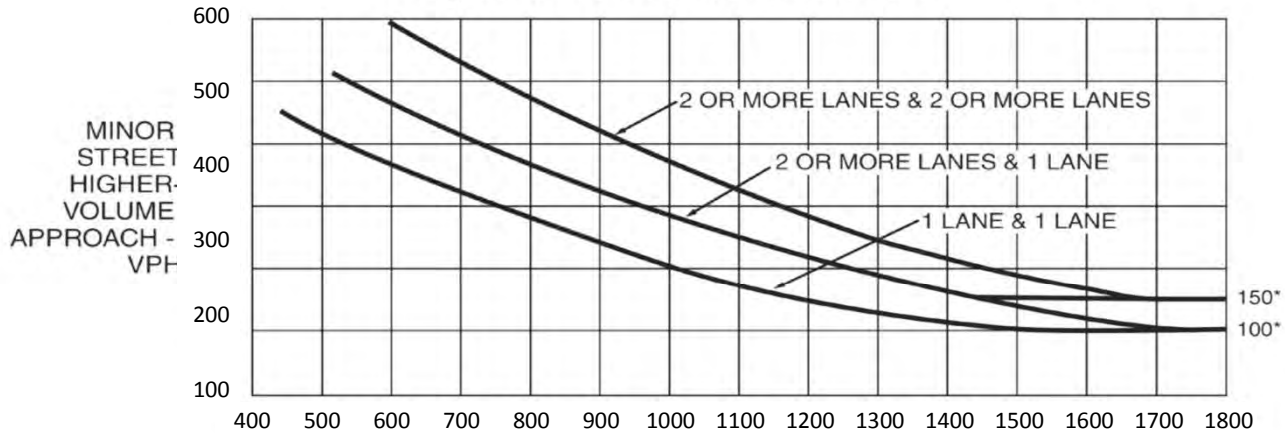
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	NO
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1963	41

Figure 4C-3. Warrant 3, Peak Hour

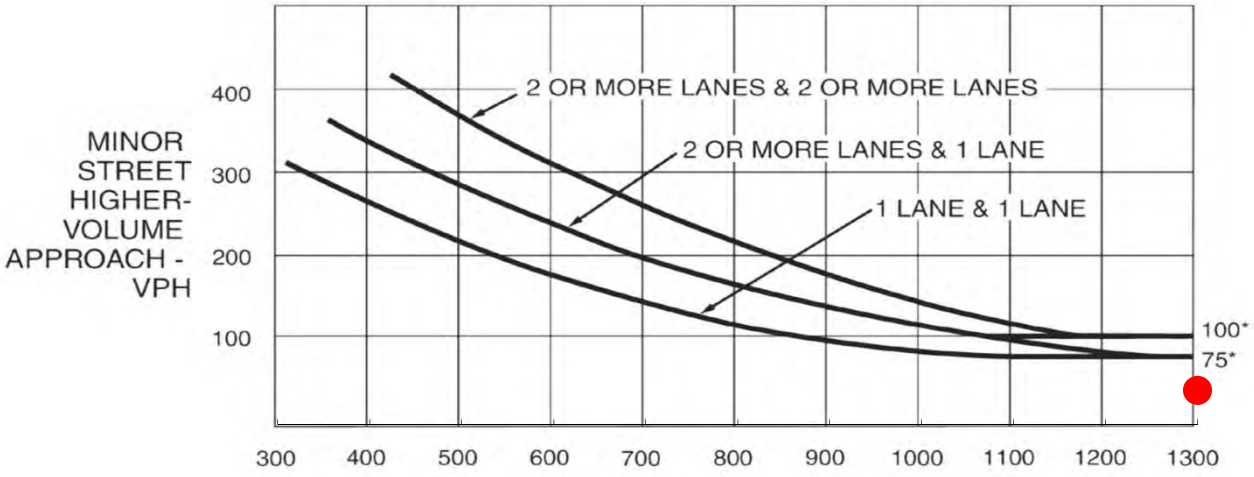


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	NO
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 With Orange PM Peak	**Total Number of Vehicles Entering:**	2143
		Number of Approaches:	4
		Intersection total delay (seconds):	124
		Minor St approach total delay (veh-hr):	0.7

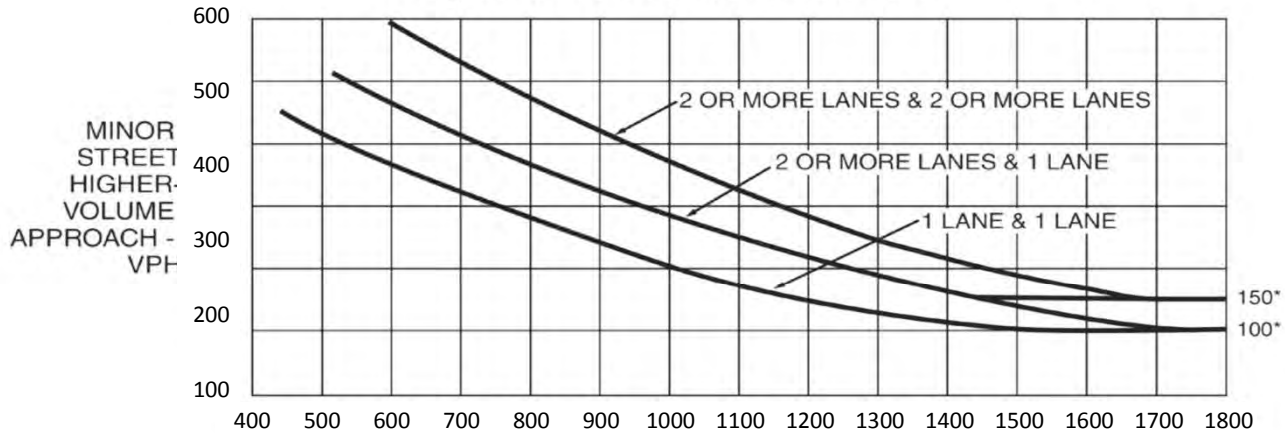
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	NO
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2025	20

Figure 4C-3. Warrant 3, Peak Hour

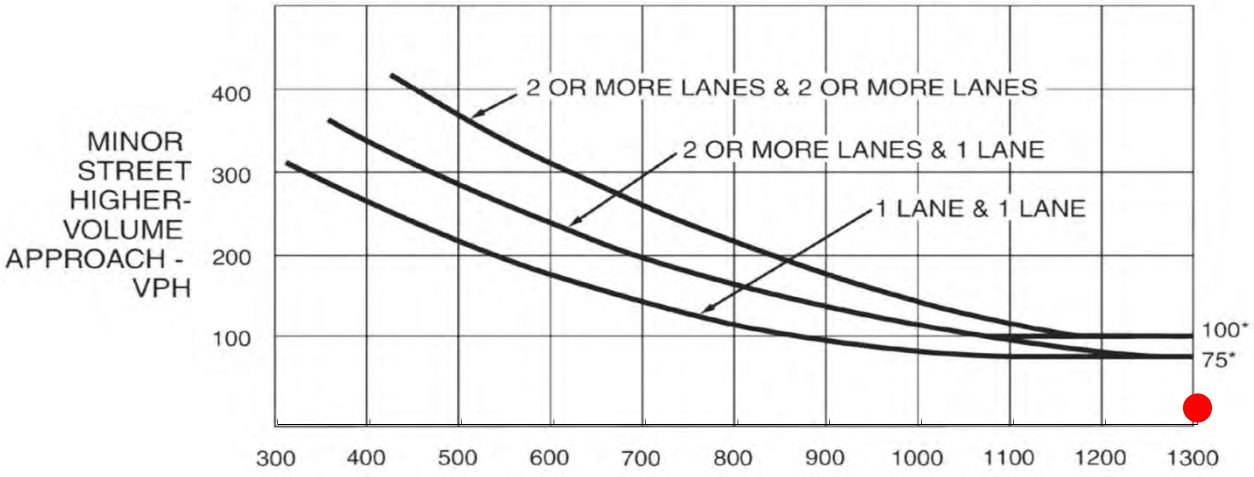


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	NO
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 Without Orange AM Peak	**Total Number of Vehicles Entering:**	2032
		Number of Approaches:	4
		Intersection total delay (seconds):	158.5
		Minor St approach total delay (veh-hr):	1.8

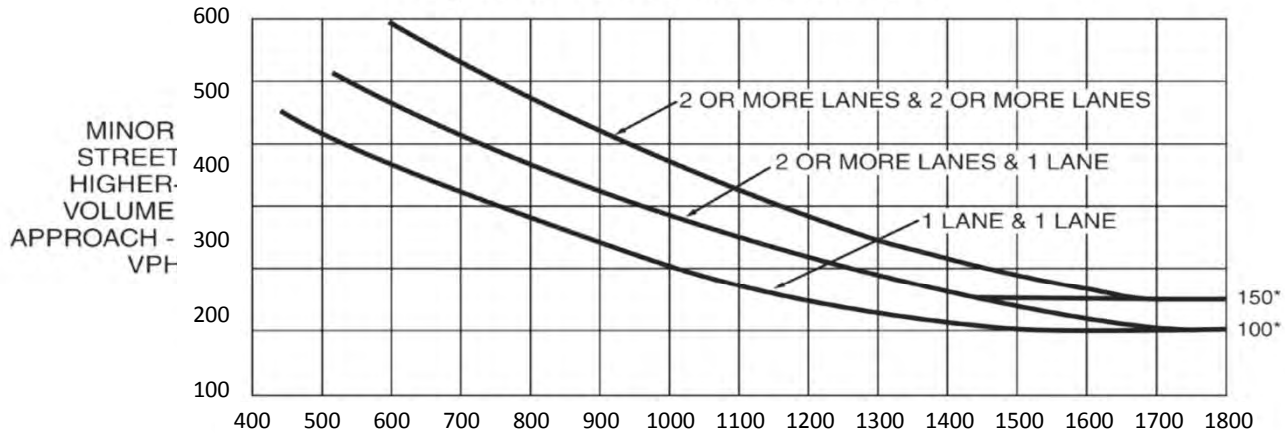
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	NO
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1955	42

Figure 4C-3. Warrant 3, Peak Hour

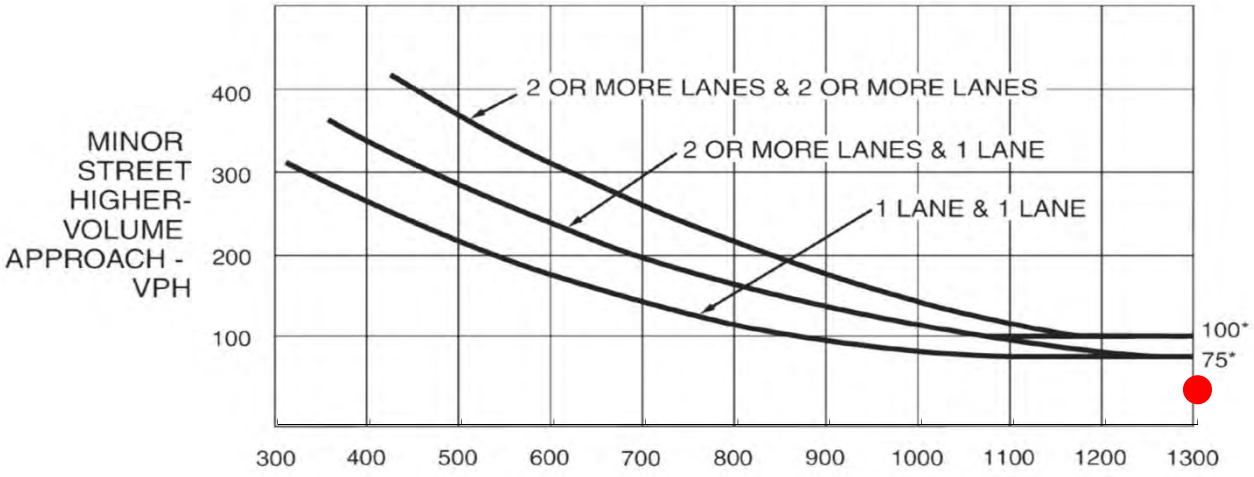


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	NO
PART B	YES

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SIGNAL WARRANT ANALYSIS

Minor Street:	Garner Road	**Number of Lanes on minor street:**	1
Major Street	Main Street	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 Without Orange PM Peak	**Total Number of Vehicles Entering:**	2113
		Number of Approaches:	4
		Intersection total delay (seconds):	108.8
		Minor St approach total delay (veh-hr):	0.6

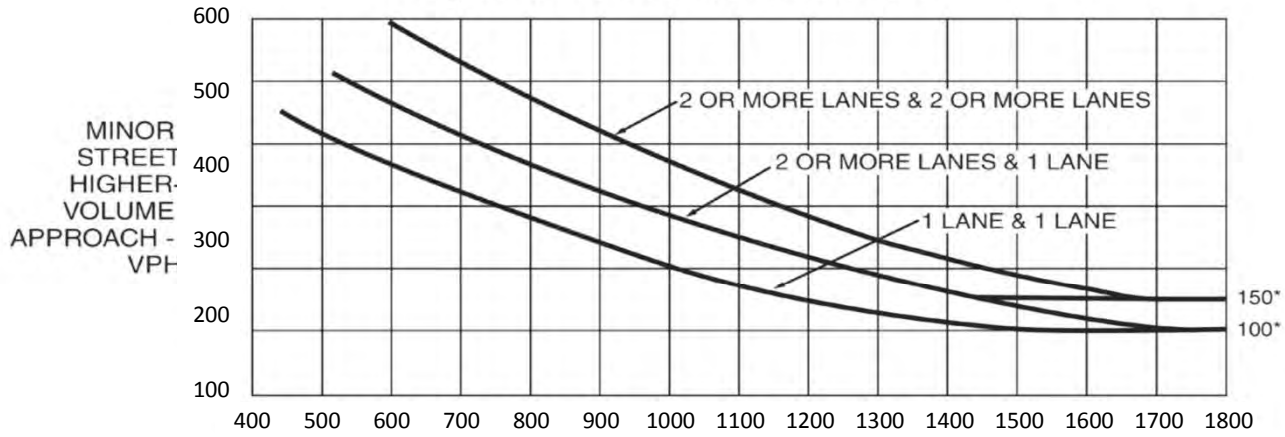
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	NO
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1996	20

Figure 4C-3. Warrant 3, Peak Hour

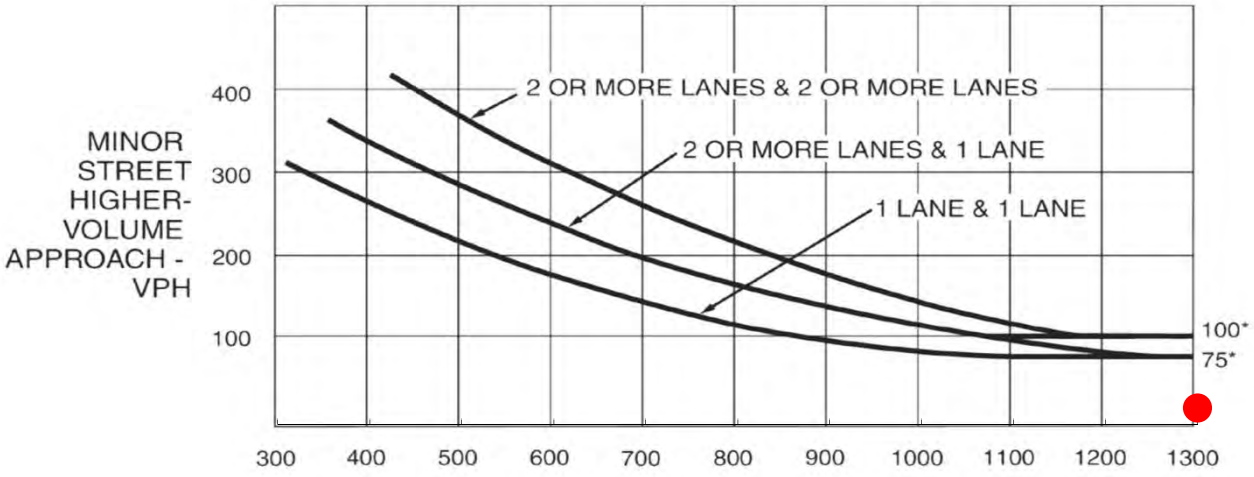


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	NO
PART B	YES

SIGNAL WARRANT ANALYSIS

Minor Street:	Oakley Avenue	**Number of Lanes on minor street:**	1
Major Street	Orange Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	1290
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	22.9
		Minor St approach total delay (veh-hr):	3.9

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
671	619

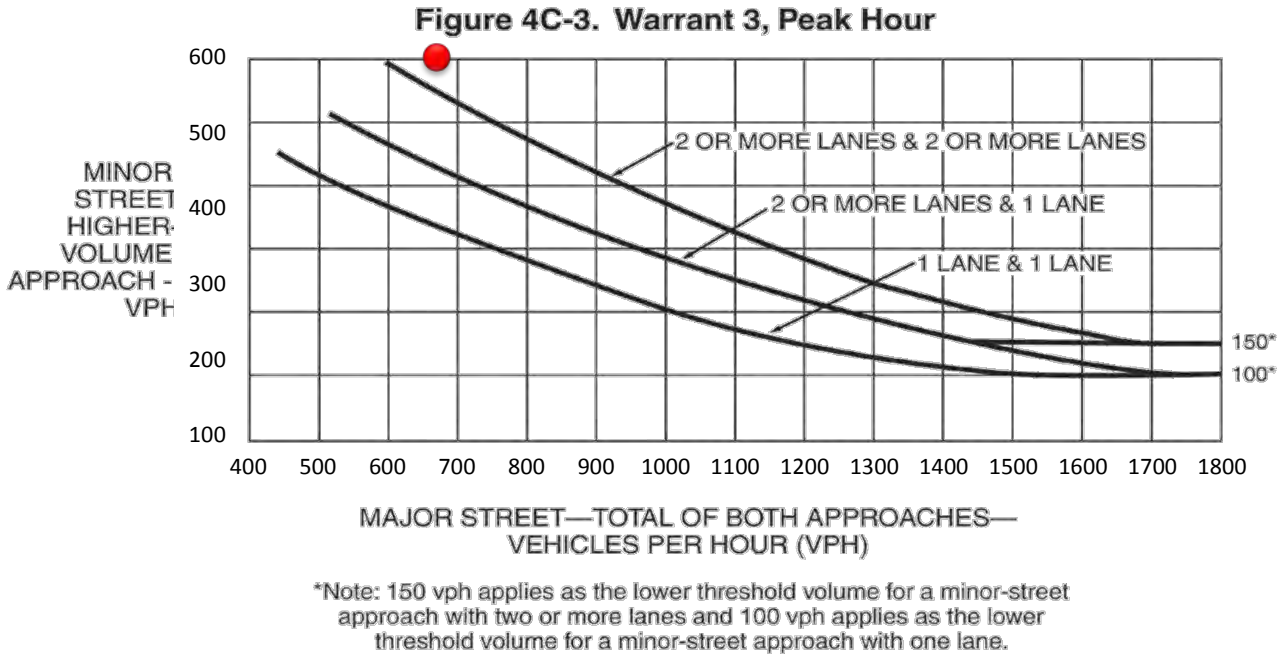
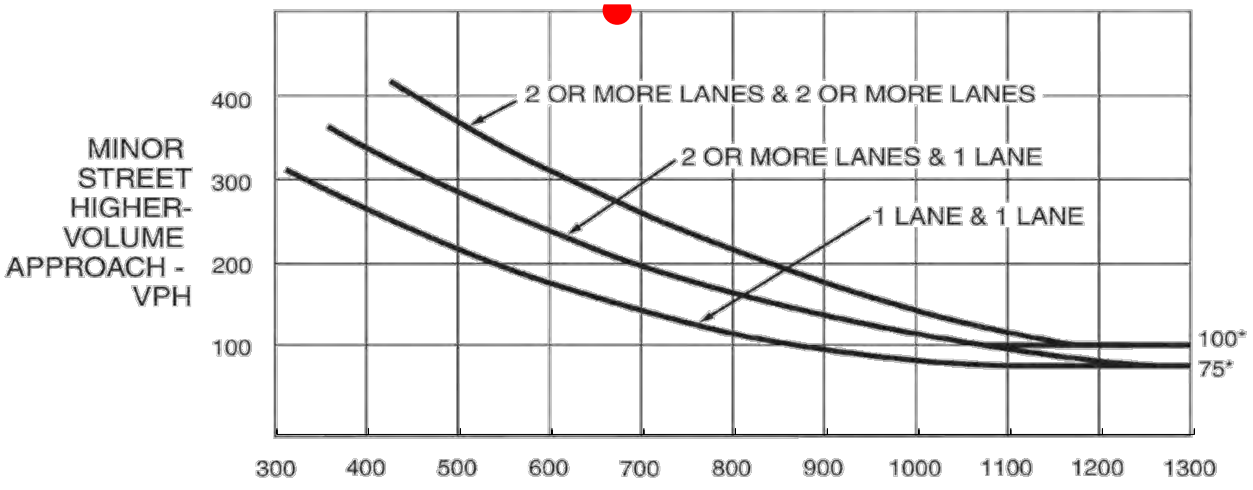


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Oakley Avenue	**Number of Lanes on minor street:**	1
Major Street	Orange Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	1581
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	60.7
		Minor St approach total delay (veh-hr):	13.3

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
794	787

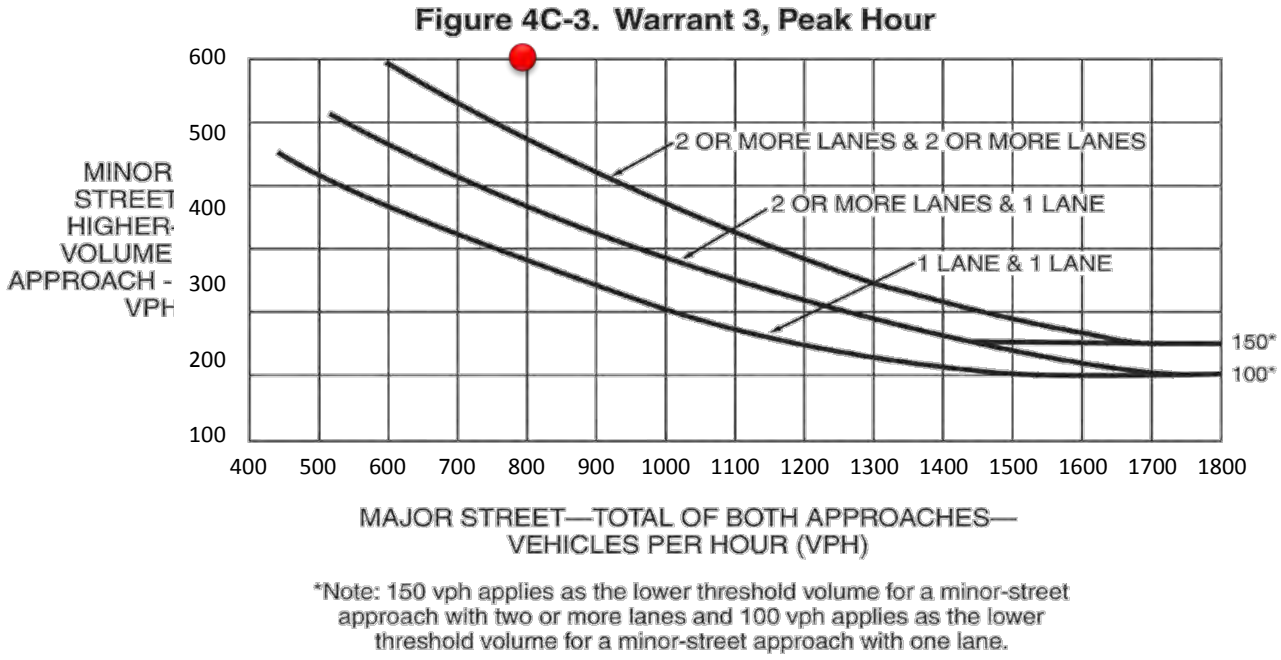
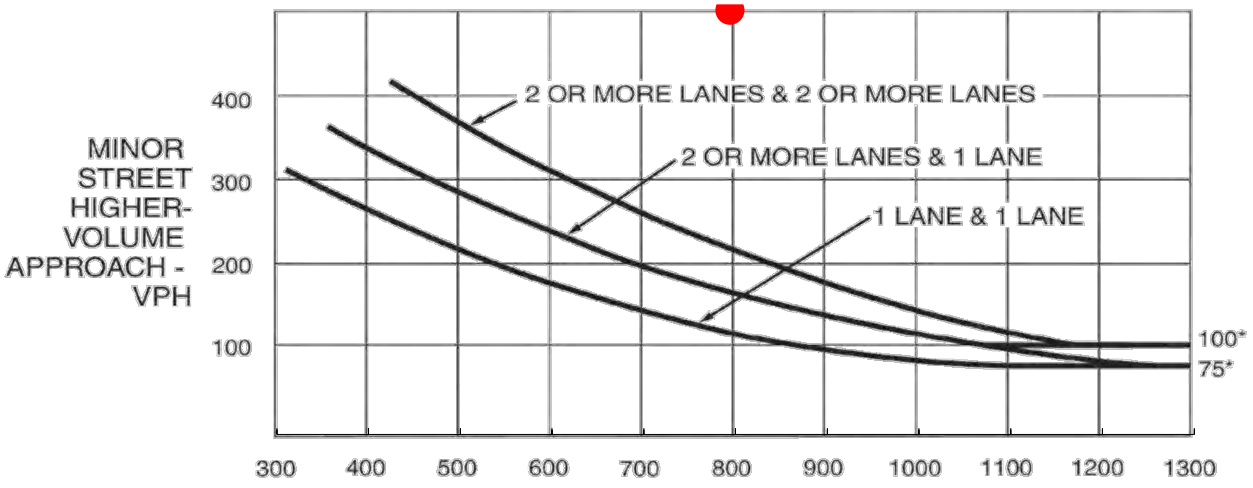


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Oakley Avenue	**Number of Lanes on minor street:**	1
Major Street	Orange Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	1281
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	22.6
		Minor St approach total delay (veh-hr):	3.9

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
664	617

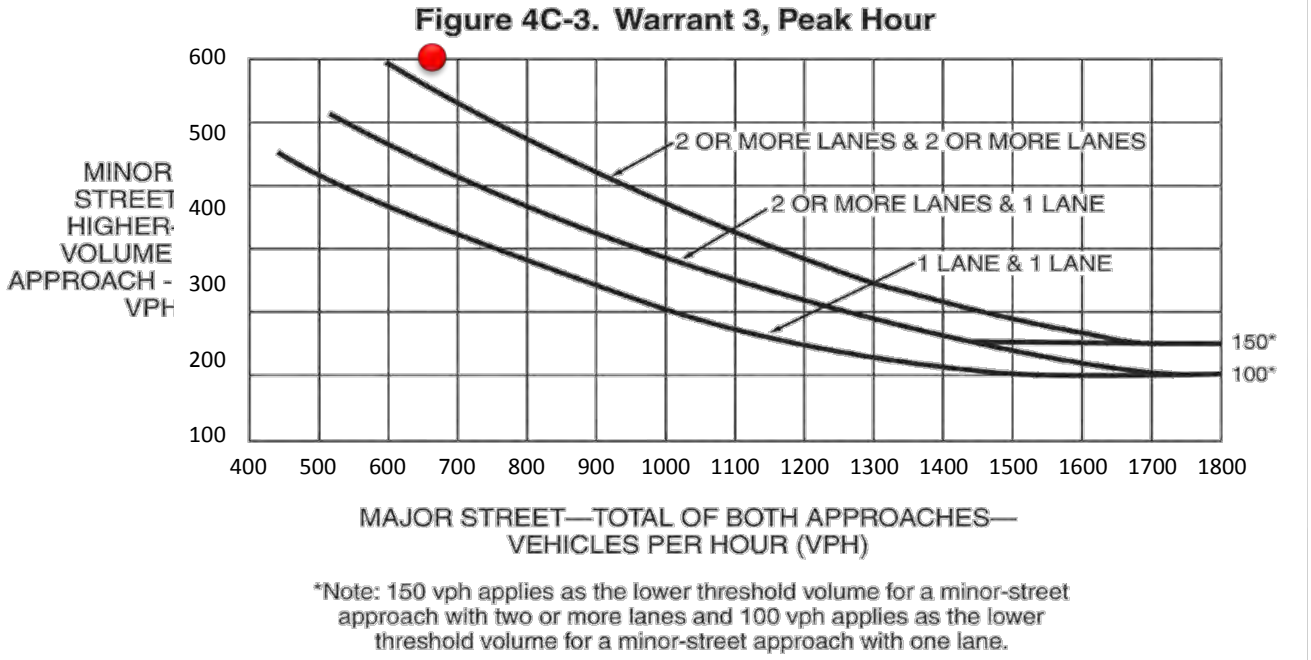
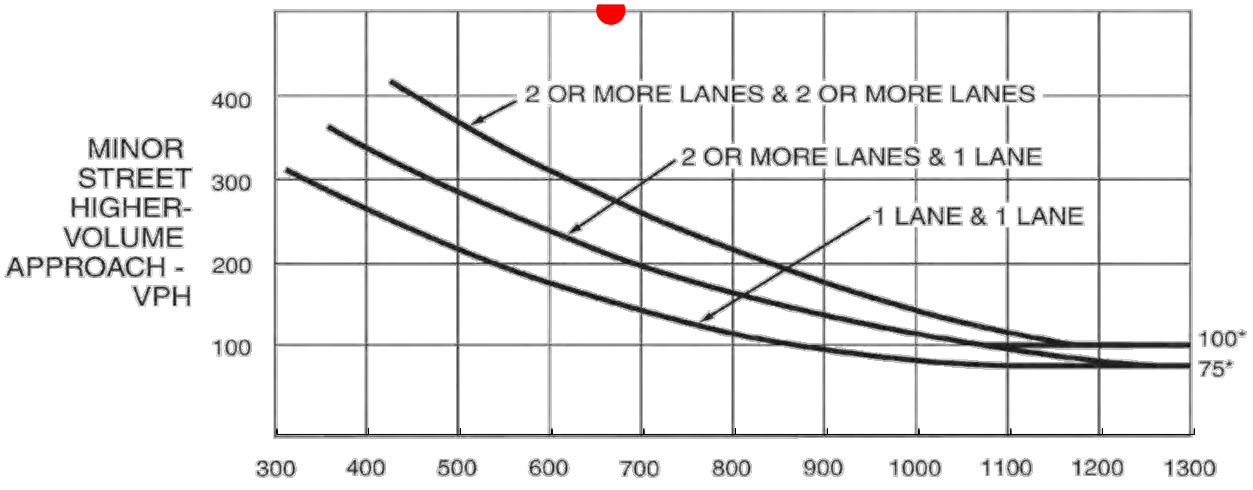


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Oakley Avenue	**Number of Lanes on minor street:**	1
Major Street	Orange Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	1542
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	51.3
		Minor St approach total delay (veh-hr):	11.0

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
768	774

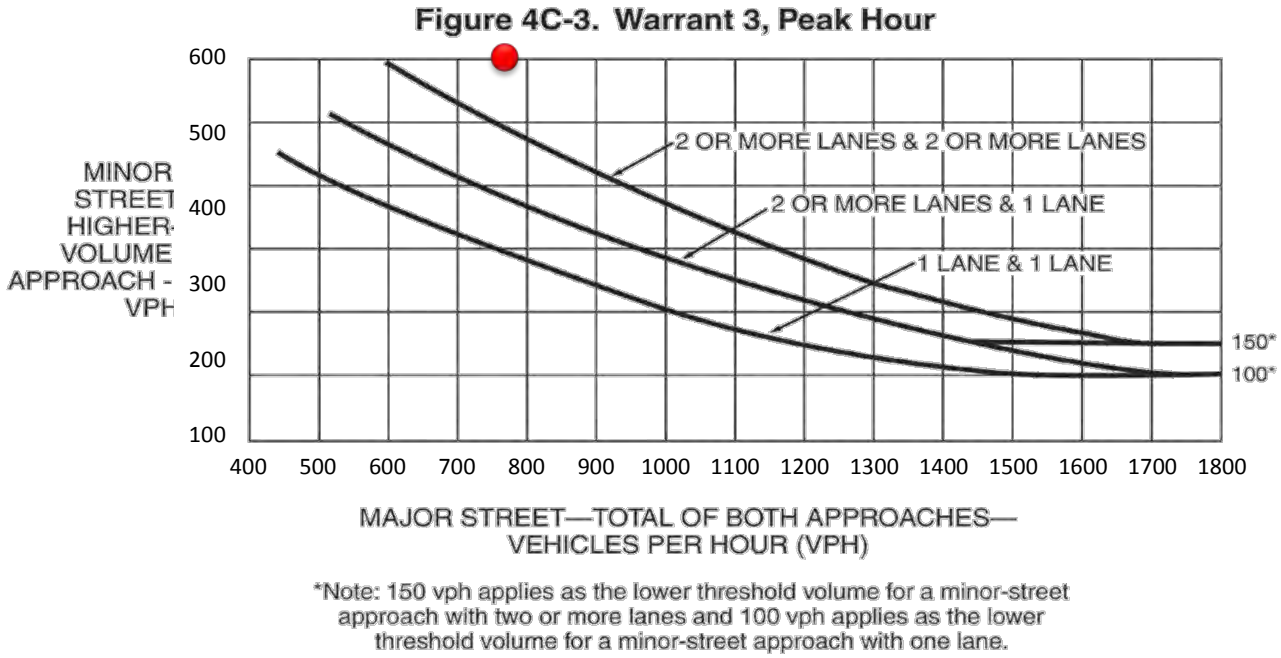
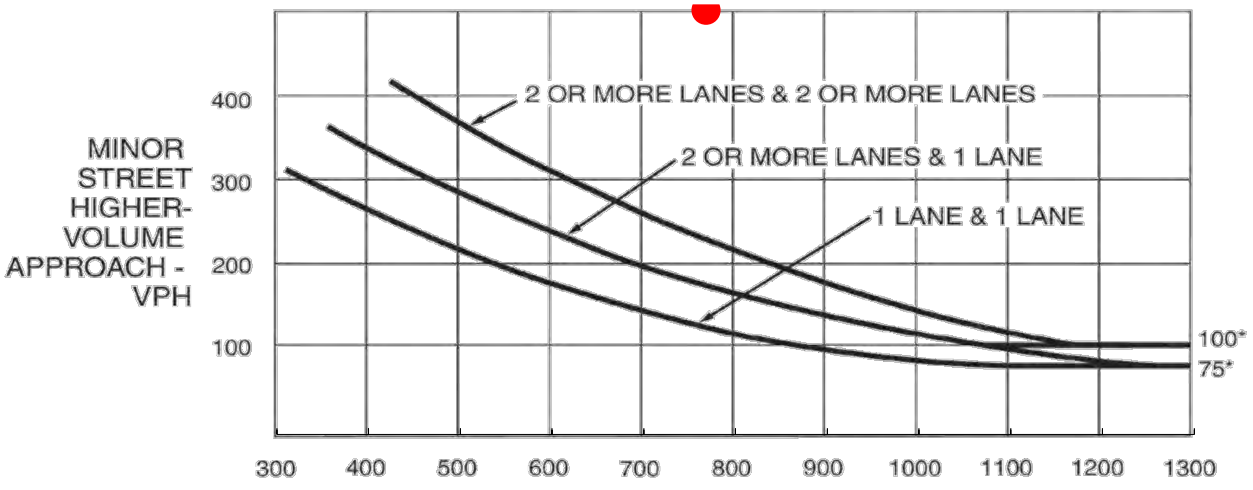


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Strong Street	**Number of Lanes on minor street:**	1
Major Street	Orange Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	770
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	13
		Minor St approach total delay (veh-hr):	0.4

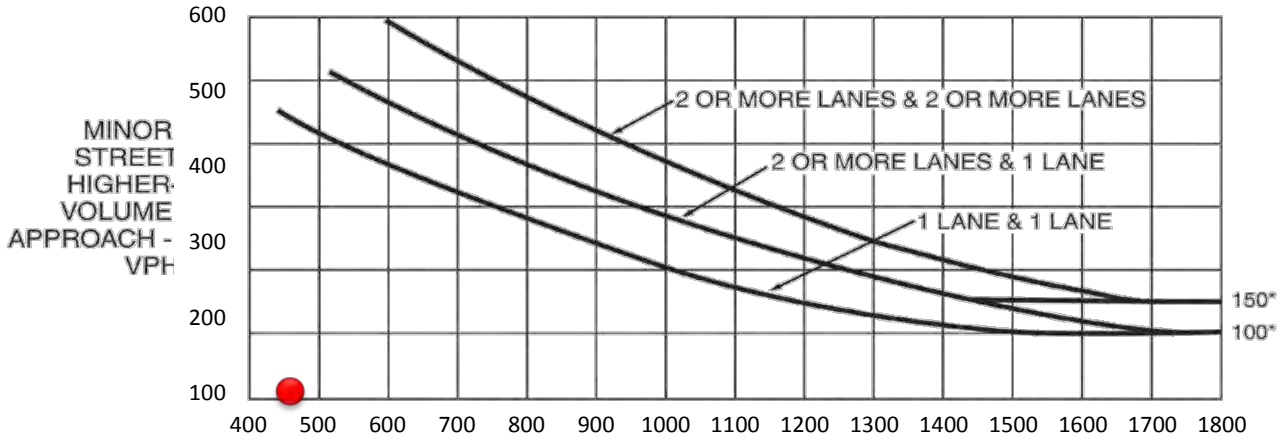
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	NO

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
460	103

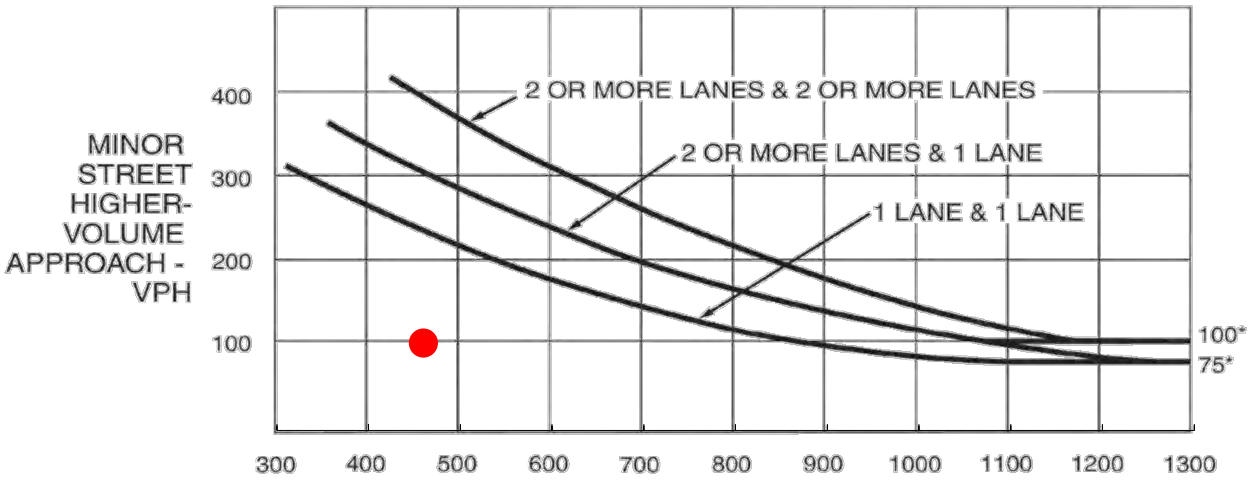
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Strong Street	**Number of Lanes on minor street:**	1
Major Street	Orange Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	1208
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	65.9
		Minor St approach total delay (veh-hr):	2.1

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
756	114

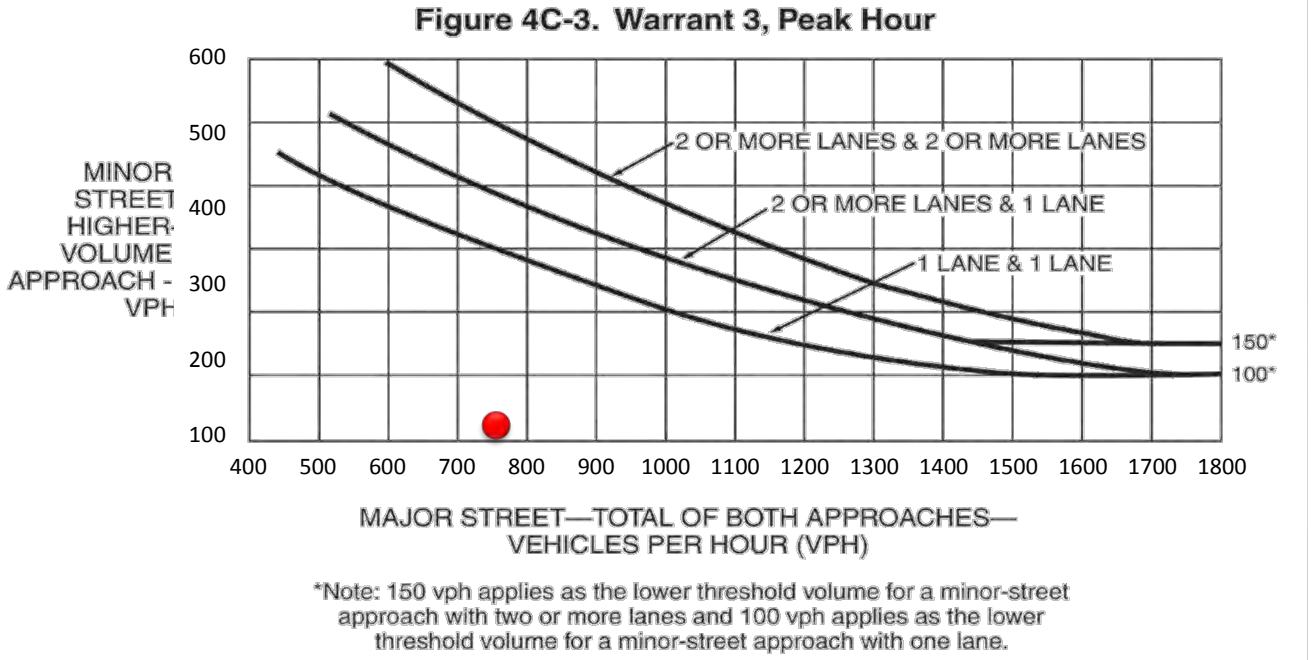
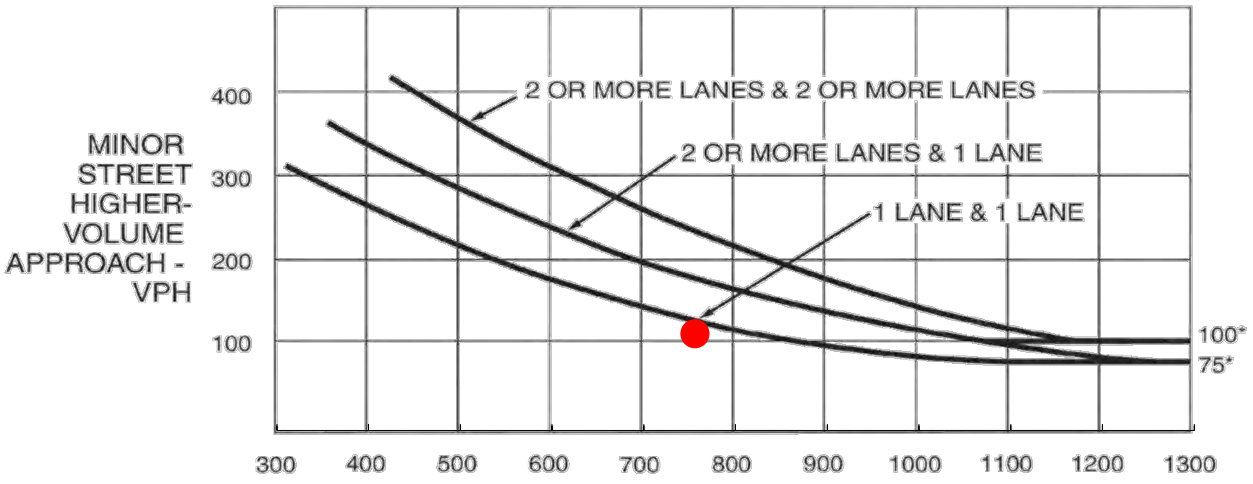


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Strong Street	**Number of Lanes on minor street:**	1
Major Street	Orange Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	747
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	12.5
		Minor St approach total delay (veh-hr):	0.4

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	NO

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
456	102

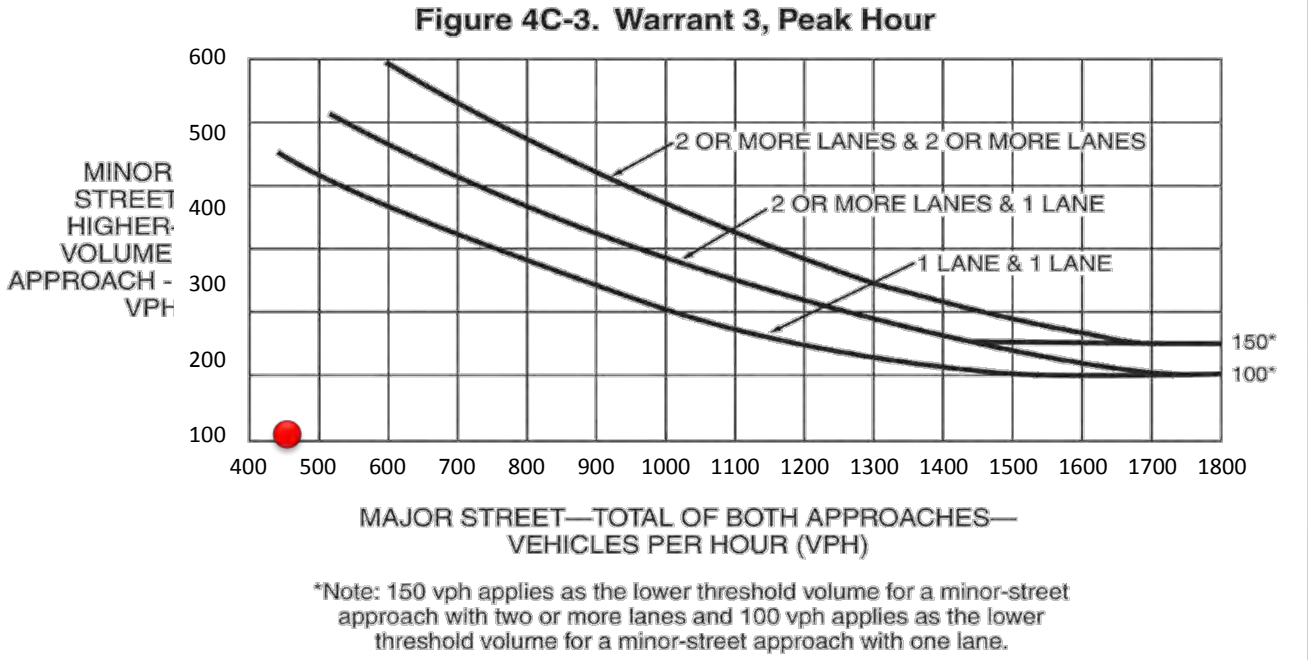
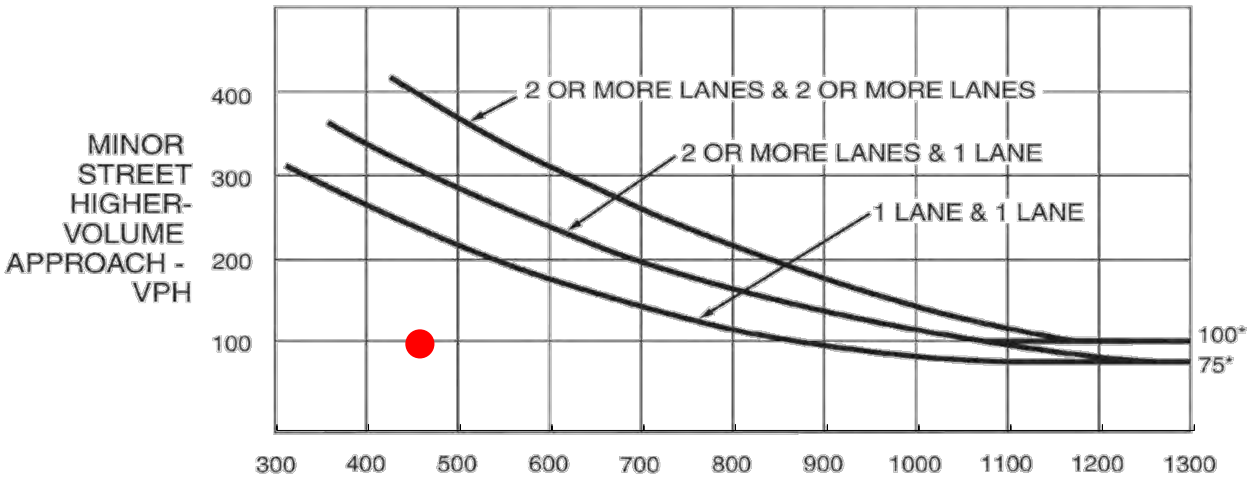


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Strong Street	**Number of Lanes on minor street:**	1
Major Street	Orange Street	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	1166
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	52.4
		Minor St approach total delay (veh-hr):	1.7

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
725	115

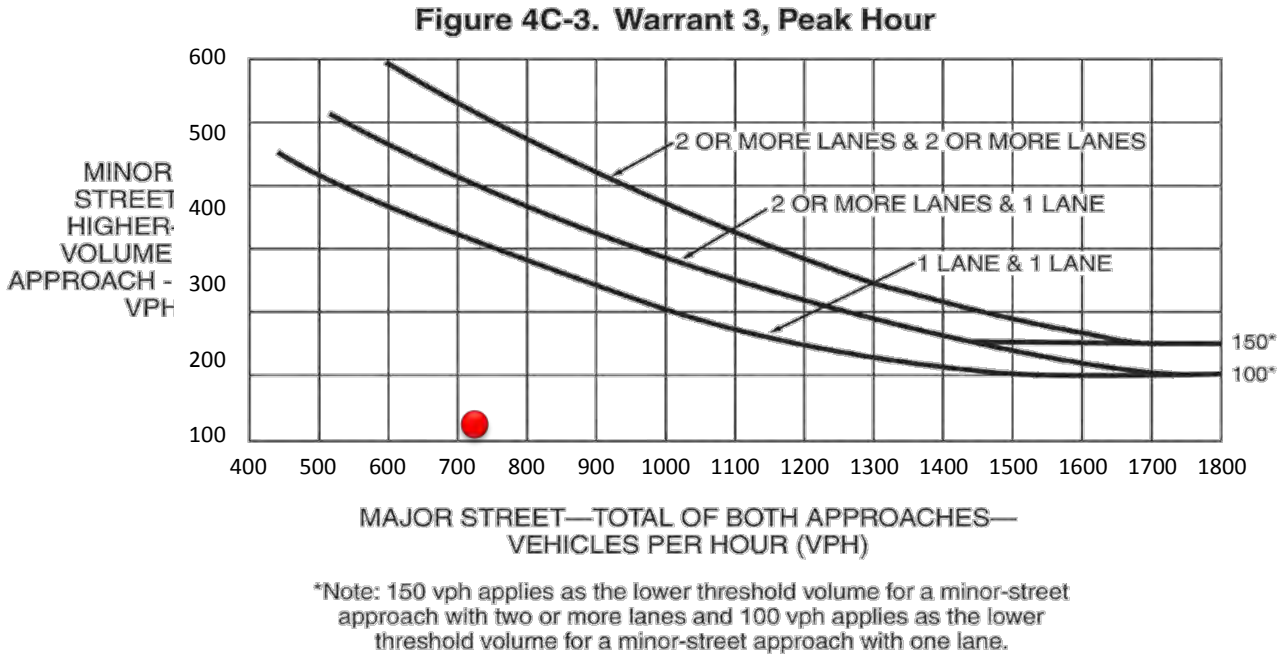
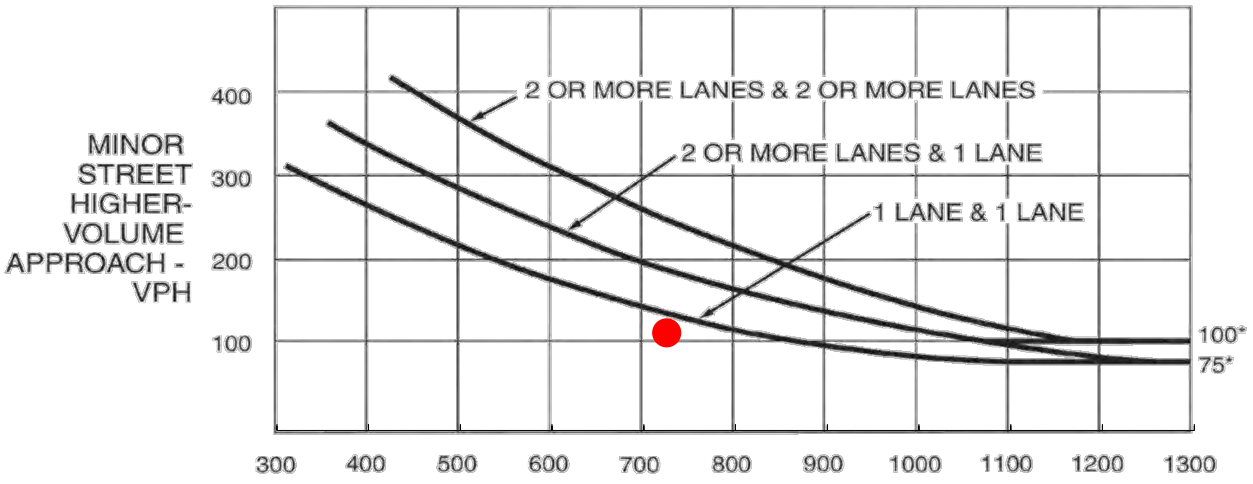


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	2196
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	16.6
		Minor St approach total delay (veh-hr):	1.4

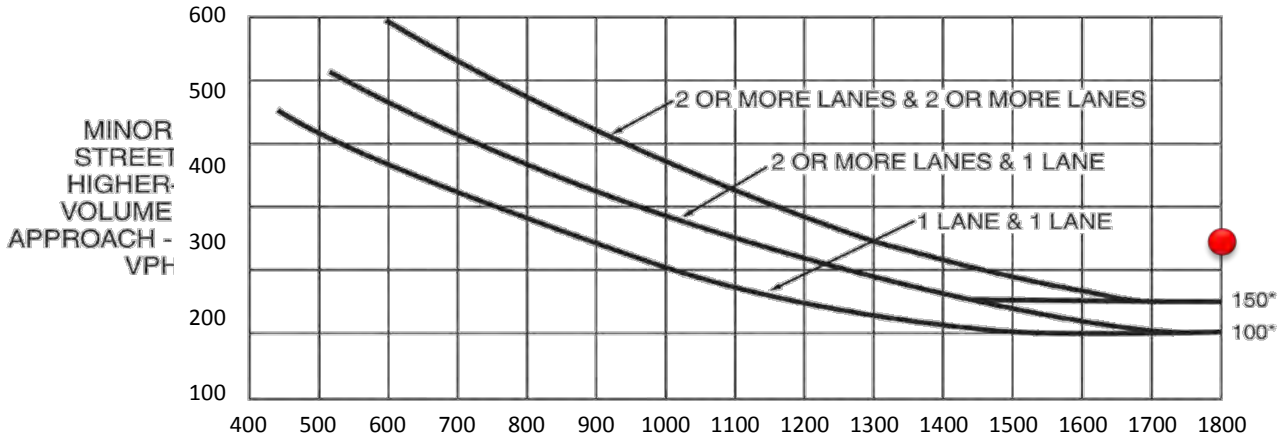
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	NO
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1895	301

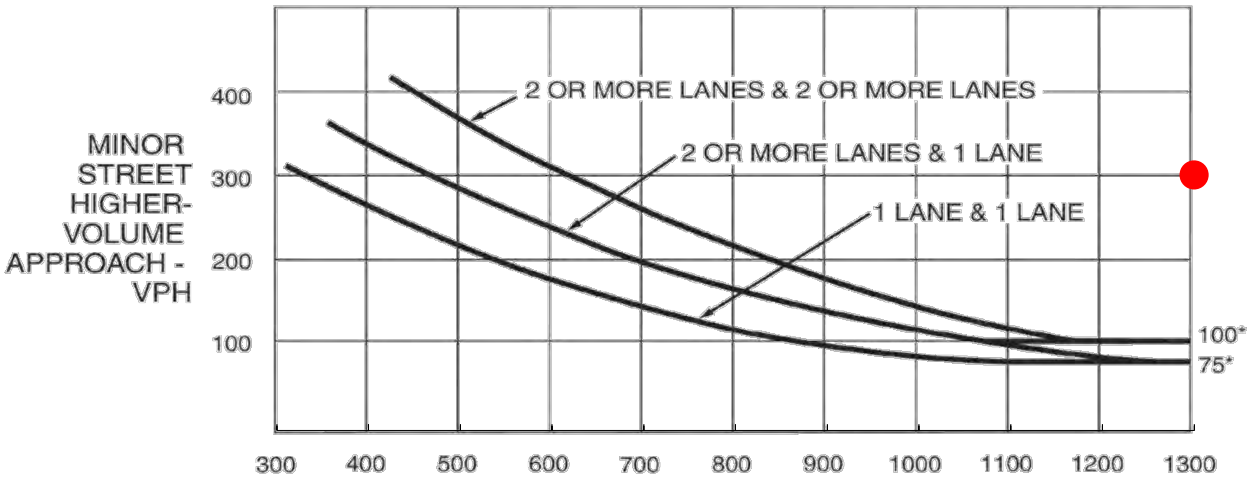
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**NO**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 1	**Total Number of Vehicles Entering:**	2800
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	731.6
		Minor St approach total delay (veh-hr):	70.9

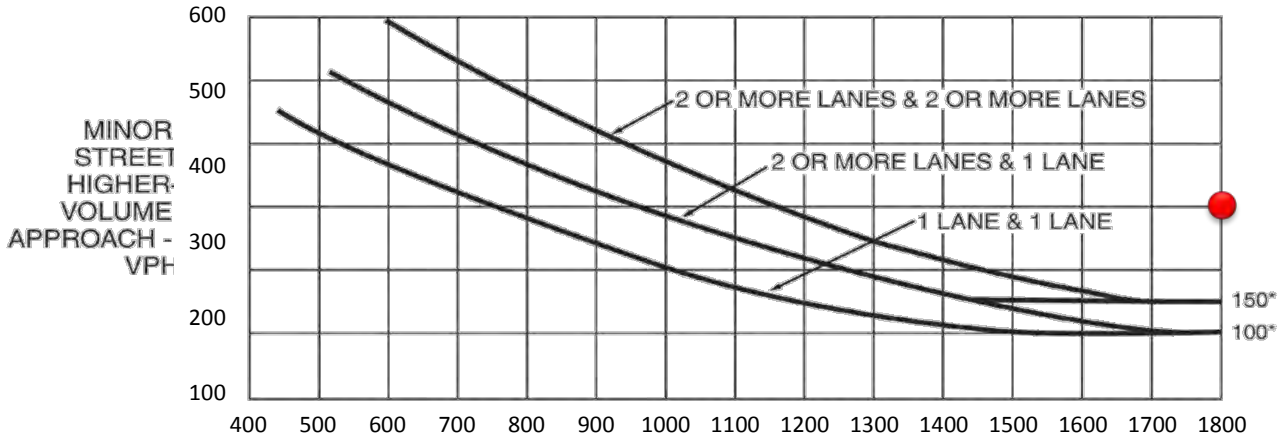
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2451	349

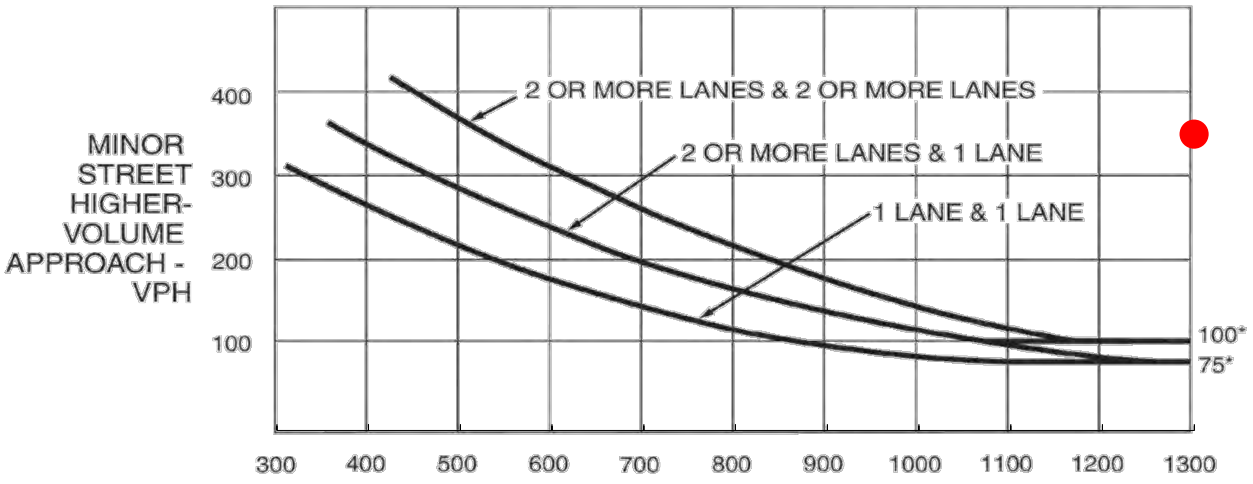
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	2207
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	781
		Minor St approach total delay (veh-hr):	51.4

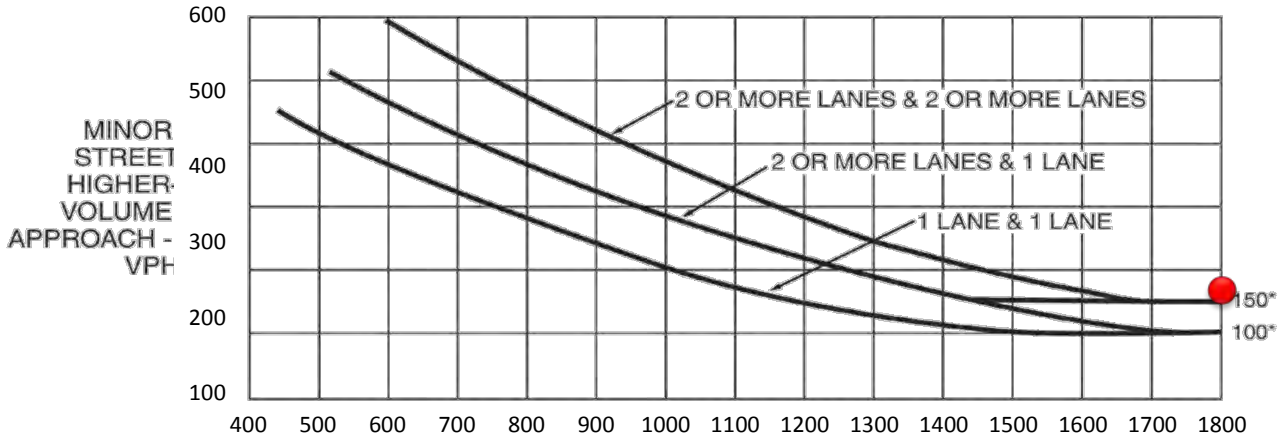
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1970	237

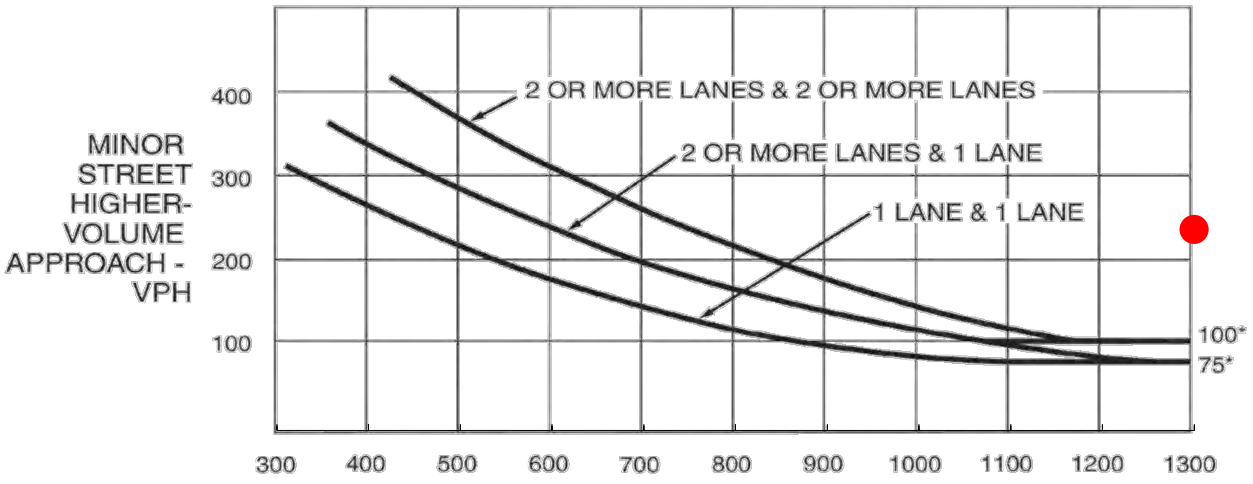
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	Existing+Project Alt 2	**Total Number of Vehicles Entering:**	2868
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	1790.8
		Minor St approach total delay (veh-hr):	180.6

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2505	363

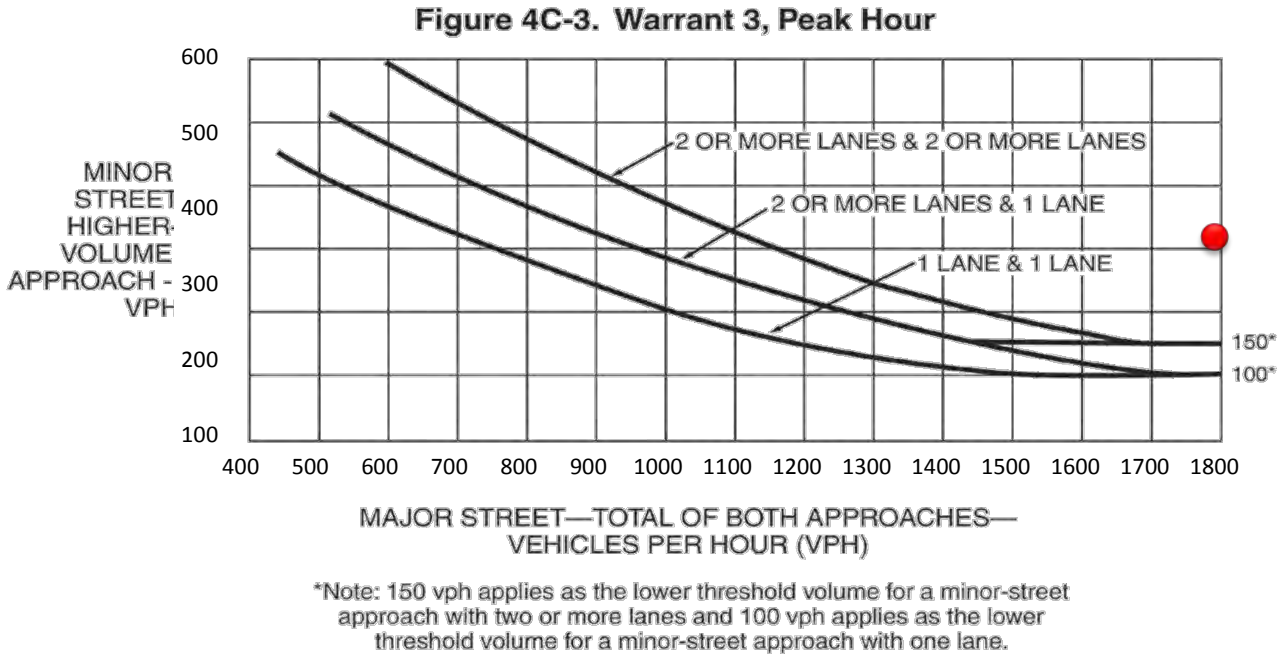
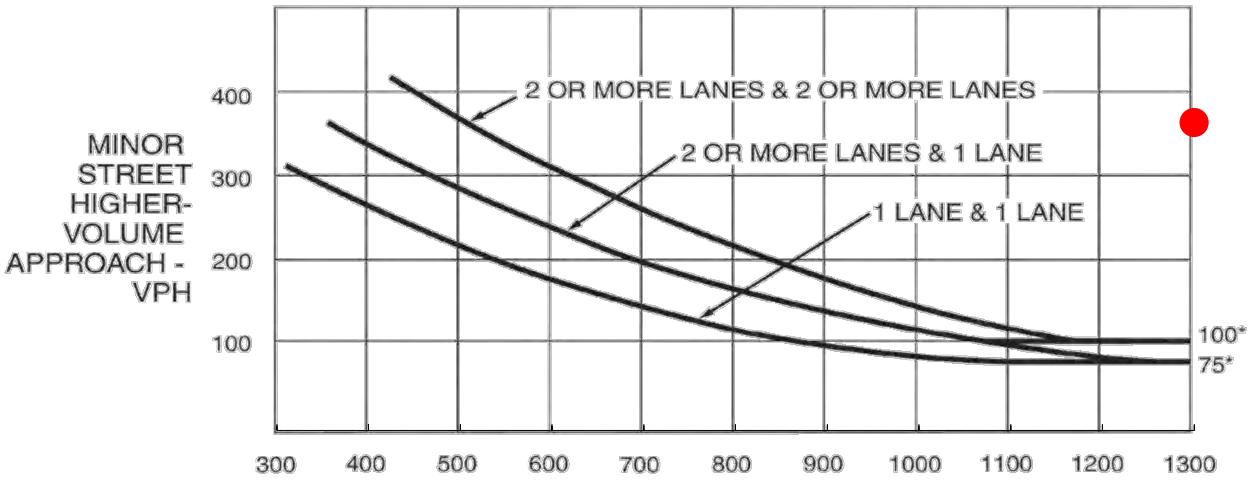


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 Without Orange	**Total Number of Vehicles Entering:**	2444
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	537.4
		Minor St approach total delay (veh-hr):	57.2

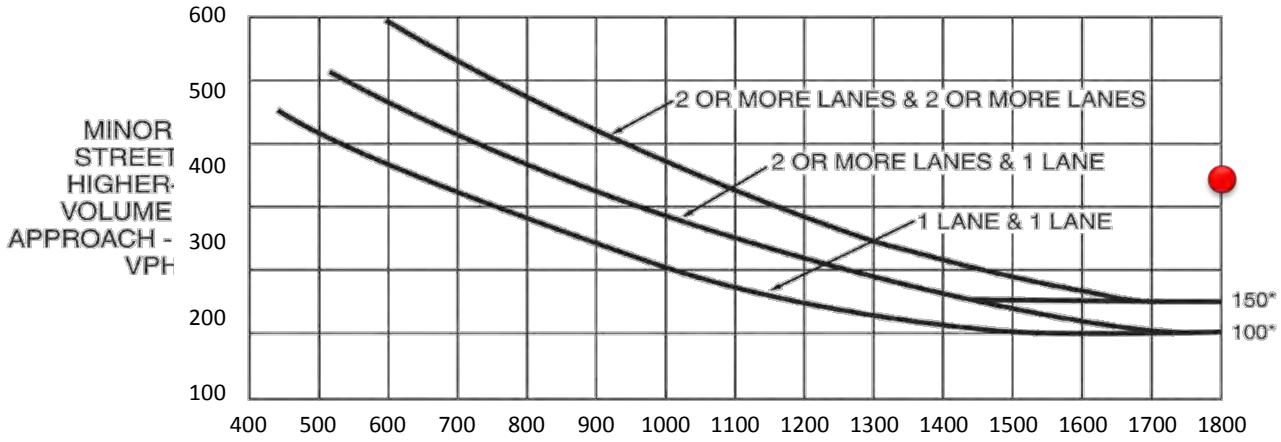
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2061	383

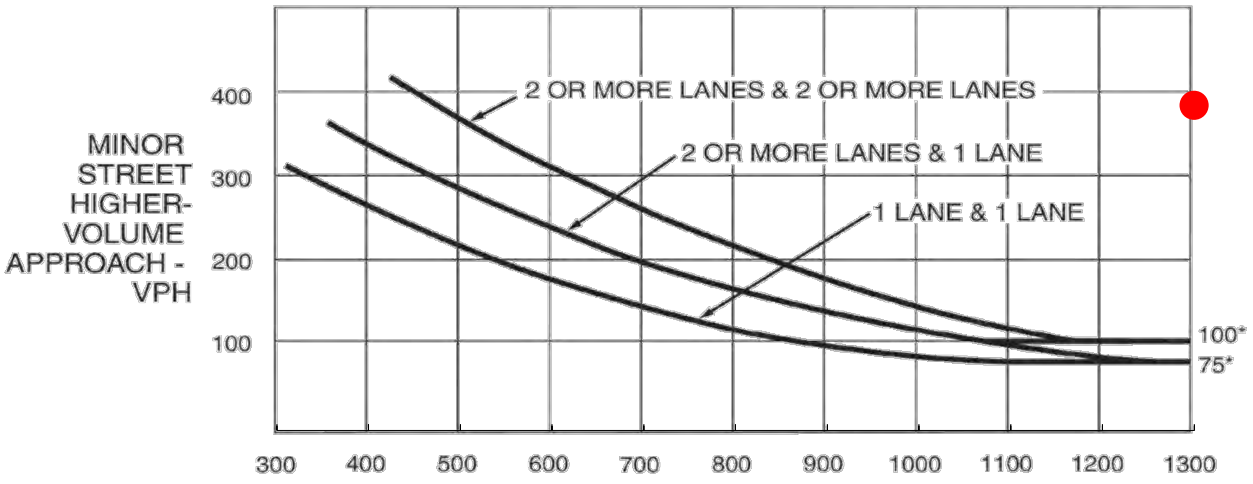
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 Without Orange	**Total Number of Vehicles Entering:**	3146
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	1390.1
		Minor St approach total delay (veh-hr):	157.2

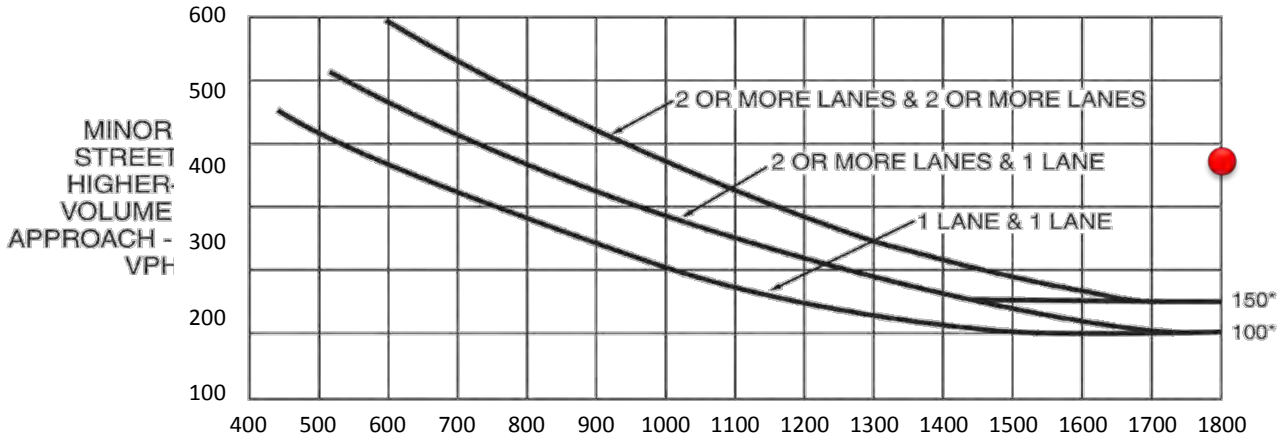
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2739	407

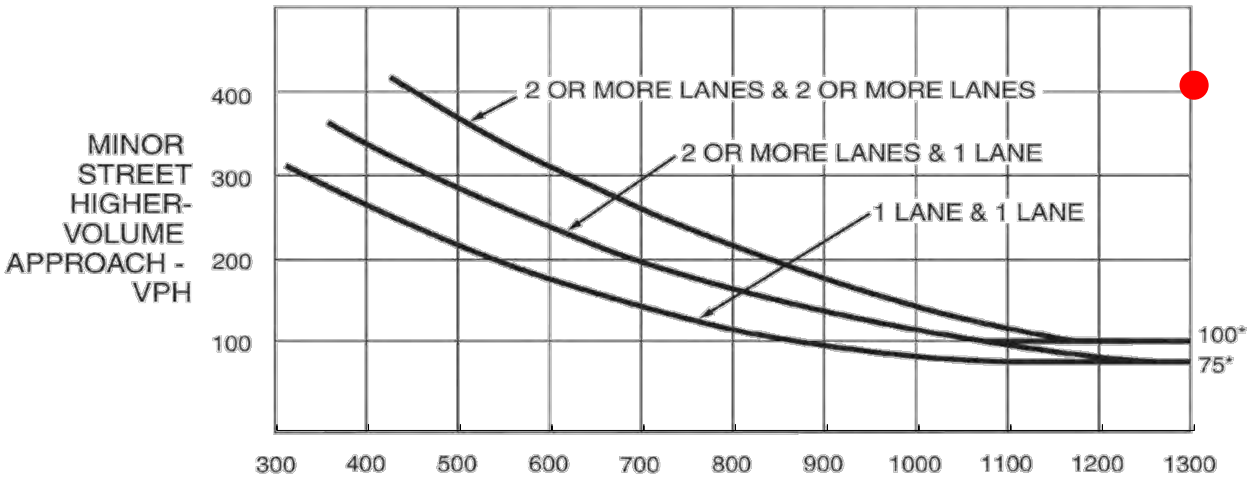
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 With Orange	**Total Number of Vehicles Entering:**	2313
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	276.4
		Minor St approach total delay (veh-hr):	25.0

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
1987	326

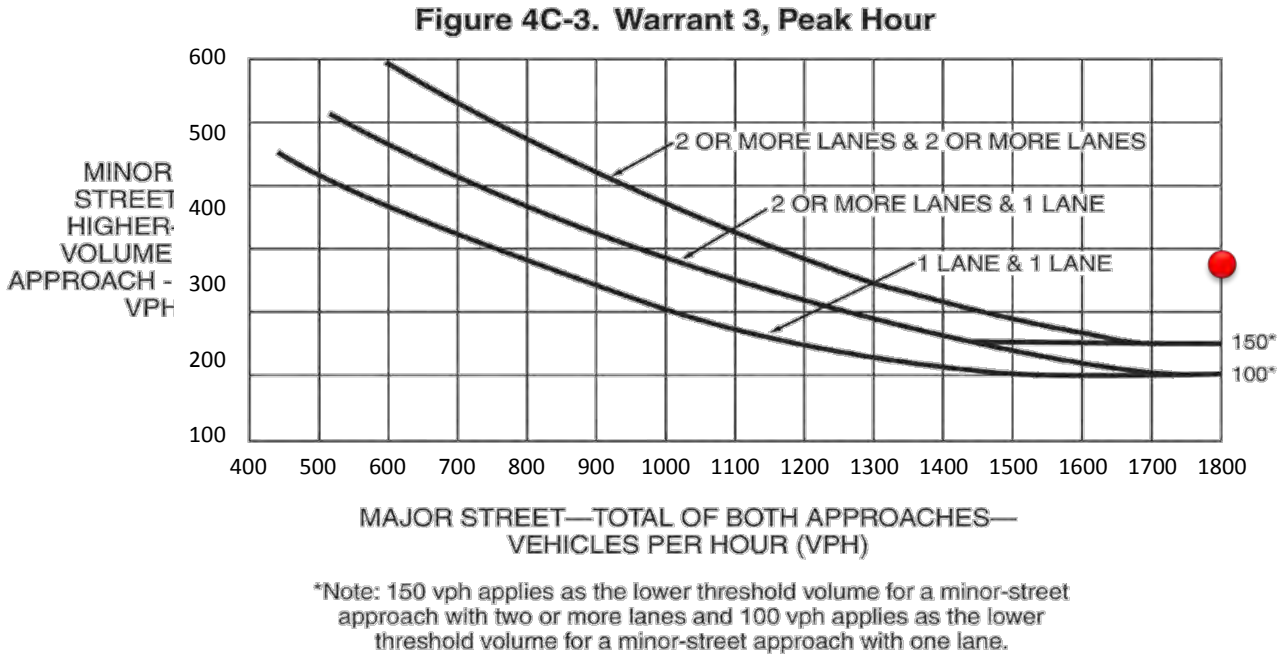
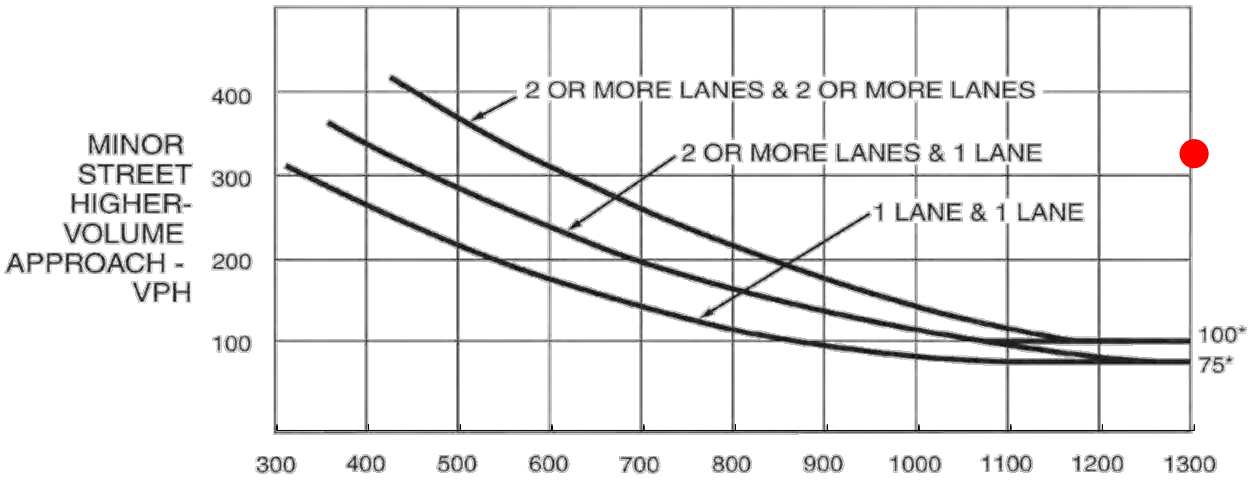


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 1 With Orange	**Total Number of Vehicles Entering:**	3036
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	956.7
		Minor St approach total delay (veh-hr):	97.3

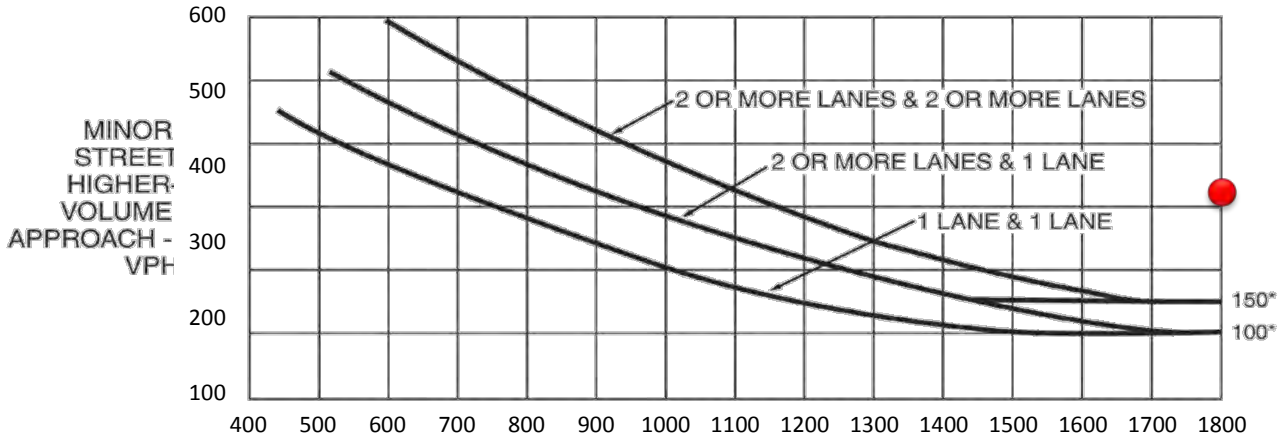
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2670	366

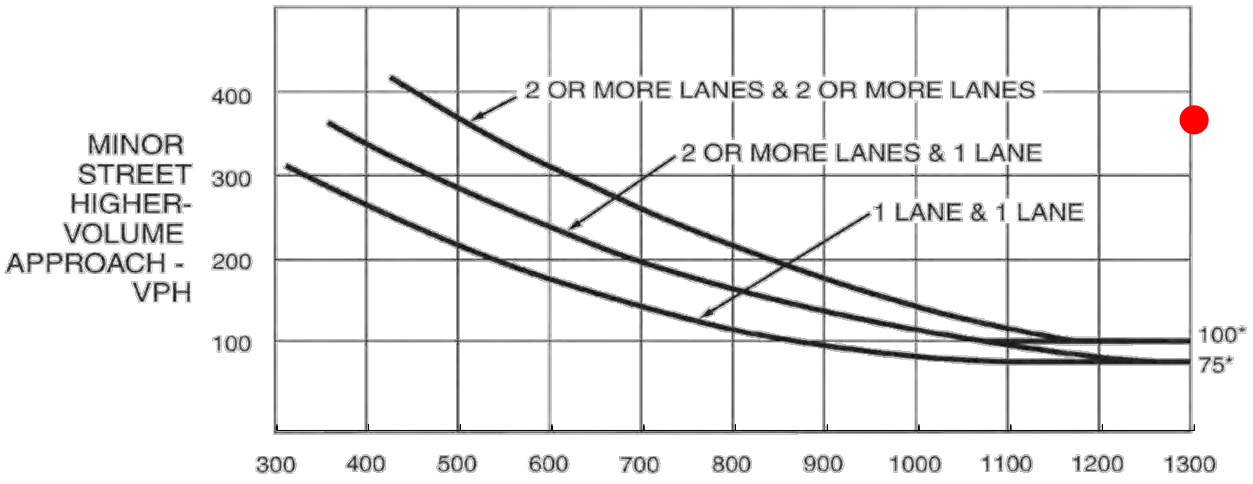
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 Without Orange	**Total Number of Vehicles Entering:**	2474
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	1038.7
		Minor St approach total delay (veh-hr):	92.0

Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2155	319

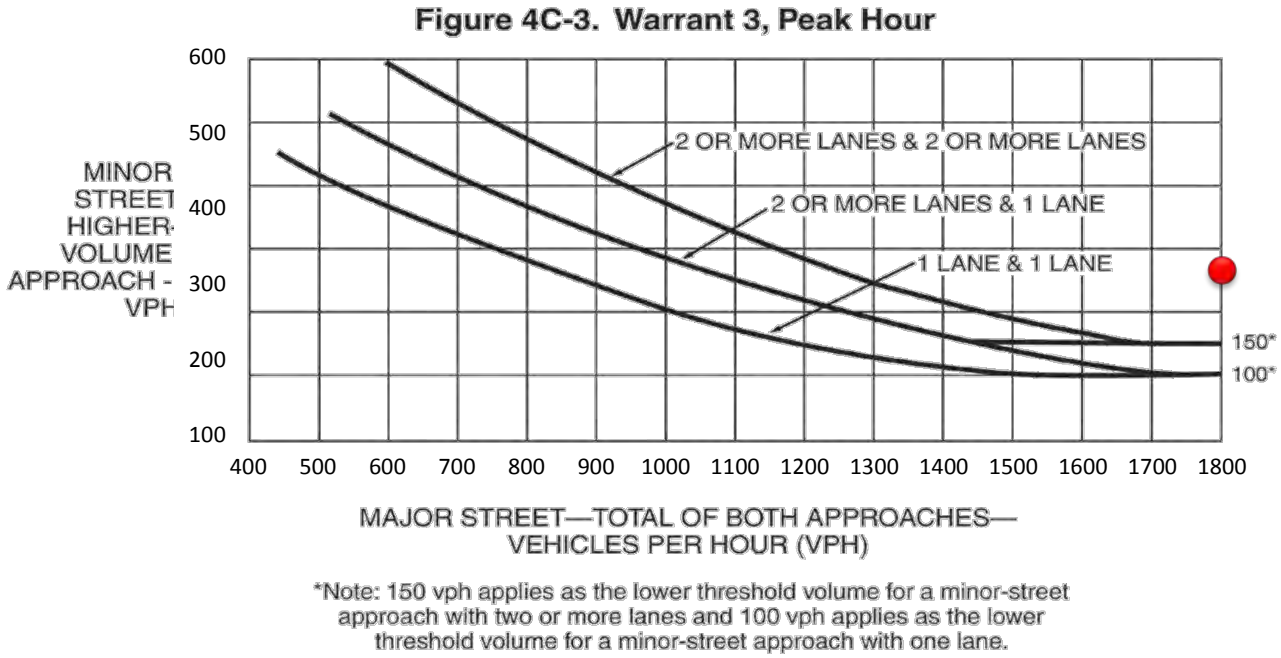
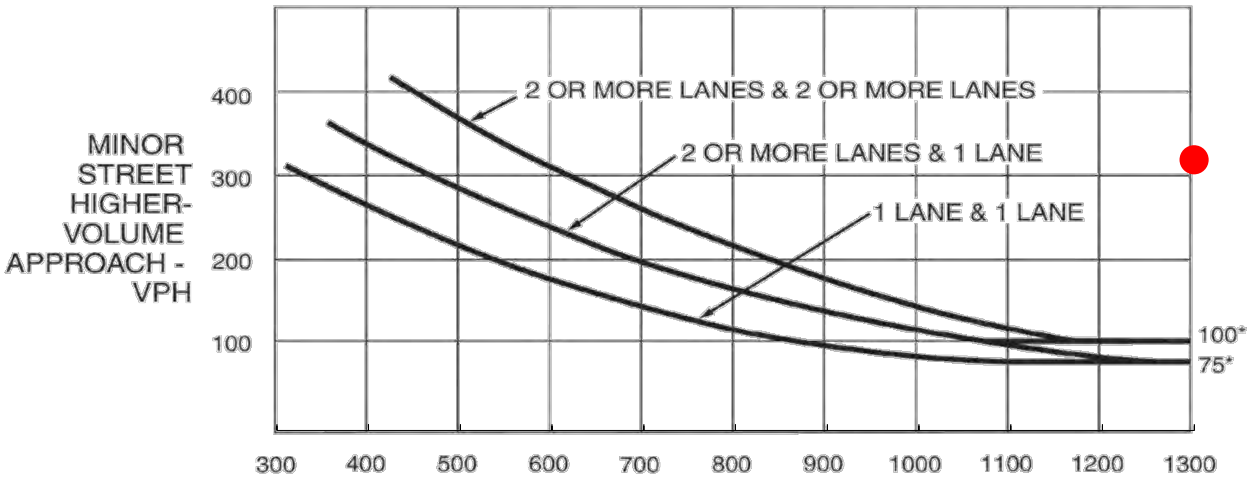


Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 Without Orange	**Total Number of Vehicles Entering:**	3307
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	1551.9
		Minor St approach total delay (veh-hr):	181.5

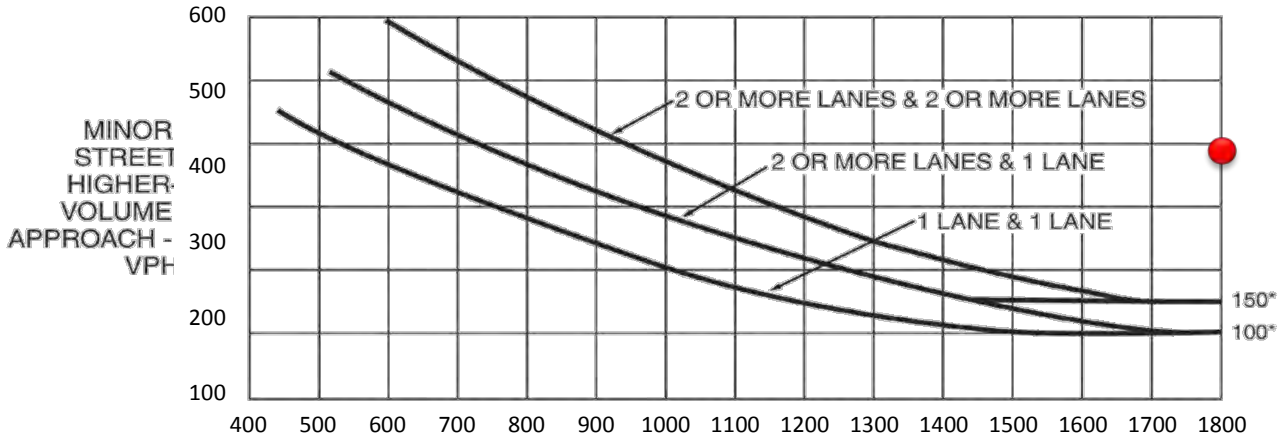
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2886	421

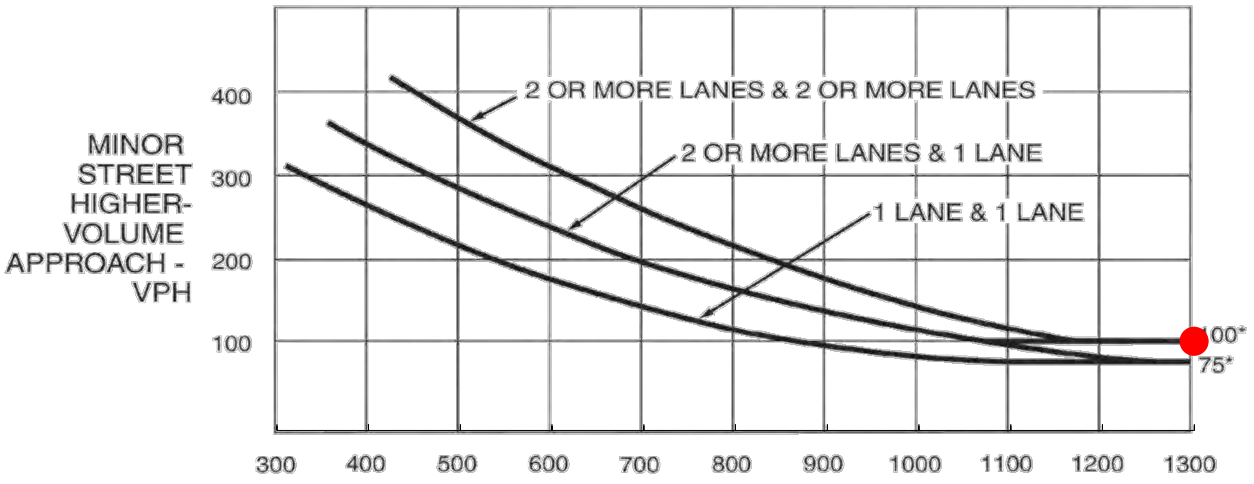
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 With Orange	**Total Number of Vehicles Entering:**	2401
	AM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	615.3
		Minor St approach total delay (veh-hr):	44.8

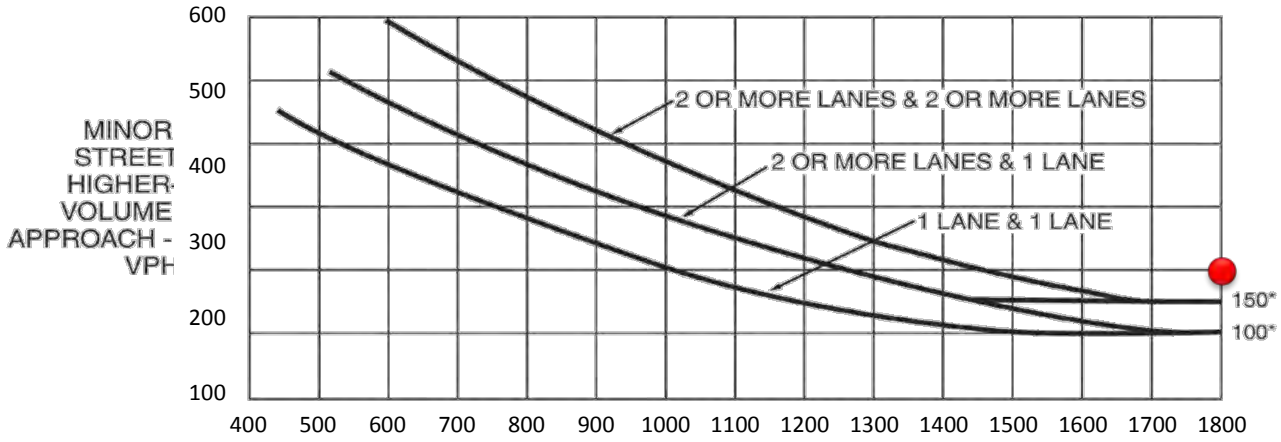
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2139	262

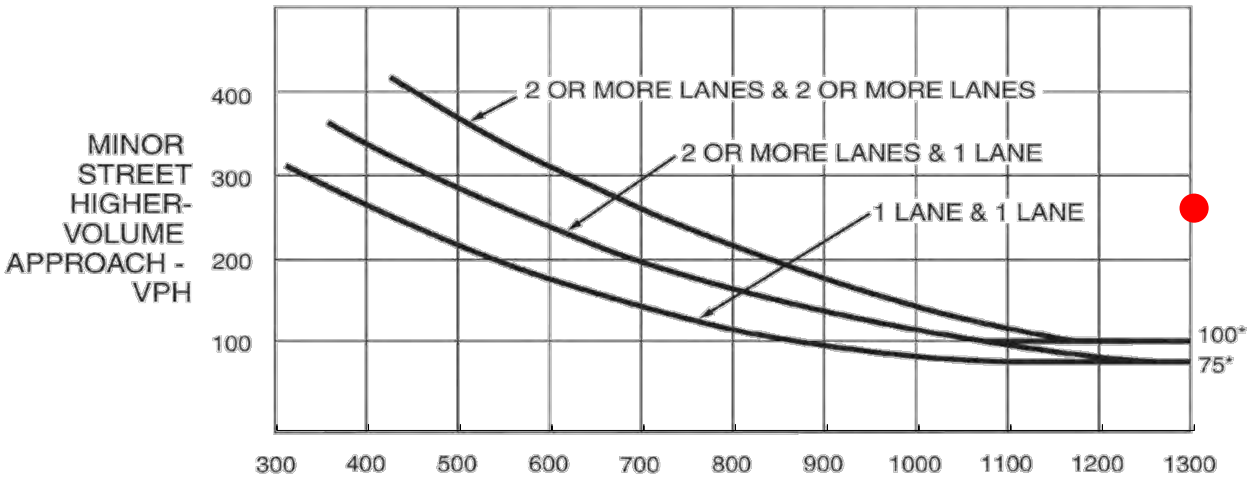
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**

SIGNAL WARRANT ANALYSIS

Minor Street:	Pellisier Road	**Number of Lanes on minor street:**	1
Major Street	S Riverside Avenue	**Number of Lanes on major street:**	2
Scenario:	2040 Alt 2 With Orange	**Total Number of Vehicles Entering:**	3190
	PM Peak	**Number of Approaches:**	4
		Intersection total delay (seconds):	3073.6
		Minor St approach total delay (veh-hr):	324.4

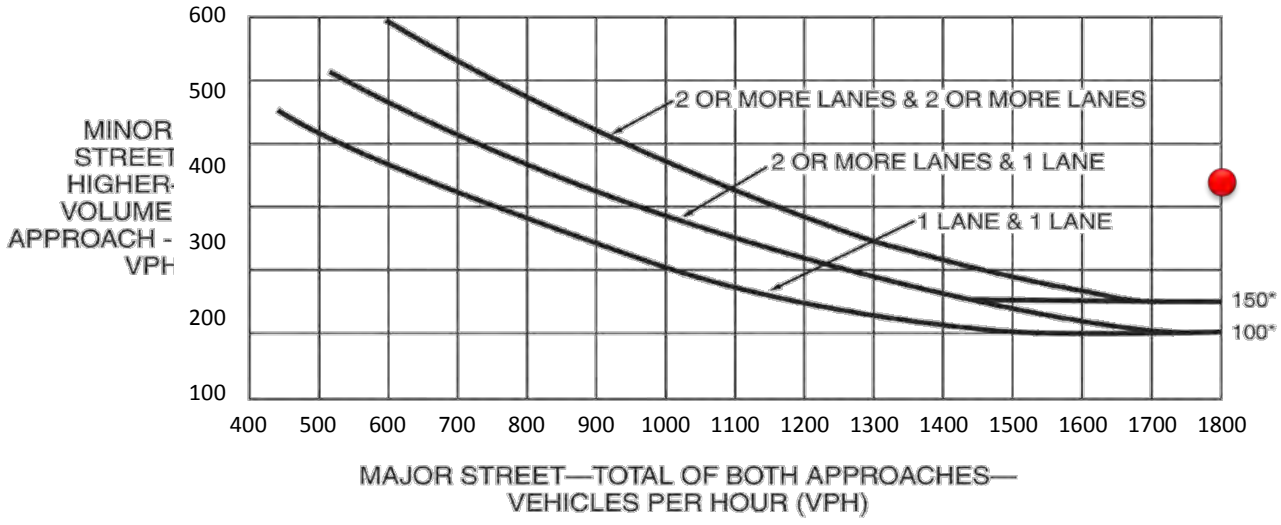
Part A

		Criteria Met?
1	Minor St approach total stopped time delay	YES
2	Volume on the same minor street approach (one directional only)	YES
3	Total volume entering the intersection during the peak hour	YES

Part B

Volume on Major St (Σ of both Approaches)	Volumes on Minor St (higher approach)
2810	380

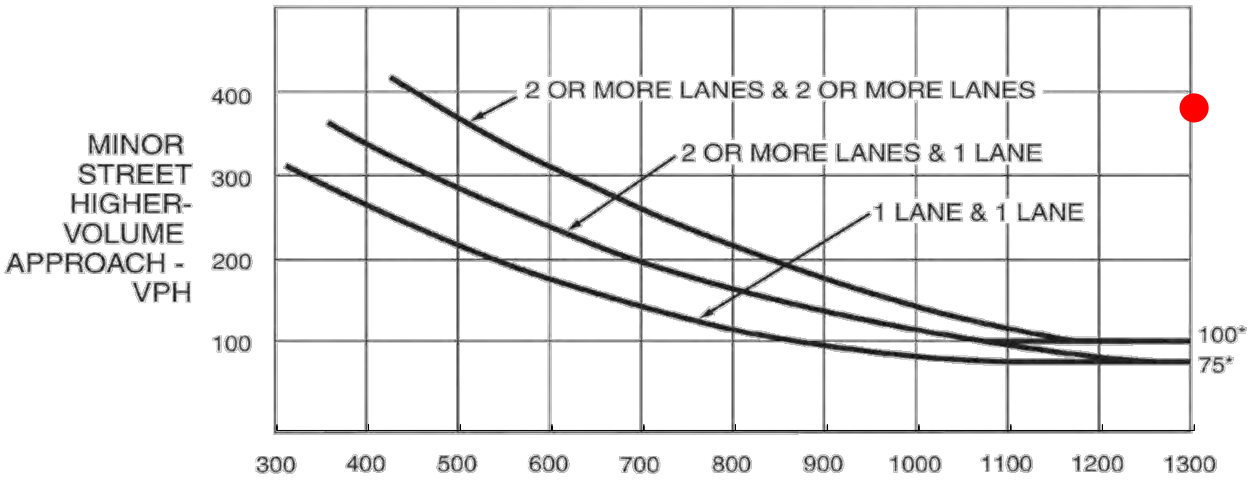
Figure 4C-3. Warrant 3, Peak Hour



*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.

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.

	Does the Intersection Meet Peak Hour Signal Warrants?:
PART A	**YES**
PART B	**YES**